



REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE

NATIONAL CIRCULAR ECONOMY STRATEGY AND ACTION PLAN (UDESEP)

(2025-2028)



Foreword

The transformation process our world is undergoing makes it necessary to reshape our economic systems. The rapid depletion of global resources, the increase of environmental threats, and the necessity to combat climate change have become the common responsibility of all countries.

In this context, by adopting the sustainable development goals and deepening our environmental responsibility, with the National Circular Economy Strategy and Action Plan we have prepared, we aim to strengthen the understanding of circular economy in our country and to implement environmentally friendly production and consumption models.

Circular economy is not only a concept but also our responsibility for the future. By adopting a new approach to production and consumption, it is aimed to use natural resources more efficiently, to reuse waste as a resource, and to address our economy with an environmentally sensitive approach. With this strategy, our purpose is to establish a model that extends the use of resources, reduces environmental impacts, and increases economic efficiency.

With this strategy, we will maximize resource efficiency, ensure the reuse of waste, and create new business and investment opportunities while protecting our environment. Our objective is to increase the use of circular materials by minimizing waste generation in our production and consumption processes, while achieving the net-zero emissions target by 2053.

The action plan in question, together with sectoral transformation, will encourage the adoption of environmentally friendly practices at every stage from industrial production to consumption and will instill circular economy awareness in all segments of society. In many sectors, from packaging to textiles, from electronic products to construction, sustainable and environmentally friendly solutions will be developed and these solutions will be integrated into production and consumption processes.

By designing more durable, repairable, and recyclable products, we will use natural resources more efficiently and fulfill our responsibility to leave a clean environment for future generations. By embracing the circular economy approach throughout every corner of our country, we will reduce environmental impacts while also making our economic growth sustainable.

The success of this strategy will be possible not only through the participation of public institutions but also through the involvement and cooperation of all stakeholders. In every step we take toward protecting the environment and achieving sustainable development, we will move forward with determination to build our country's future in a greener, healthier, and stronger way.

The National Circular Economy Strategy and Action Plan will serve as an important milestone in fulfilling our environmental responsibility and, with the contributions of all of us, will act as a guide to strengthen Türkiye in moving toward a more sustainable future.

I wish that the National Circular Economy Strategy and Action Plan, prepared to collectively achieve the “Sustainability” goal included in the Century of Türkiye Vision, will be beneficial for our country.

Murat KURUM

Minister of Environment, Urbanization and Climate Change
Republic of Türkiye



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LIST OF ABBREVIATIONS

EU	European Union
WEEE	Waste Electrical and Electronic Equipment
FTM	Fair Transition Mechanism
BDDK	Banking Regulation and Supervision Agency
ICT	Information and Communication Technologies
UNFCCC	United Nations Framework Convention on Climate Change
BTK	Information Technologies and Communication Authority
CCRI	Circular Cities and Regions Initiative
COP	Conference of the Parties
MoEUCC	Ministry of Environment, Urbanization and Climate Change
IED	Industrial Emissions Directive
EEE	Electrical and Electronic Equipment
IEPR	Industrial Emissions Portal Regulation
IPPC	Integrated Pollution Prevention and Control
GEKAP	Recovery Participation Fee
GİB	Revenue Administration
EPR	Extended Producer Responsibility
SWG	Specialized Working Group
İŞKUR	Turkish Employment Agency
JRC	Joint Research Center
KİK	Public Procurement Authority
POP	Persistent Organic Pollutants
KOSGEB	Directorate of Small and Medium-Sized Enterprises Development and Support Administration
E-PRTR	European Pollutant Release and Transfer Register
REF-BAT	Best Available Techniques Reference Documents
MÜSİAD	Independent Industrialists and Businessmen Association
NDC	Nationally Determined Contributions
OECD	Organization for Economic Cooperation and Development
OIZ	Organized Industrial Zone
OSBÜK	Organized Industrial Zones Supreme Organization
ELV	End-of-Life Vehicles
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
SIA	Sectoral Impact Assessment
SEDĐK	Insurance and Private Pension Regulation and Supervision Authority
SDG	Sustainable Development Goals
CBAM	Carbon Border Adjustment Mechanism
SPK	Capital Markets Board of Türkiye
TCMB	Central Bank of the Republic of Türkiye
TENMAK	Turkish Energy, Nuclear and Mining Research Council
EXPdate	Recommended Date of Expiration
TOBB	The Union of Chambers and Commodity Exchanges of Türkiye
TRT	Turkish Radio and Television Corporation
TSE	Turkish Standards Institute
TÜBİTAK	Scientific and Technological Research Council of Türkiye
TÜÇA	Turkish Environment Agency
TÜİK	Turkish Statistical Institute
TÜRKAK	Turkish Accreditation Agency
TÜSİAD	Turkish Industry and Business Association
NCESAP	National Circular Economy Strategy and Action Plan

1. INTRODUCTION

As known, the linear economy model operates with a buy-make-use-dispose approach. This approach means that raw materials are obtained, then transformed into products, utilized and finally disposed of as waste. In a linear economic system, value is developed by producing and selling as many products as possible.¹ Türkiye Circular Economy Platform (2022). Available at https://donguseleekonomiplatformu.com/en/knowledge-hub/article_1-what-is-the-definition-of-a-circular-economy_11.html?page=3] However, this model has led to a sudden increase in the use of natural resources. The increase in resource use, combined with an increase in waste and emissions, has led to a series of challenging situations such as climate change, reduced food security, water scarcity and air pollution.

According to the 2019 Circularity Gap Report, critical increases in global raw material use, gross domestic product and greenhouse gas emission figures have been observed between 1900 and 2017 and projected between 2017 and 2050. Between 1900 and 2017, raw material extraction increased from 7 gigatonnes (Gt) to

92.1 Gt, global gross domestic product increased from EUR 2.6 trillion to EUR 60.4 trillion and greenhouse gas emissions increased from 7 Gt to 53 Gt. The growth rate of GHG emissions is projected to decrease between 2017 and 2050² PACE (2019). The Circularity Gap Report, Platform for Accelerating the Circular Economy. Available at <https://www.circularity-gap.world>]. However, projected greenhouse gas emissions are well above the threshold set to keep the temperature increase below 1.5°C agreed in the Paris Agreement.

According to the report updated in 2022, global raw material utilization in 2050 is expected to be between 170-184 Gt according to the business-as-usual scenario. In the last 50 years, the global consumption of raw materials has increased about 4 times. More than half a trillion tons of raw materials were consumed between the Conferences of the Parties (COP 21 & 26) in Paris and Glasgow alone. According to the report, only 8.6 per cent of all raw materials extracted and used to date have been recovered. In other words, more than 90 per cent of the raw materials used have turned into waste.³

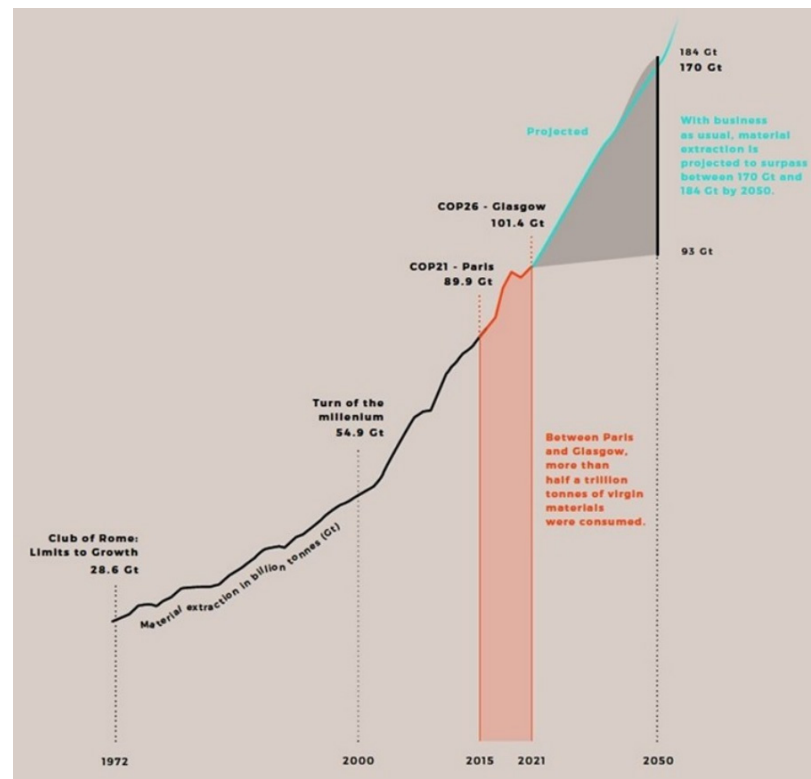


Figure 1 - Global Raw Material Utilisation between 1972 and 2050⁴

¹ Türkiye Circular Economy Platform (2022). Available at https://donguseleekonomiplatformu.com/en/knowledge-hub/article_1-what-is-the-definition-of-a-circular-economy_11.html?page=3

² PACE (2019). The Circularity Gap Report, Platform for Accelerating the Circular Economy. Available at <https://www.circularity-gap.world>

³ PACE (2022). The Circularity Gap Report, Platform for Accelerating the Circular Economy. Available at <https://www.circularity-gap.world/2022#Download-the-report>

According to the Organization for Economic Co-operation and Development (OECD), it is estimated that 167 gigatonnes (Gt) of material use will be reached by 2060. This situation indicates that material use per person per day will reach 45 kg by 2060, exacerbating environmental challenges.

Global consumption of materials such as biomass, fossil fuels, metals and minerals is estimated to double in the next 40 years, while annual waste generation is expected to increase by 70 percent by 2050⁵.

By 2022, the EU's greenhouse gas emissions from manufacturing amounted to 86 % of total greenhouse gas emissions. This rate was 81 % for Türkiye in the same year.⁶ The ratio of GHG emissions from production to total GHG emissions was calculated using total population and GHG emission data for 2022 obtained from TÜİK and Eurostat.] The transition to a circular economy has a high potential to reduce emissions from production, and therefore circular economy is one of the main approaches together with renewable energy and energy efficiency in combating climate change.

At this point, the Circular Economy envisions a new economic model in which production and consumption patterns change radically and offers a systematic and cost-effective approach to overcome the above-mentioned challenges (see. Figure 2). The circular economy is designed with a holistic approach that aims to manage resources sustainably, inspired by nature. This model, with its cradle-to-cradle principle, focuses on the re-sourcing of products from waste to resource throughout their life cycle and integrates biological and technical cycles at a much higher level than recycling. With the understanding of industrial ecology, it is aimed to establish a balance similar to ecosystems in nature by transforming the wastes of one sector into raw materials for another sector. With the sharing economy, it encourages more efficient sharing of resources between individuals and businesses by focusing on use rather than ownership. All these approaches prioritise increasing resource efficiency, preventing waste generation and minimising environmental impacts at every stage from design to consumption.

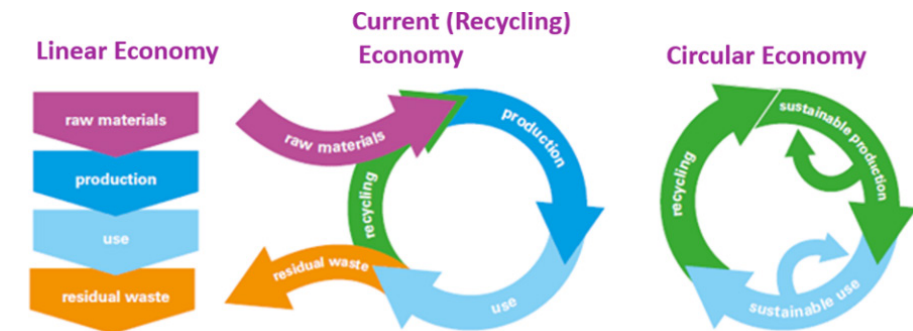


Figure 2 - Economic Models by Resource Utilisation⁷

Humankind has long been aware of the destructive impact of the linear economy on nature. While the waste generated during production and consumption can be reduced to a certain level, the remaining waste can be recycled, albeit at a low rate. While this situation reduces the need for additional resource input

of the economy, it does not eliminate this need. On the other hand, in the field of energy, which is one of the most important inputs of production processes, fossil fuels are still the main energy source despite the increase in renewable energy supply.

⁴ PACE (2022). The Circularity Gap Report, Platform for Accelerating the Circular Economy. Available at <https://www.circularity-gap.world/2022#Download-the-report>

⁵ OECD (2021). Global Material Resources Outlook to 2060: Economic Drivers and Environmental Consequences, Organisation for Economic Co-operation and Development. Available at <https://www.oecd.org/environment/waste/highlights-global-material-resources-outlook-to-2060.pdf> adresinden ulaşılabilir

⁶ The per capita GHG emissions from production in the EU and Türkiye in 2022 are 6,464.9 tonnes CO₂eq and 5,305.2 tonnes CO₂eq, respectively. Available from Eurostat at https://ec.europa.eu/eurostat/databrowser/view/cei_gsr011_custom_15296924/default/table?lang=en. The ratio of GHG emissions from production to total GHG emissions was calculated using total population and GHG emission data for 2022 obtained from TÜİK and Eurostat.

⁷ UoH (2017). Constructing a Green Circular Society, University of Helsinki. Available at <https://helda.helsinki.fi/bitstream/handle/10138/231630/ebook2017%28pdf%29.pdf?sequence=1>

Circularity refers to the circular flow of resources, materials and products through efficient utilization and reuse. This new economic model encourages sustainable green growth by extending the life of products and materials and minimizing waste.⁸ The circular economy model distinguishes between **Sustainable Consumption and Production** and the use of materials that minimize the use of natural resources and toxic materials and replaces them with materials that advocate the need for a model that supports a better quality of life.

The main approach of the European Union (EU) in implementing the circular economy is both

to increase circularity within the borders of the Union and to pioneer the circular economy understanding on a global scale. As global consumption of materials such as biomass, fossil fuels, metals and minerals is expected to double in the next four decades, EU Member States are also trying to manage their limited natural resources, as can be seen in the figure below.⁹ The EU imports most of the critical raw materials used in production from other countries. In addition, fossil fuels used in energy production cause climate change and environmental pollution. EU has introduced the circular economy as a solution to these situations.

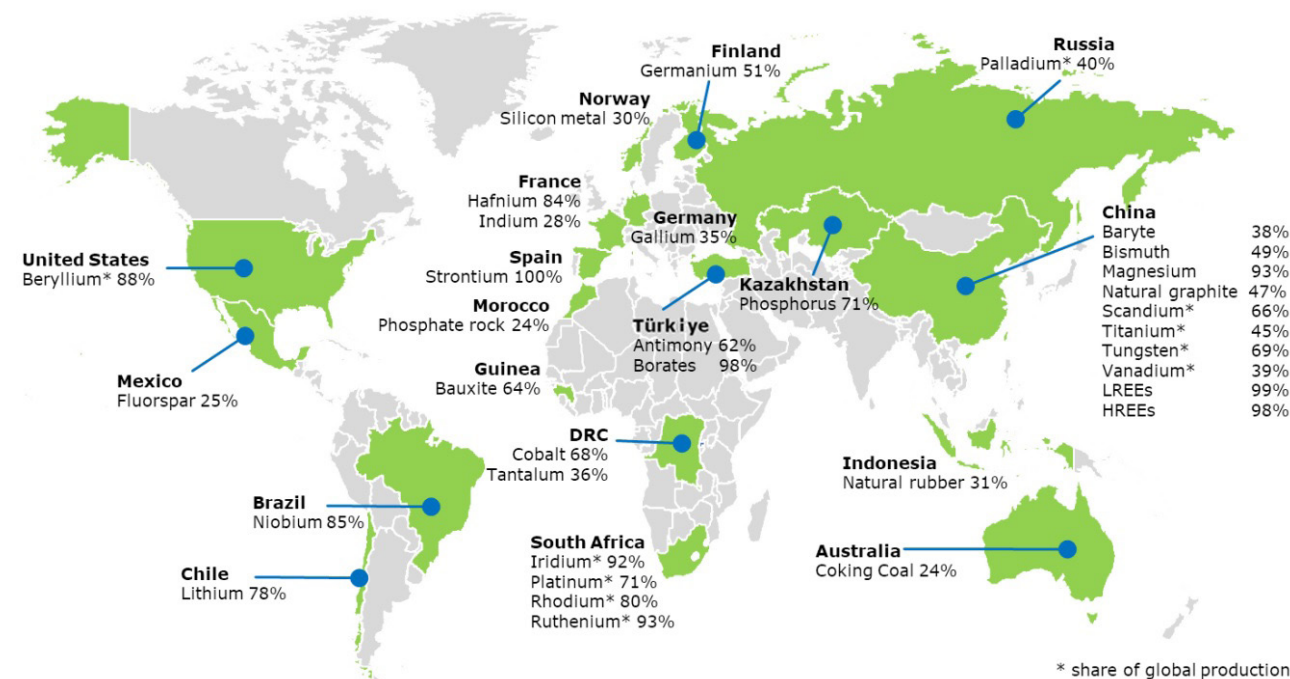


Figure 3 - Countries with the Largest Share in EU's Critical Raw Material Supply¹⁰

In this direction, the EU first prepared the First Circular Economy Action Plan in 2015 and started to implement it gradually at EU scale as of 2018. The Plan includes a total of 54 actions under 7 headings;

1. Production
 - Production Design
 - Production Processes
2. Consumption
3. Waste Management

4. Waste-to-Resource (Secondary Raw Material)
5. Priority Areas / Sectors
 - Plastics
 - Food Waste
 - Critical Raw Materials
 - Construction and Demolition
 - Biomass and Bio-based Products
6. Innovation, Investment and Other Horizontal Measures
7. Monitoring

⁸ EIB (2020). The EIB Circular Economy Guide: Supporting the Circular Transition, European Investment Bank. Available at <https://www.eib.org/en/publications/the-eib-in-the-circular-economy-guide> adresinden ulaşılabilir.
⁹ OECD (2018). Global Material Resources Outlook to 2060, Organisation for Economic Co-operation and Development. Available at <https://www.oecd.org/environment/waste/highlights-global-material-resources-outlook-to-2060.pdf>
¹⁰ EC, (2020). Critical Raw Materials, European Commission. Available at https://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_en

In December 2019, the EU announced the **European Green Deal** as the Union's new growth strategy, setting out the actions needed to achieve a more resource-efficient and competitive economy. The EU will work closely with international partners to improve global environmental standards and promote green and more sustainable development overseas.¹¹ The overall goal is to reduce greenhouse gas emissions and become the first climate neutral continent by 2050. Key benefits include economic and safe efficiency, zero pollution, smarter transport and high quality food. The EU is showing leadership and setting an example in this context as it has increased its domestic commitments, changed its regulatory framework and significantly reduced its greenhouse gas emissions. As the EU alone accounts for eight per cent of global greenhouse gas emissions, it is leading the global actions to achieve the Paris Agreement targets. As the foreign policy component of the Green Deal, the EU aims to increase its resilience and competitiveness in a changing security and geopolitical environment and to trigger a global transition towards climate neutrality.¹²

The European Green Deal will underpin Europe's actions beyond the Union's borders and international partnerships targeting climate action to promote a global transition to climate neutrality.

In March 2020, the European Commission published the 'New Circular Economy Plan', which forms one of the key components of the European Green Deal. The Commission notes that half of global greenhouse gas emissions come from the extraction and production of raw materials and that Europe will not reach its carbon-neutral target by 2050 without moving to a circular economy. The new Circular Economy Plan aims to accelerate the fundamental transformation envisaged by the European Green Deal and to take the circular economy actions implemented since 2015 forward. The Plan presents a series of interrelated initiatives to create a strong and coherent product policy framework that will standardise sustainable products, services and business models and make consumption patterns waste-free.¹³ Under

the new Action Plan, the Commission has identified 7 areas and 35 actions that are key to achieving circular economy.¹⁴

1. Sustainable Product Framework Policy
2. Key Product Value Chains
 - Electronics and ICT
 - Batteries and vehicles
 - Packaging
 - Plastics
 - Textile
 - Construction and buildings
 - Food, water and nutrients
3. Less Waste, More Value
4. Making the Circular Economy Work for People, Regions and Cities
5. Crosscutting Actions
6. Leading Efforts at the Global Level
7. Monitoring Progress

1.1. Policies and Legal Infrastructure

Türkiye also includes policies, targets and objectives related to circular economy in Development Plans, Medium Term Programs, Annual Programs, sectoral action plans and strategy documents as well as legislation on the subject in detail.

The main legislation referring to NCESAP is the **Environmental Law No. 2872**.¹⁵ In December 2020, one of the main objectives of the amendment to the law was **to increase resource efficiency in line with the circular economy and zero waste approach**. With the amendment, the phrase **"promoting zero waste, implementing circular economy principles and combating climate change"** was included in the Law. Another important step taken with this amendment is the regulation of secondary legislation on **the compulsory use of waste or recycled materials obtained from waste**, which will make a great contribution to the circular economy vision of our country in the coming period.

In the **Twelfth Development Plan (2024-2028)**¹⁶ which is the highest policy document of our country, it is stated that investments in the circular economy are expected to accelerate in line with global developments and trends.

¹¹ EC (2020). The EU Green Deal, European Commission. Available at https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

¹² EU (2021). Council conclusions on Climate and Energy Diplomacy - Delivering on the external dimension of the European Green Deal, Council of the European Union. Available at <https://www.consilium.europa.eu/media/48057/st05263-en21.pdf>

¹³ EC (2019). European Green Deal, European Commission. Available at https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF

¹⁴ EC (2020). Circular Economy Action Plan, For a cleaner and more competitive Europe, European Commission. Available at https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

¹⁵ MoEUCC (2024) Environmental Law, Ministry of Environment, Urbanisation and Climate Change. Available at <https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=2872&MevzuatTur=1&MevzuatTertip=5>
¹⁶ SBB (2024). Twelfth Development Plan, Presidency Strategy and Budget Presidency. Available at https://www.sbb.gov.tr/wp-content/uploads/2023/11/On-ikinci-Kalkinma-Plan1_2024-2028.pdf

It is underlined that new job opportunities and green employment opportunities related to the circular economy have emerged and within this context, the demand for qualified workforce specialized in fields such as engineering, information technologies and environmental sciences has increased. Policies in different sectors under the titles of 'Stable Growth, Strong Economy', 'Competitive Production with Green and Digital Transformation' and 'Disaster Resilient Living Areas and Sustainable

Environment' of the Development Plan are directly related to circular economy. Circular economy investments are seen as one of the strategic areas for Türkiye to reach its net zero emission target by 2053.

In this context, the prominent policies and measures in the field of circular economy in the Twelfth Development Plan, **particularly the preparation of the NCESAP**, are as follows.

Table 1 - Major Policies and Measures in the Twelfth Development Plan in the Context of Circular Economy

Related Title	Policy / Measure
3.1. STABLE GROWTH, STRONG ECONOMY 3.1.2. Domestic Savings	350. Promotion of responsible production and consumption behaviors (SDG 12), which are among the Sustainable Development Goals, will be encouraged in the society. 350.1. Consumption behaviors that increase energy and water saving, waste reduction, use of durable and sustainable products, recycling, purchasing and repairing second-hand products, walking, cycling and using public transportation, which are elements of responsible consumption, will be promoted. 350.2. Training on the acquisition of sustainable production and consumption behaviors will be included in the curricula and programs of public institutions and the private sector.
3.1. STABLE GROWTH, STRONG ECONOMY 3.1.3. Balance of Payments	360. In order to ensure sustainable export growth, production, branding, promotion and marketing processes of goods and services based on R&D and innovation, compatible with green and circular economy, will be supported.
3.1. STABLE GROWTH, STRONG ECONOMY 3.1.6. Fiscal Policy	397.6. Public procurement legislation will be updated in line with international norms and standards with a procurement approach that supports and prioritizes digitalization, innovation and sustainability, and sectoral public procurement regulation will be implemented.
3.2. COMPETITIVE PRODUCTION WITH GREEN AND DIGITAL TRANSFORMATION 3.2.1. Manufacturing Industry	427. Green transformation in the manufacturing industry will be supported, and circular and sustainable production practices will be increased 427.1. R&D activities and technology transfer will be supported for the adoption, development and dissemination of sustainable production and green transformation technologies. 427.2. Green transformation projects will be designed for common use in existing OIZs, industrial zones (IZ) and small industrial estates (SIE), and Green OIZs and Green IZs will be made widespread. 427.4. Industrial utilization of wastes and circular economy practices will be made widespread. 427.11. Facilities that report energy and resource efficient production by reducing their emissions towards the zero pollution target will be certified to show that they are engaged in cleaner production. 427.12. Wastes generated as a result of industrial activities will be collected separately at source. 438. Green and digital transformation of the chemicals sector will be supported. 438.4. Within the scope of the sector's transition to circular economy, the product life cycle method will be made widespread. 438.6. Waste management process will be improved in a way to prevent pollution, starting from the stage of separation at source. 439. Domestic raw material utilization in the chemical industry will be increased. 467. A circular economy road map for the electrical equipment sector will be determined. 467.1. Implementation of eco design requirements for electrical and electronic goods and components will be ensured. 467.2. The recovery of lead, which is the main raw material of accumulators, will be addressed with a holistic approach. 467.3. Harmonization with the EU Battery and Battery Waste Regulation will be ensured in order to improve the capacity for the collection and recycling of batteries.

	470. In the automotive sector, green transformation will be realized through transition to circular economy and transformation of the market. 470.2. A system for battery recycling, secondary use and disposal will be established. 471. In the automotive industry supply chain, increasing domestic supply and added value at all stages from design to production will be supported. 471.1. A road map will be created for the domestic procurement of critical raw materials used in new generation energy vehicles. 479. In order to increase raw material security in the Textile-Clothing-Leather industry, research and production of alternative raw materials and investments in natural and synthetic fibre raw materials will be encouraged. 481. The main objective in the non-metallic mineral products sector is to ensure sustainable production, secure input supply, ensure compliance with green transformation, increase productivity by developing high value-added product range and competitiveness. 485. In the base metal industry, studies will be carried out on the economization of steel and aluminum wastes and supply security of copper and aluminum metal.
3.2. COMPETITIVE PRODUCTION WITH GREEN AND DIGITAL TRANSFORMATION 3.2.2. Priority Areas of Development	495.3. Awareness raising activities will be carried out to prevent food loss and wastage. 500.4. The use of forest products for the longest possible period within the framework of circular economy will be encouraged, reuse and recycling will be increased. 517. Studies will be carried out to increase the supply security of raw materials used in energy technologies and to minimize the negative impacts of these raw materials on the environment. 517.1. Recycling facilities will be made widespread in order to reduce the negative impact of equipment whose lifetime is completed, such as solar panels and batteries, on the environment and to ensure transition to circular economy. 517.2. Comprehensive regulations will be made regarding the recycling of raw materials used in energy technologies, and awareness and reward mechanisms will be established for manufacturers and consumers.
3.2. COMPETITIVE PRODUCTION WITH GREEN AND DIGITAL TRANSFORMATION 3.2.3. Sectoral Policies	597.3. 597.3. Mining wastes, residues and tailings will be inventorized, the potential of valuable elements and minerals contained in them will be determined and projects for their utilization will be developed. 599. A strategy will be developed for the identification of strategic and critical raw materials in Türkiye and their management. 599.1. A road map will be prepared for the safe supply of strategic and critical mines. 599.2. Legal regulations will be made on management, strategic reserves, stocks and export restrictions for strategic and critical minerals. 599.3. In order to ensure the supply security of raw materials such as nickel, lithium, cobalt, rare earth elements used in areas such as renewable energy, batteries and electric vehicles, efforts will be made to cooperate with countries that have rich reserves in these minerals. 621.2. Promotion and awareness-raising activities will be ocarried out to raise awareness of producers and consumers, particularly on green transformation, environmental impacts of products, sustainable production and consumption. 635. Products and construction techniques based on sustainable built environment will be developed. 635.1. The development of the software sector, which is suitable for digital transformation in life cycle analyses and sustainability issues, will be supported. 635.2. Capacity will be developed for the use of sustainable building design methods based on life cycle analyses. 636.1. The architecture-engineering education curricula in universities will be reorganized in order to train qualified and foreign language speaking labor force in the field of circular economy. 639.2. The knowledge and skills of construction sector employees in new areas such as digitalization, circular economy and energy efficiency will be developed with a lifelong learning approach.

3.4. DISASTER RESISTANT LIVING SPACES, SUSTAINABLE ENVIRONMENT 3.4.5. Environmental Protection	866. In order to ensure efficient use of resources, sustainable production and consumption patterns will be implemented within the framework of transition to circular economy. 866.1. Efforts will be made to disseminate existing best environmental practices on sustainable consumption and production. 866.2. Legislative work will be completed to harmonize raw material procurement, production, consumption and waste management processes with international standards. 866.3. In order to minimize the harmful effects of all wastes on human health and the environment, necessary measures will be taken regarding their release into air, water and soil. 866.4. Efforts will be carried out to prevent wastes causing marine litter at the source and to prevent the damage of existing marine litter to the marine environment. 866.5. The environmental labelling system will be extended and the competitiveness of environmentally friendly products and services will be increased. 866.6. Green public procurement strategies will be developed, alternative procurement criteria will be determined and carbon footprint will be reduced. 867. Effective management of chemicals will be ensured in a way to minimize their effects on human health and the environment. 867.1. Through holistic chemicals management, the negative impacts of chemicals on human health and the environment will be minimized throughout the life cycle.
3.4. DISASTER RESISTANT LIVING SPACES, SUSTAINABLE ENVIRONMENT 3.4.6. Urban Infrastructure	878.8. By taking circular economy criteria into consideration, wastewater treatment plant design norms and criteria specific to our country will be determined and design software will be developed. 881. Solid waste management will be made more efficient by considering circular economy principles. 881.1. National Circular Economy Action Plan will be prepared. 881.2. A database will be established in all areas of waste management, a monitoring system will be developed and harmonization of online data entry systems will be ensured. 881.3. Programs will be organized to build human and technical capacity for waste management within the scope of transition to circular economy. 881.4. Technical standards for recovered secondary products will be developed and incentive and guidance legislation will be improved. 882. Zero waste applications will be made widespread and public awareness will be raised on recycling of waste. 882.1. Within the scope of the “Zero Waste Project”, educational awareness raising activities will be carried out and zero waste applications will be carried out at all levels of education. 883. Recycling and disposal facility projects of domestic solid waste and transfer station projects of local administrations with insufficient financial capacity will be supported within a program. 883.1. The “Solid Waste Program”, which is implemented to support solid waste management projects that local administrations have difficulty in financing, will be extended.

In addition to Türkiye’s national requirements for a more circular economy, such as ensuring effectiveness and efficiency in resource use, reducing costs, increasing competitiveness and minimizing environmental impacts, another objective for the preparation of the **NCESAP** is that **Türkiye is a candidate country for full membership to the EU and aims to take the**

necessary measures to ensure harmonization with EU objectives and policies. Within this scope, it is important for Türkiye to harmonize and implement the legislation and initiatives introduced by the **EU Circular Economy Action Plan**¹⁷ which constitutes one of the main components of the **European Green Deal**¹⁸ at different levels.

¹⁷ EC (2020). Circular Economy Action Plan, For a cleaner and more competitive Europe, European Commission. Available at https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF

¹⁸ EC (2019). European Green Deal, European Commission. Available at https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF

The Ministry of Environment, Urbanization and Climate Change was assigned the responsibility of preparing a **National Circular Economy Strategy and Action Plan** in order to realize the actions determined within the scope of the **National Green Deal Action Plan**¹⁹ published in 2021 and the **National Climate Change Mitigation Strategy and Action Plan**²⁰ published in 2024.

Türkiye’s international commitments to combat climate change also constitute an important basis for the preparation of NCESAP. At the 26th Conference of the Parties, the parties notified their **updated First Nationally Determined Contribution (NDC)** to the **UNFCCC** and the **Paris Agreement** on 13 April 2023.²¹

With this declaration, Türkiye confirms that it will reduce its GHG emissions by 41 per cent by 2030 (695 Mt CO2 equivalent in 2030) compared to the baseline scenario set out in the First Nationally Determined Contributions Declaration, where 2012 is considered as the base year (reference year). Türkiye’s updated NDC covers the entire economy and includes comprehensive mitigation and adaptation actions as well as assessments of means of implementation. The new reduction target represents a step forward towards achieving a **net zero emission target by 2053**, as well as demonstrating greater ambition on the basis of science and equity.

In the updated NDC, it is stated that resource efficient and sustainable **circular economy** is of utmost importance for achieving the net zero target, protecting the natural environment and increasing competitiveness. The document includes the **National Circular Economy Strategy and Action Plan** among the primary legislation and policy documents that are being prepared to improve Türkiye’s climate actions and are targeted to be completed as soon as possible.

The **Medium Term Programme (2025-2027)**²² published in September 2024 includes the following concrete policies and measures for both the **preparation of the NCESAP** and the transition to a circular economy.

- National Circular Economy Action Plan will be implemented, recovery rates will be increased and industrial symbiosis practices will be encouraged.
- Legislation will be developed for the calculation and monitoring of carbon footprint and other environmental indicators by following the legislation on environmentally sensitive design and sustainable products in the manufacturing industry, and the digital infrastructure which will be required will be supported.
- Investments aiming low-carbon generation in line with the circular economy approach will be supported under the Green Transformation Support Program.
- Zero waste applications will be made widespread.
- Public procurement legislation will be updated in line with international norms and standards with a procurement approach that supports and prioritizes digitalization, innovation and sustainability, and sectoral public procurement regulation will be implemented.
- By analyzing the reflections of green and digital transformation on labor markets, programs for adaptation and fair transition will be implemented.
- Legislative work will be completed for the establishment of a National Green Taxonomy in line with international taxonomy examples, especially the EU taxonomy, and in line with Türkiye’s needs.

1.2. Preparation Process

Within the scope of NCESAP preparations, various desktop analyses and reporting activities, surveys, bilateral meetings and workshops were carried out. The concrete evaluations and recommendations that came to the fore as a result of all these studies were reflected in the strategy’s vision, strategic goals, objectives, actions and implementation calendar, and the institutions responsible for the actions were determined.

¹⁹ Ministry of Trade (2021). National Green Deal Action Plan. Available at https://ticaret.gov.tr/data/60f1200013b876eb28421b23/MUTA-BAKAT%20YE%C5%9E%C4%BOL.pdf?utm_source=aposto

²⁰ Directorate of Climate Change (2024). National Climate Change Mitigation Strategy and Action Plan. Available at https://iklim.gov.tr/db/turkce/icerikler/files/undp_azaltim_spread.pdf

²¹ Directorate of Climate Change (2023) The Updated First National Contribution Statement. Available at <https://iklim.gov.tr/db/turkce/dokumanlar/turkiye-cumhuriyeti--8230-102-20230512125223.pdf>

²² SBB (2024). Medium-Term Program (2025-2027), Presidential Strategy and Budget Directorate. Available at https://www.sbb.gov.tr/wp-content/uploads/2024/09/Orta-Vadeli-Program_2025-2027.pdf

- A Market Research and Institutional Visits process **was conducted between July-September 2022 in order to identify the gaps, needs and solution proposals of relevant stakeholders regarding Türkiye's circular economy transition process and policies and to identify the environmental, economic and social benefits and challenges of the transition.**

For this purpose, one-to-one interviews were conducted with a total of 86 institutions/organizations/units and feedback was received from 133 institutions/organizations/units through a structured questionnaire.

- In order to verify the gaps, needs, solution proposals and impacts identified through market research and institutional visits by the relevant stakeholders; to develop solution proposals that will form the basis of NCESAP; and to bring international and local experts together to exchange information on circular economy, two **Circular Economy Workshops** for different stakeholders were organized. In addition to the physical participation of 198 people from public and private sector institutions/organizations, 175 people participated in the workshops via remote connection.

- In parallel with the above studies, a **Benchmark Analysis** has been carried out in order to compare the EU's Circular Economy policy goals and objectives with the relevant national conditions and systems and to reveal the integrability of these goals and actions into the national framework and the applicability of the concepts and actions. In the Benchmark Analysis, the current situation is presented, gaps and needs were analyzed, one or more solutions (interventions) were proposed for each identified need and responsible institutions were identified for each solution. All these findings were comprehensively reported in December 2022 under the name of **General**



Assessment Report. The report focusses on four groups of gaps and needs: legislative, infrastructure, institutional and financial. The main environmental, economic and social benefits, challenges and opportunities for Türkiye during the transition to circular economy are presented.

- **A Sectoral Impact Assessment (SIA) study** was prepared to determine the impacts of the implementation of the measures in the 2015 and 2020 EU Circular Economy Action Plans on the relevant sectors of the Turkish economy. In this study, the following seven sectors, which are considered to have the most impact and influence on Türkiye's transition to Circular Economy and prioritized accordingly, are examined.

- o Packaging
- o Battery and Vehicle
- o Construction and Building
- o Electronics and ICT
- o Food and Biomass
- o Plastic
- o Textile

The results of the **SIA** study provided important inputs when designing strategic goals, objectives and actions within the scope of NCESAP.

- In order to structure NCESAP in a participatory manner, to develop a vision, target year, strategic goals and objectives, and to elaborate the actions to achieve these goals, two comprehensive **strategy and action plan development workshops** were held with the participation of 125 representatives of institutions/organizations. The workshops have been one of the most fundamental preparatory stages in the formulation of the framework of the strategies and the emergence of concrete actions.

- **A National Circular Economy Action Plan Specialized Working Group (SWG)** was established at various stages of NCESAP preparations in order to receive institutional views and make improvements. The SWG under the chairmanship of the General Directorate of Environmental Management of the Ministry of Environment, Urbanization and Climate Change (MoEUUCC) consists of representatives of the following institutions/organizations.

- o Presidency of the Republic of Türkiye,
- o Presidency of Strategy and Budget
- o Ministry of Labour and Social Security



- o MoEUCC, General Directorate of EIA, Permit and Inspection
- o MoEUCC, Directorate of Climate Change
- o MoEUCC, Türkiye Environment Agency (TÜÇA)
- o Ministry of Foreign Affairs
- o Ministry of Energy and Natural Resources
- o Ministry of Treasury and Finance
- o Ministry of Industry and Technology
- o Ministry of Agriculture and Forestry
- o Ministry of Trade
- o TÜBİTAK Marmara Research Center (MAM)
- o Union of Municipalities of Türkiye (TBB)
- o Turkish Statistical Institute
- o The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)
- o Independent Industrialists and Businessmen's Association (MÜSİAD)
- o Turkish Industry and Business Association (TÜSİAD)

responsibility within the scope of NCESAP and the draft actions were finalized.

1.3.Objective and Scope

NCESAP aims to protect natural resources, combat climate change, increase international competitiveness and reduce dependence on imports. Within this scope;

- Ensuring sustainability by protecting the environment and biodiversity
- Combating climate change through greenhouse gas mitigation
- Being able to achieve national and international sustainable development and climate change goals
- Ensuring efficient/sustainable management of limited primary resources and increasing welfare
- Minimizing waste generation, adding value to the generated wastes by reuse or ensuring their recovery
- Transforming linear economy into circular economy by developing new business models with a cost-effective approach
- Strengthening international competitiveness and exports, increasing trade integration with the EU
- Reducing the import share and current account deficit of our country, which is largely dependent on foreign raw materials

The SWG has met regularly to assess the outputs of all the above-mentioned work and to work on the proposed actions under the headings of **legislation, infrastructure, technology and innovation, institutional structure and co-operation, as well as financing and economic instruments.** Following the SWG meetings, written opinions were received from all institutions that have been assigned



- Manufacturing longer lasting products with less raw materials and better design
- Ensuring that materials that are safe for human health and the environment are included in the product cycle
- Minimizing the potential negative social impacts of the transition to circular economy, ensuring the fairest transition for all segments of society, including workers, women, persons with disabilities and children, and increasing social welfare

In order to achieve these objectives, NCESAP focuses on objectives and actions developed under 6 main strategic areas listed below.

- Circular Products
- Priority Sectors
- Waste and Wastage Prevention and Reduction
- Dissemination of Circular Economy
- Horizontal Actions
- Monitoring of Progress

Circular Products include policies and measures for more sustainable business models and product manufacturing and their supervision.

Under the strategic area of **Priority Sectors**, sectors (product value chains) that are both expected to be affected by the transition to a circular economy and important for accelerating this transition will be addressed. The **Waste and Wastage Prevention and Minimization** section focuses on general waste minimization policies and measures, as well as waste reuse and production. **Dissemination of Circular Economy** includes strategies and actions developed for different levels to adapt to the transition to circular economy. Cross-cutting policies and measures related to climate change and affordability are categorized under **Horizontal Actions**. Finally, the title of **Circular Economy Monitoring** sets out the follow-up system to be developed for the successful realization of the transition to circular economy and monitoring of progress.

Under these main headings, the Strategy and Action Plan includes a total of 6 Strategic Goals, 22 Objectives and 53 Actions. In order to follow up the realizations and progress made regarding the actions, it is suggested that a Working Group be established with the institutions responsible for implementation and the progress should be reported to the Working Group by the Ministry of Environment, Urbanization and Climate Change on a 6-monthly basis.

2. NATIONAL CIRCULAR ECONOMY STRATEGY

2.1. Vision and Target Year

In 2018, 2020 and 2023, circular material use rates are 9.1, 8.6 and 7.2 percent in the world and 11.6, 11.2 and 11.8 percent in the EU. As can be seen from these rates, circular material utilization rates worldwide have been declining in recent years, while the EU is struggling to make progress. The main reason for this is that the total amount of materials consumed by the global economy continues to increase. In the last six years alone, almost as much material has been consumed as in the entire twentieth century - more than half a trillion tons. The vast majority of these materials entering the economy are raw materials. The share of secondary materials is therefore steadily decreasing.²³ The vision envisaged by NCESAP forms the framework for the policies and measures necessary to increase the national circular material utilization rate.

The vision and target year of NCESAP were determined in a participatory manner by taking the opinions of relevant stakeholders and taking different suggestions received into consideration. The vision of NCESAP, which will be implemented between 2025 and 2028, is a Türkiye that is highly competitive, protects and develops the environment, and progresses towards the net zero emission target in 2053 through a circular economy approach specific to Türkiye, based on a production and consumption model that reduces the use of raw materials and waste generation, extends the life of products, encourages reuse, repair, renewal and recycling.

2.2. Priority Sectors

In parallel with the key product value chains prioritized in the EU Circular Economy Action Plan, 7 sectors were selected within the scope of NCESAP. The transition to a circular economy is expected to both have the potential for significant change in the following sectors and accelerate the transition of these sectors.

1. Packaging
2. Battery and Vehicle
3. Electronics and Information-Communication Technologies (ICT)
4. Food and Biomass
5. Construction and Building
6. Plastic
7. Textile



As a result of the SIA carried out within the scope of the National Green Deal Action Plan, it has been revealed that all actions included in the 2015 and 2020 EU Circular Economy Action Plans will lead to an increase in costs for these 7 sectors in general and some of these costs can be compensated by a decrease in indirect environmental costs. However, the positive impacts of the actions in terms of creating sectoral added value and reducing environmental impacts were clearly identified.

2.3. Strategic Areas and Goals 2.3.1. Circular Products

Strategic Goal 1: The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

On 30 March 2022, the European Commission adopted the **Sustainable Products Initiative** package of measures, including the Regulation on **Environmentally Responsible Design Requirements for Sustainable Products (2024/1781/EC)**. The Commission has proposed new rules to make almost all products on the EU market more environmentally responsible, circular and energy efficient throughout their entire life cycle.

With the Sustainable Products Initiative, the EU aims to make sustainable products the norm on the EU market in order to strengthen the circular economy and reduce the impact of products on the environment and climate. The initiative is expected to be applied to the widest possible range of products.

²³ CGR (2024). *Circularity Gap Report 2024*. Available at <https://www.circularity-gap.world/2024>

The EU Regulation on Environmentally Responsible Design Requirements for Sustainable Products (2024/1781/EC), one of the policy documents under the EU Sustainable Product Initiative, entered into force after being published by the EU Council in the EU Official Journal dated 28 June 2024.

As the EU is the most important export market for Türkiye, the measures related to the Sustainable Products Initiative are of great interest to the business community.

Complying with the regulations under the Initiative will entail various costs related to design and production. On the other hand, Türkiye, which has a logistical advantage due to its proximity to the EU, can gain a competitive advantage over other countries and increase its share in the EU market by taking measures in this direction.

Another important initiative under the Sustainable Product Policy is the **Digital Product Passports**, whose product-specific information requirements will enable consumers to know the environmental impact of the products they buy. All products subject to the regulation will have a digital product passport. These passports are tools that can significantly enhance the end-to-end traceability of a product by complementing the information provided in product manuals or labelling. Digital product passports are expected to help consumers make informed choices by improving access to product information, enabling access to relevant information from repair services or recyclers, and improving the enforcement of legal requirements by authorities.

In our country, legal regulations for digital product passports and infrastructure preparations for collecting the necessary data will be required to be made. The costs to be borne by producers may be reflected on sales prices and thus on consumers. On the other hand, there will be environmental benefits, especially due to the reduction of resource consumption and greenhouse gas emissions.

In this process, in terms of our country, addressing the environmental impacts of products throughout their life cycles will ensure the emergence of sustainable, circular and resource efficient products and these products will contribute to the national economy. These policies are expected to increase the durability, reliability and reparability of products as well as generate a demand for secondary raw materials.

On 30 March 2022, the European Commission adopted a package of measures, one component of which is the **Directive on Empowering Consumers for Green Transformation in the EU (EU 2024/825)**, published on 6 March 2024, which is complementary to the Sustainable Product Initiative. This directive aims to better inform consumers about the environmental sustainability of products, protect them against green washing, unreliable or false environmental claims and planned obsolescence practices.

Following the publication of the National Green Deal Action Plan, various activities have started to be carried out, especially by the Ministry of Trade, which is directly responsible for the issue. Türkiye needs to revise the Consumer Protection Law to integrate right to repair requirements, strengthen information tools and regulate green declarations.

Regulations to be made within the scope of the National Environmental Labelling Programme, including digital product passport applications to better inform consumers, will help alleviate potential barriers to cross-border trade, and the dissemination of fair practices will increase the competitiveness of SMEs.

The European Union published the **Industrial Emissions Directive (IED) (2024/1785)** on 15 July 2024 and the **Industrial Emissions Portal Regulation (IEPR) (2024/1244)** on 2 May 2024 in the Official Journal of the EU to revise measures to prevent and reduce pollution from large industrial installations, monitor progress and provide public access to this environmental data. The IEPR replaced the EU Pollutant Release and Transfer Register (PRTR) Regulation.

The revision aims to better integrate circular economy concepts into the updated Best Available Techniques Reference Documents (BAT-REF) and BAT Results.

Within the scope of harmonization of the existing EU Integrated Pollution Prevention and Control (IPPC) Directive and IED, the **Regulation on Management of Industrial Emissions** was published in the Official Gazette dated 14 January 2025 and numbered 32782 and will enter into force on 1 December 2025.

Within the scope of the Regulation, there are approximately six thousand facilities in sectors such as energy, metal, mineral, chemical, waste management, textile, automotive, leather, paper, food and animal husbandry.



With the “Green Transformation in Industry Certificate”, our facilities will be classified from A to F from one hundred percent compliance to fifty percent compliance according to the use of the best available techniques.

Within the framework of “Green Transformation in Industry”, it is aimed to expand clean, environmentally friendly and resource efficient production with circular economy policies and to increase the competitiveness of our industry in the export market with environmental improvement.

On the other hand, the PRTR Regulation has been harmonized with the **Regulation on Pollutant Release and Transfer Register (PRTR)** published in the Official Gazette dated 4 December 2021 and numbered 31679 and the establishment of the system is ongoing.

Within this framework, as a strategic goal under the strategic area of “Circular Products”; **the design, production and use of more durable, reusable, repairable and updateable products will be promoted.**

The objectives in line with this strategic goal are;

- Promoting environmentally responsible design for more circular products,
- Preparing the necessary infrastructures for new circular initiatives,
- Integrating circular economy principles into industrial production processes.

2.3.2. Priority Sectors

Strategic Goal 2: Circular economy will be integrated into product life cycles in priority sectors.

In order for the NCESAP to become more circular, circular economy models that include interventions such as reducing the amount of raw materials used by these sectors, replacing them with renewable alternatives if possible, ensuring that the products manufactured are repairable and therefore can be used for a longer period of time, and that the products do not pose a danger when they turn into waste and can be recycled should be applied to the entire value chain.

Common objective for priority sectors in the light of this background information;

- Increasing circularity at all stages of production, consumption and waste management in priority sectors.

Packaging

On 22 January 2025, the European Commission published the **Packaging and Packaging Waste Regulation (EU 2025/40)**. The Regulation sets out the requirements for the entire life cycle of packaging with regard to environmental sustainability and labelling in order to place packaging on the market. It also regulates extended producer responsibility, the prevention of packaging waste, such as the reduction of unnecessary packaging and the reuse or refilling of packaging, and requirements for the collection and treatment of packaging waste, including its recycling.

The Regulation sets out the rules for entry into the EU market and packaging materials that do not meet the sustainability and labelling criteria will not be able to be placed on the EU market. This will apply not only to the export of packaging materials, but also to all packaging to be used in the export of products to the EU. In this respect, harmonization with the aforementioned legislation is envisaged to include the approach of protecting the free movement of goods within the scope of the Customs Union.

The Regulation on the Control of Packaging Waste in force in our country is mostly in line with the EU Packaging and Packaging Waste Directive. However, some provisions of the Packaging and Packaging Waste Regulation (EU 2025/40) revising Directive 94/62/EC on packaging and packaging waste have not been fully transposed into national legislation.



Implementation of various practices within the scope of harmonization efforts may generate costs, reduce environmental impacts and create employment. When the Regulation enters into force and design criteria for recycling are set by the Commission, the definition of recyclability needs to be updated in the national regulation. The definition of recyclability can lead to compliance costs for the national packaging sector, but it can also lead to a reduction in greenhouse gas emissions and water consumption, as well as job creation.

Moreover, the main financial impacts on the private sector may result in the cost of secondary raw materials, verification costs and additional costs to increase existing recycling capacity. The expansion of existing recycling capacity, especially the establishment of chemical recycling, has greater financial implications.

In our country, savings will be achieved as a result of the introduction of obligations regarding packaging reduction and excessive packaging, reduction of material consumption and reduction of EPR costs. Besides, greenhouse gas emissions and water consumption will also be reduced.

Overall, harmonization efforts will have positive impacts in terms of greenhouse gas emissions, water consumption and employment. Although costs are incurred for the private sector, including packaging producers and recyclers, savings in indirect costs are possible.

Within this framework, in the packaging sector, which is among the priority sectors in the circular economy action plan, increasing recycled content, making packaging recyclable,

reducing excessive packaging, phasing out hazardous and harmful substances and establishing reuse business models will be encouraged.

Electronics and Information-Communication Technologies (ICT)

The European Commission has announced the “**Circular Electronics Initiative**” to promote longer product life cycles as part of the 2020 EU Circular Economy Action Plan.

Under the **Regulation on Environmentally Responsible Design Requirements for Sustainable Products**, the Commission introduced measures to ensure that mobile phones and tablets are designed to be energy efficient and durable; that consumers can easily repair, update and maintain them; and that the devices can be reused and recycled.

The **Directive on common rules encouraging the repair of goods (Right to Repair)** was adopted on 13 June 2024 and entered into force on 30 July 2024. The Directive aims to promote more sustainable consumption by increasing the repair and reuse of goods both within and outside the legal warranty.

The Commission published Directive (EU) 2022/2380 on a **common charger for electronic devices** on 23 November 2022. By the end of 2024, all mobile phones, tablets and cameras sold in the EU will need to be equipped with a USB Type-C charging port. This obligation will also cover laptops as of spring 2026. The amendments introduced by the Directive were harmonized by the Ministry of Transport and Infrastructure and shared with our Permanent Representation to the EU to be forwarded to the European Commission for confirmation of harmonization.

Work is ongoing to **review the Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment** and to provide guidance to clarify its links with REACH Regulation and environmentally responsible design requirements.

In our country, **Regulation on the Management of Waste Electrical and Electronic Equipment** published in the Official Gazette dated 26.12.2022 and numbered 32055 was prepared by taking into account the EU WEEE Directive (2012/19/EU). According to the Regulation, the use of recycled materials in products is prioritized

where technically feasible. In addition, the regulation includes WEEE collection targets and recycling and recovery targets for collected WEEE.

The Regulation on the Sale of Refurbished Products No. 31221 published by the Ministry of Trade on 22.08.2020 regulates the activities regarding the refurbishment, certification and resale of used mobile phones and tablets.

Within the scope of the electronics and information-communication technologies value chain, it will be necessary to take measures by developing legislation on the sustainable design of mobile phones and tablets, right to repair, planned obsolescence and common charger application. The introduction of a common charger for mobile devices will have a significant positive impact on the consumer. Since the production of mobile phones and mobile phone chargers in Türkiye is carried out by a small number of companies, it will not be possible to realise high costs in Türkiye. On the other hand, it will be useful for charger manufacturers/importers and companies planning to invest in this field to prepare for the common charger application in the EU market.

In our country, maintenance and repair services should be provided as part of after-sales services for the rest of the service life in terms of the right to repair and measures for planned obsolescence. The right to repair scheme will incentivize repair as well as promote the reuse of goods within and beyond the statutory warranty. The measures to be taken will change the consumption habits of consumers towards sustainability (repair and reuse) in the long term, and consumers will save money by replacing less suitable consumer goods that are

not subject to conscious obsolescence.

Food and Biomass

The 2015 EU Circular Economy Action Plan promotes a **reduction of food waste by 30 per cent by 2025 and 50 per cent by 2030**.

The 2018 revision of the EU Waste Framework Directive introduces new obligations on food waste prevention, such as the adoption of national food waste prevention programs and the monitoring and reporting of food waste amounts, referring to the target set by the United Nations under the SDGs for food waste to “reduce the amount of food waste per capita along the food production, consumption and supply chain by 50 per cent by 2030”.

The Commission published **Guidelines on food donation** in 2017 and **Guidelines on feed utilization of food no longer intended for human consumption** in 2018.

On 27 September 2019, the **Delegated Commission Decision** establishing a common EU methodology for measuring food waste was published.

In July 2023, the Commission **proposed a new revision to the Waste Framework Directive (COM(2023) 420)** with food waste as one of the focus areas, aiming to reduce the generation of food waste by 10 per cent in food processing and production and by 30 per cent in retail, food services and households by 2030.

The **National Strategy Document and Action Plan on Prevention, Reduction and Management of Food Loss and Waste in Türkiye** published in



2020 aims to create sustainable food systems in terms of both consumption and production by preventing, reducing and managing food loss and waste. This Plan is supported by **Türkiye's National Roadmap for Sustainable Food Systems** and several other policy documents.

According to the **Zero Waste Regulation** published in 2019 with the aim of preventing, reducing, reusing and recycling waste and avoiding wastage, it is essential to take necessary measures and prepare food waste prevention plans by the relevant parties throughout the production, supply chain and use of food in order to prevent food waste generation.

Work is needed in Türkiye to develop a common methodology and indicators to measure food waste, to examine how to achieve the SDGs on food waste, to establish a stakeholder platform to share best practices and assess progress, legislation on waste, food and feed to facilitate food donation and the use of old foodstuffs as animal feed, and to explore options for more effective use and understanding of date markings on food.

The introduction of new methods and techniques to reduce food waste is expected to increase investment costs, while on the other hand, it is expected to save on the purchase of raw materials and ingredients and waste treatment costs per unit of final product. The utilization of by-products in food production will create new business opportunities. Moreover, innovations to prevent food waste will increase investment costs, while reducing the amount of food waste will reduce expenditure on waste disposal. Measures to reduce food waste at all stages of the food sector value chain will have positive environmental impacts, particularly on greenhouse gas emissions, biodiversity, land use, water use and eutrophication.

Construction and Building

In 2020, the European Commission launched a new comprehensive Strategy for a Sustainable Built Environment in the construction and building sector **with the aim of increasing material efficiency and reducing climate impacts**. In this context, the **EU Construction Products Regulation** EU 2024/3110 was published in the Official Journal of the EU on 18 December 2024. The Regulation sets out harmonized rules on the environmental and safety performance of key characteristics of construction products, including life cycle assessment, and

environmental, functional and safety product requirements.

The **Regulation on Control of Excavation Soil, Construction and Demolition Wastes**, which has been in force in our country since 2004, aims to regulate the general rules and technical and administrative issues regarding the reduction, collection, temporary storage, transport, recovery, utilization and disposal of excavation soil, construction and demolition wastes in an environmentally responsible manner.

On the other hand, the **Regulation on the Demolition of Buildings**, which entered into force in 2021, states that the actual demolition cannot be started without the removal of manufacturing containing asbestos and similar hazardous chemicals in buildings and selective demolition according to the **Regulation on Control of Excavated Soil, Construction and Demolition Wastes**. It is foreseen that all kinds of wastes, starting from recyclable materials, should be separated at the source with appropriate processes, separated at the source and temporarily accumulated, primarily reused, and if it is not possible, it should be recycled.

The two regulations in question are in line with the EU Waste Framework Directive's objectives of waste generation reduction, selective demolition, reuse and recycling for construction and demolition waste. However, the new legal framework to be established under the EU Construction Products Regulation will need to be harmonized with the national legislation.

The strategy will require prioritization of recyclable and recycling-derived materials and compliance with minimum recycled content obligations and other limit values for environmental aspects, including climate-friendly approaches in technical specifications.

Reused and recycled raw materials represent an added value in terms of sustainability in the construction industry. Although the economic viability of selective demolition varies, it can be environmentally beneficial.

Implementation of practices aimed at recycling and reusing materials/components can generate different economic impacts, such as reduced transport costs for different types of construction and demolition waste, reduced waste disposal fees and waste treatment centre fees, and income from the reuse of materials/components. In addition to economic impacts, improvements are also envisaged in terms of reducing the environmental burden



of construction and demolition waste and the impacts associated with its transport.

It is estimated that a high amount of construction and demolition waste will be generated during the ongoing urban transformation process in our country. Moreover, since a large portion of the existing housing stock is located in first and second degree earthquake zones, it needs to be transformed through demolition and retrofitting activities. Due to all these activities, it is necessary to develop methodologies and standards to manage the increasing construction and demolition waste from a circularity perspective. Efforts to improve waste minimization, collection and recycling practices as well as related data collection and monitoring in the construction and building sector will need to be put on the agenda.

Battery and Vehicle

The European Commission adopted the new **Battery and Waste Battery Regulation (2023/1542)** on 12 July 2023 and published it in the Official Journal of the EU on 28 July 2023.

The new Regulation aims to ensure that all battery types placed on the EU market are sustainable and safe throughout their entire life cycle. The Commission has set new market access rules and targets for the collection, processing and recycling of end-of-life batteries and the content of recycled materials.

The **Digital Battery Passport**, one of the provisions of the Regulation, is critical for secure data sharing, increasing the transparency of the battery market and traceability of batteries throughout their lifecycle.

The existing legal framework in Türkiye needs to be harmonized with the new **Battery and Waste Battery** Regulation adopted in the EU. Legislative change needs include banning

the placing on the market of batteries or accumulators containing certain levels of hazardous substances, separate collection and achieving high levels of recycling for all waste batteries and accumulators.

Although the restriction of the use of hazardous substances related to mercury is in line with the new proposal, the threshold value for cadmium is higher compared to the new proposal. For this reason, regulation is required for the threshold values determined for cadmium within the scope of the Regulation on Control of Waste Batteries and Accumulators.

In order to reach the collection target rates specified in the Battery Regulation, gradual targets should be determined by taking the conditions of our country into consideration. It is critical that the infrastructure and other investments to be realized are planned and implemented in accordance with national conditions. Although there is no provision on carbon foot printing in the current Regulation, this issue may affect the sector due to the potential expansion of the EV battery sector in Türkiye and the possibility of batteries being included in the future Carbon Border Adjustment Mechanism (CBAM).

Currently, the national regulation does not contain requirements on the minimum recycled content of any active substance. With the new regulation, it is envisaged that battery exports to the EU will also be subject to these requirements. Minimum recycled content measures may create a need for the development of cost-effective technologies that can provide recycled material to the industry and impose an obligation to provide information on the amount of recycled content. At the same time, mandatory recycled content targets could increase the demand for secondary materials, which could positively affect the collection and recycling of batteries. Therefore, although there will be costs associated with technology development and upgrading to newer technology, these costs may be partially offset by increased revenue from recycled materials.

Harmonization of national legislation with EU legislation for sector-specific circular economy actions can generate added value and benefits for the sector. It is considered that the implementation of the provisions may generally increase investment costs and operating costs, as well as reduce carbon emissions and other environmental impacts.

On the other hand, according to EU Regulation No. 2023/851, all passenger cars and light commercial vehicles to be driven in 2035 are aimed to be carbon emission-free, and in this respect, the use of electric vehicles is expected to increase. The automotive sector is at the forefront of our country's exports to the EU, and the possibility of access to the EU market with the principle of free movement of goods within the scope of the Customs Union has contributed to the increase in automotive sector investments in our country. In the coming period, there will be a need to transform the current production from internal combustion engines to new technologies, especially electric. In this framework, harmonization with the Battery and Waste Battery Regulation will contribute to the production of electric vehicles in our country and increase the attractiveness of our country in terms of new investments.

In this direction, it is planned to repeal the Regulation on Control of Waste Batteries and Accumulators and to publish a new battery legislation.

On the other hand, preparations for the **National Critical Raw Material Strategy and Action Plan** are ongoing under the coordination of the Ministry of Energy and Natural Resources in order to obtain valuable elements in our country, to develop products and technologies related to these elements and to ensure their wide use in advanced technological products.

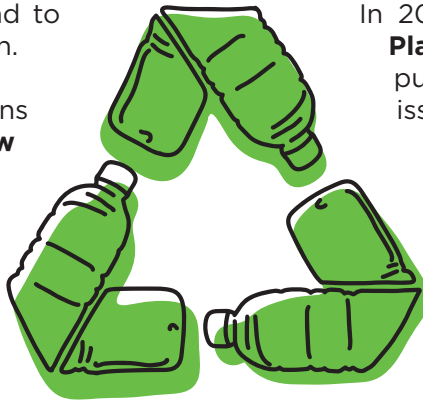
On 13 July 2023, the European Commission proposed a **new Regulation on End-of-Life Vehicles (COM(2023) 451)**. Proposed Regulation aims to improve the circular design of vehicles, to ensure that at least 25 per cent of the plastic used in the production of a vehicle is obtained from recycling, to recover more and better quality raw materials, to ensure that manufacturers are financially responsible for vehicles after they become waste.

The Regulation on the Control of End-of-Life Vehicles (ELVs) published in 2009 and in force in our country aims to reuse-recover at least 95 per cent of the average vehicle weight of ELVs and reuse-recycle at least 85 per cent of the average vehicle weight of ELVs. Since

2012, approximately 600 thousand tons of raw materials, mainly metal, plastic and glass, from 540 thousand scrap vehicles have been recycled and brought into the economy through 103 licensed ELV temporary storage areas for ELV decontamination and dismantling and 29 licensed ELV processing facilities for material recovery.²⁴

Improvements to be made in national legislation in vehicle design, production, service life and end-of-life processes will further reduce negative environmental impacts and contribute to the sustainability of the vehicle value chain. On the other hand, implementation of the relevant provisions will create pressures on the sector as it will require sectoral investments, innovation and adoption of new technologies, reorganization of supply chains and reduction of strategic dependence on raw materials.

Plastic



In 2018, the **“European Strategy for Plastics in a Circular Economy”** was published to address environmental issues related to plastics and to steer the EU towards a more sustainable plastics economy.

Published in 2019, the **Single Use Plastics Directive (2019/904)** aims to promote circular approaches that prioritize sustainable and non-toxic reusable products and reuse systems and reduce the amount of waste generated.

In 2020, within the scope of the EU's new circular economy action plan published in 2020, work was initiated to establish a policy framework for biobased, biodegradable and compostable plastics and an **EU Communication on biobased, biodegradable and compostable plastics (COM(2022)682)** was published in 2022.

The **new EU Waste Shipment Regulation (EU 2024/1157)** was adopted on 11 April 2024 and entered into force on 20 May 2024. The regulation aims to manage waste exported from the EU in a way that is sensitive to human health and the environment in destination countries by supporting the transition to a circular economy, while implementing stricter monitoring processes for plastic waste exports and stepping up sanctions to counter illegal waste shipments.

The Regulation on Packaging and Packaging Waste (EU 2025/40), published by the European Commission on 22 January 2025, will contribute to the commitment of the EU Plastics Strategy to ensure that all plastic packaging placed on the market by 2030 can be cost-effectively reused or recycled.

On 25 September 2023, the European Commission adopted **measures to restrict microplastics intentionally added to products** to protect the environment and human health. The restriction is based on an amendment to Annex 17 of the EU's REACH Regulation on the registration, evaluation, authorization and restriction of chemicals.

In Türkiye, in order to ensure circularity in the plastics sector, it is necessary to develop a comprehensive national strategy based on the conditions of our country, taking the Plastics Strategy in the EU into consideration, and the policies that support it.

Within the scope of the **Regulation on the Control of Packaging Waste and the Procedures and Principles on the Establishment and Operation of Civic Amenity Sites and Zero Waste Applications**, there are various measures for some single-use products. However, there is a need to develop comprehensive policies to prevent and reduce pollution from single-use plastics along the entire value chain and to update the legislation accordingly. On the other hand, product-specific measures such as market restrictions and extended producer responsibility should also be considered.

After the restrictions on microplastics intentionally added to products enter into force in the EU, an update can be made in the Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals, which is the national legislation harmonizing the REACH Regulation in our country, regarding the use of intentionally added microplastics in different sectors.

There is also a need to initiate work to establish a policy framework for biobased, biodegradable and compostable plastics.

If the targets for plastic bottle collection and minimum recycled content utilization are changed, it is foreseen that investment and operating costs may increase. It is expected that certain investment needs will arise with the EPR applications envisaged for some single-use products, and it is also envisaged that these



applications will create new employment opportunities and reduce carbon emissions. Restriction of certain single-use plastic products can be expected to cause sectoral turnover losses, but reduce other environmental impacts arising from the products.

Harmonization with the mentioned legislation will be important in terms of meeting the relevant requirements not only for packaging products but also for the packaging of all export products to be exported to the EU, protecting the free movement of goods within the scope of the Customs Union and thus protecting our competitiveness in the EU market.

Harmonization with waste management standards that may be encountered in the coming period due to trade relations with the EU may increase investment and operating costs, while inspections of waste processing and recovery facilities may increase operating costs. On the other hand, the added value of the sector can be benefited and new employment opportunities can be provided.

Textile

Within the scope of the EU Green Deal, European Circular Economy Action Plan and EU Industrial Strategy, textile was identified as a priority sector and the **EU Strategy for Sustainable and Circular Textile Products was published on 30 March 2023**. By 2030, it is aimed that textile products placed on the EU market should be long-lasting, repairable and recyclable, manufactured largely from recycled fibres, free from hazardous substances and produced in consideration of social rights and the environment.

²⁴ MoEUCC (2024). 600 Thousand Tonnes of Conversion from Scrap Vehicles, Ministry of Environment, Urbanisation and Climate Change. <https://www.csb.gov.tr/hurda-araclardan-600-bin-tonluk-donusum-bakanlik-faaliyetleri-40438>

Under the current **Waste Framework Directive**, Member States are required to ensure the separate collection of **textiles** by 1 January 2025. Furthermore, the directive states that the Commission will consider setting reuse and recycling targets for textile waste by 31 December 2024.

The Commission is proposing to introduce mandatory and harmonized EPR schemes for textiles in all Member States with the revision of the **Waste Framework Directive** published in July 2023. Furthermore, the level of financial contributions from producers under the proposal will be based on the circularity and environmental performance (eco-modulation) of textile products.

In the **National Green Deal Action Plan**, there are actions envisaging the **establishment of cleaner production legislation for the textile sector**, which has high water consumption within the scope of circular economy, and the organization of training programmes on cleaner production practices in the textile and leather sector.

The **“Communiqué on Pollution Prevention and Control for Textile Sector”**, which aims to minimise environmental impacts in textile production by using resource and energy efficient processes and clean production technologies, entered into force on 14 December 2011. **“Communiqué on Cleaner Production Practices in the Textile Sector”** was published by the MoEUCC on 30 December 2022 in order to minimize the negative impacts of textile sector activities on the environment, prevent air and water pollution, and implement cleaner production technologies to reduce water and energy consumption.

Existing national legislation already addresses cleaner production issues and **provides environmental labelling criteria for textile products**. In addition, the legal basis for extending the lifetime of textiles through reuse and separate collection of textiles/clothing is set out in the **Procedures and Principles on the Establishment and Operation of Civic Amenity Sites and Zero Waste Applications**.

In order to implement circular economy principles more effectively in the textile sector, it is considered that it would be beneficial to make sector-specific regulations to cover issues such as EPR rules, environmentally responsible design, collection and recycling requirements. The vision of transition from fast fashion to high quality and recyclable textile products can be generalized not only for textile products to be

exported to the EU but also for products to be sold in the domestic market. Circular business models for reuse, repair and repurposing can be developed. Green washing should be avoided and eco-labelling of textiles should be encouraged.

Although the textile sector is not among the sectors subject to the CBAM, studies on the adaptation costs of the private sector on climate change suggest that the textile sector in Türkiye may be under a large tax burden. Designing products with an environmentally responsible design approach can reduce the amount of materials consumed during production and/or use, especially raw materials and hazardous chemicals. Although companies exporting textile products and/or taking part in the supply network of global companies have significantly reduced the use of banned/restricted chemicals, especially within the scope of Zero Discharge of Hazardous Wastes (ZDHC), there is a need to implement these efforts for textile products produced for the domestic market.

The re-cycling of recycled natural and synthetic fibers can contribute to reducing production costs and environmental impacts. Waste textiles are not covered by the Recovery Contribution Allowance (GEKAP) in Türkiye. Through EPR programs and waste management practices, the use of end-of-waste and by-products can have a high level of impact on domestic sales and/or exports/imports. These practices may also contribute to the reduction of greenhouse gas emissions.

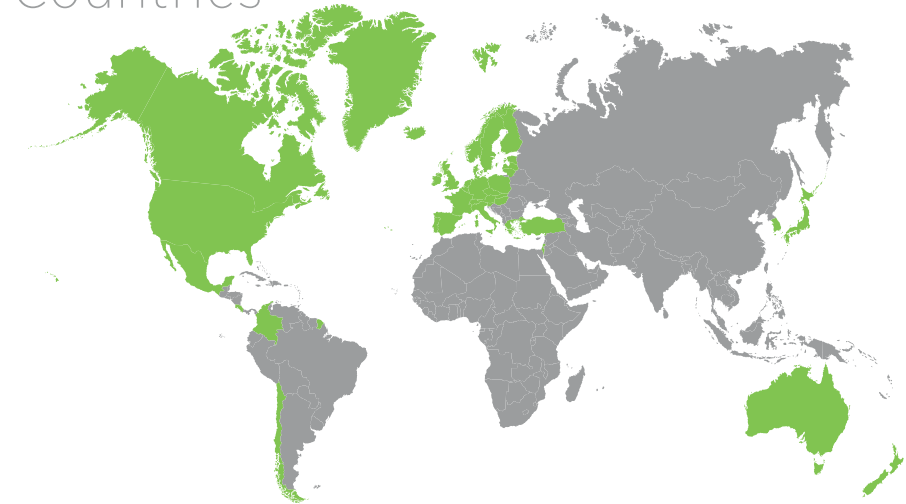
Possible performance requirements to ensure the environmental sustainability of textile products, the requirement for all packaging materials to be recyclable, compulsory recycled content quantities in packaging materials and digital product passport applications can provide added value to the sector while reducing carbon emissions.

Initiating initiatives related to microplastics unintentionally released from textile products into the receiving environment can lead to added value-benefit to the sector while increasing investment and operating costs.

2.3.3. Waste and Wastage Prevention and Reduction

Strategic Goal 3: Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

OECD Countries



Circular economy is the economic system that uses a systemic approach to maintain a circular flow of resources through the recovery, conservation or addition of value to the value of resources, while contributing to sustainable development. Within this framework, sustainability principles should be observed at all stages of the product life cycle to reduce waste and prevent wastage. A well-managed circular economy model has the potential to reduce a wide range of waste, from preventing food wastage to recycling electronic waste.

Circular economy also requires a safer and more sustainable approach to the management of chemicals. Risks to the environment and human health should be minimized by reducing or completely eliminating the use of harmful chemicals in production processes. In addition, the recovery and reuse of chemicals supports the resource cycle by reducing dependence on raw materials. It is also important to ensure the traceability of chemical contents at the end of the product life cycle, making it possible to maintain quality and safety standards in recycling processes.

On 5 July 2023, the European Commission proposed amendments to the **Waste Framework Directive**, with a particular focus on textile and food waste. The proposal requires Member States to reduce food waste generation by 10 per cent in food processing and production and 30 per cent in retail, food services and households by 2030. Member States shall also ensure that producers establish mandatory separate collection and EPR systems for home textiles, clothing, clothing accessories and footwear, ready-to-wear clothing and clothing accessories. On 28 October 2021, the European Commis-

sion submitted a proposal for a **Regulation to update the Rules on Persistent Organic Pollutants (POPs) in Waste**. Following the proposal, Regulation 2022/2400 was published on 23 November **2022 revising Annexes IV and V of EU POPs Regulation 2019/1021 on persistent organic pollutants**. The proposal aims to implement the EU's international obligations under the Stockholm Convention and the obligations under the EU POPs Regulation (2019/1021) for the substances in scope.

On 17 November 2021, the European Commission submitted a **proposal to revise the EU rules governing Waste Shipments**. The new EU Waste Shipment Regulation (2024/1157) was adopted on 11 April 2024 and entered into force on 20 May 2024. The Regulation aims to facilitate waste shipments for reuse and recycling in the EU by supporting the transition to a circular economy; to ensure that waste exported from the EU is managed in destination countries in a manner responsible for human health and the environment; and to step up enforcement action to counter illegal waste shipments. The Regulation also repealed Regulation (EC) No 1013/2006 on waste shipments and adopted new rules on the export, import and intra-EU shipment of plastic waste.

The EU is overly dependent on waste processing in non-EU countries for some waste types due to import restrictions imposed in recent years by some third countries, in particular China, which receives significant amounts of waste from the EU. Türkiye, a member of the Organization for Economic Co-operation and Development (OECD), is by far the largest destination for EU waste exports, receiving around 12.4 million tons of waste in 2022.²⁵

²⁵ European Commission (2024). The EU exported 32 million tonnes of waste in 2022. Available at <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240118-1>

In 2024, 91.2 % of waste imports from the EU consisted of iron scrap, followed by paper scrap with a share of 4.4 % and plastics with a share of 3 %. Therefore, a large part of our waste imports from the EU is the supply of ferrous scrap raw material required for our steel sector.

The Regulation introduces stricter measures to monitor waste exports to OECD countries and a 'safeguard procedure' if these exports lead to a situation where waste is not managed in a manner that is responsible for human health and the environment. If there is insufficient evidence that the country of destination has the capability to treat the waste appropriately, or if there is insufficient evidence that the imported waste does not have a significant adverse impact on the management of waste produced in the country of destination, the Commission will request information from the country concerned. If the information provided is not satisfactory, the Commission shall be authorized, through delegated powers, to suspend the relevant waste exports to that country.

The regulation requires exporters to ensure that, before exporting waste, the facilities that will manage the waste in the destination country are subject to an audit conducted by an independent and accredited third party. This audit, which will verify compliance with a set of established criteria, will be repeated at least every two years. If an exporter receives reasonable information that a facility is no longer compliant, it will carry out an interim inspection without delay. For waste exports to OECD countries, the proposal provides for a possible exemption from the inspection requirements if an international agreement between the country concerned and the EU recognizes that facilities in that country will manage waste in a manner that is sensitive to human health and the environment.²⁶

The Regulation specifically regulates shipments of plastic waste. As of 21 November 2026, "all types of plastic waste" will be banned to non-OECD countries. A non-OECD country wishing to import plastic waste from the Union will be able to submit its request to the Commission as of 21 May 2029. Plastic waste exports from the EU to OECD countries and imports in the EU will be more strictly controlled. The export of hazardous plastic waste and difficult-to-recycle plastic waste from the EU to OECD countries will be subject to prior informed consent and approval procedures. Within the scope of this procedure, both importing and exporting countries will be required to allow shipment.

These new rules implement the decision taken by 187 countries at the 14th Conference of the Parties to the Basel Convention in May 2019 by revising the EU's Waste Shipment Regulation (EC) (Regulation 1013/2006). This decision has added new plastic waste-related entries to the Annexes of the Convention, creating a global regime governing the international plastic waste trade for the first time. This situation shows that multilateral institutions are increasingly taking binding measures against plastic pollution. By banning the export of difficult-to-recycle plastic waste, such as mixed or contaminated plastics, outside the OECD, the EU actually goes beyond the requirements of the Basel Convention.

Regarding the management of chemicals; **Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (KKDİK) dated 23 June 2017 and Regulation on Classification, Labelling and Packaging of Substances and Mixtures** dated 11 December 2013 are in force. The issues and relevant provisions regarding the preparation of safety data sheets were previously governed by the Regulation on Safety Data Sheets for Hazardous Substances and Mixtures dated 11 December 2013. These issues are carried out within the scope of KKDİK Article 27 and Annex-2 as of 31 December 2023.

Regarding Persistent Organic Pollutants (POPs), Türkiye has ratified the **Stockholm and Basel conventions** on POPs and the **Regulation on Persistent Organic Pollutants** has been in force since 2018. The **Regulation on PCB and PCT Control** dated 27 December 2007, which sets out the procedures and principles regarding the disposal of PCB-containing goods, is another relevant legislation in this field.

According to the **Waste Management Regulation**, the import of wastes that have economic value for the sector is permitted on a controlled basis. In this context, the principles regarding the waste and metal scrap that can be imported subject to inspection and the waste and metal scrap whose import is prohibited are determined by the Communiqués published by the Ministry of Trade by taking the opinions of the MoEUCC. Import of hazardous waste and waste for disposal purposes is prohibited and the procedures and principles regarding the documents to be given to waste recovery/recycling facilities that will import certain non-hazardous wastes whose import is permitted and the characteristics of the wastes to be imported are regulated by the **Circular on Waste Import Practices**

published by the MoEUCC. As the new Waste Shipment Regulation aims to keep waste generated in the EU within its borders, the measures have the potential to lead to a ban on waste exports from the EU to Türkiye for any waste stream under surveillance. Iron and steel and plastics stand out as sensitive sectors due to scrap metals and plastics, which are among the most imported waste types from the EU. Within the framework of the national framework legislation on waste management, namely **Waste Management Regulation, Zero Waste Regulation and Regulation on Landfilling of Waste**, there is no quantitative target for the reduction of food waste. Likewise, there are no measures for the separate collection of textile wastes and their inclusion in the extended producer responsibility system.

Regarding secondary raw materials, there is a regulation for wastes that can be utilized as by-products within the framework of the existing **Waste Management Regulation**. In our country, studies are being carried out to develop technical and institutional capacity for the determination and effective implementation of "End of Waste" criteria for certain waste streams.

In this direction, there is a need for the realisation of a circular economy network to promote existing and potential material exchanges between companies to promote circular economy through the use of secondary raw materials and industrial symbiosis and to facilitate such practices in different industries.

In the light of this background information, as a strategic goal under the strategic area of "Waste and Wastage Prevention and Minimization"; waste generation will be prevented and the amount of waste generated will be gradually reduced according to the circular economy hierarchy.

The objectives in line with this strategic goal are;

- Improving environmental legislation in line with circular economy principles,
- Dissemination of Industrial Symbiosis applications,
- Developing economic instruments to accelerate the circular economy,
- Enhancing digitalization in waste management,
- Making zero waste applications widespread.

2.3.4. Dissemination of Circular Economy

Strategic Goal 4: Relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.

The transition to a circular economy will be possible by properly managing not only material flows and business models, but also the human resources required for transformation. Education on circular economy comes to the forefront due to its horizontal role in raising awareness of citizens at all levels and ensuring all stakeholder engagement for the dissemination and effective implementation of the circular economy concept. Furthermore, for this transition, cities have an important role to play as promoters, facilitators and enablers of circular economy practices. The dissemination of the circular economy can be accelerated by seizing important opportunities through inter-institutional cooperation, international agreements, new markets and partnerships.

The EU focusses on the development of new skills and competences in the 2015 and 2020 CE Action Plans. The Commission has initiated work on the **Skills Agenda**, the future **Social Economy Action Plan**, the **Skills Deal** and on supporting the transition to a circular economy through the **European Social Fund+, Cohesion Policy Funds, the Just Transition Mechanism and urban initiatives**.

On 9 December 2021, the European Commission adopted a new action plan on the social economy. With the action plan, the Commission has set out concrete measures to help mobilise the full potential of the social economy, based on the results of the **2011 Social Enterprise Initiative and the 2016 Start-up and Scale-up Initiative**.

The European Social Fund (ESF) has restructured the existing ESF (including the Youth Employment Initiative (YEI)) into ESF+, which combines



²⁶ Avrupa Parlamentosu (2022) AB'nin Atık Sevkiyat Tüzüğü. https://environment.ec.europa.eu/topics/waste-and-recycling/waste-shipments_en adresinden ulaşılabilir

the European Fund for Assistance to the Most Deprived (FEAD), the Employment and Social Innovation Program (EaSI) and the EU Health Program. ESF+ focuses its investments on education, employment and social inclusion.

The **European Urban Initiative, the Smart Cities Challenge Initiative** and the Circular Cities and Regions Initiative provide essential assistance to cities. It is stated that circular economy will be among the priority areas of the Green City Agreement. The **European Circular Economy Stakeholder Platform** acts as a platform for stakeholders to exchange information.

The **Circular Cities and Regions Initiative (CCRI)** focuses on the implementation of circular systematic solutions at local and regional level, providing assistance to cities and regions as part of the EU Circular Economy Action Plan.

In our country, the Small and Medium Enterprises Development Organization (KOSGEB) carries out studies to determine the current situation of SMEs on green transformation, to identify their problems and needs, to formulate the necessary strategies in this regard, to increase their capacities in line with these strategies and to meet their prioritized needs with the EU Circular Economy Action Plan.

Training programs on cleaner production practices in textile and leather sectors were realized by the MoEUCC. Development Agencies, which carry out their activities under the coordination of the , carry out trainings, awareness-raising activities and support programs to ensure resource efficiency at regional level. The Ministry of Agriculture and Forestry works to provide training on sustainable agricultural techniques, to carry out R&D projects, to carry out awareness-raising activities and to disseminate relevant practices.

There is a need to develop education curricula and professional standards focusing on circular economy principles to support the harmonization of our country's future workforce with the circular economy and to promote expertise in this field. Furthermore, support mechanisms need to be established to strengthen local initiatives and circular city concepts. It is also important to carry out awareness and consciousness raising activities on circular economy for all segments and all ages, emphasizing the advantages and viability of circular economy for local businesses and society at large. In the light of this background information, as a strategic goal under the strategic area of "Dissemination

of Circular Economy"; **relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.**

The objectives in line with this strategic goal are;

- **Developing vocational skills and qualifications for the transition to a circular economy,**
- **Building circular cities,**
- **Increasing cooperation and raising awareness on circular economy.**

2.3.5. Horizontal Actions

Strategic Goal 5: The relationship between circular economy and just transition and financeability will be improved.

In order to ensure that no region is left behind and to mitigate the socio-economic impacts of transition during the Green Deal process, the EU has prepared a support package called the **Just Transition Mechanism (JTM)** to be implemented between 2021 and 2027.

This mechanism aims to minimize negative impacts on employment by facilitating access to new job opportunities, particularly for individuals working in carbon-intensive sectors such as coal mining. Training and reskilling programs support the adaptation of the workforce to the transformation process, while funding and investment instruments are put in place to address regional disparities. In this context, steps such as infrastructure projects, green energy investments and support for SMEs are taken. Also, it is aimed to increase economic resilience by diversifying local economies and promoting sustainable new sectors. Various social policies are envisaged to be implemented to strengthen the inclusion of low-income households, women, persons with disabilities and young people in economic and social life during the transition process. Shifting the tax burden away from the labor force and reducing taxes for low and middle income groups is encouraged.

Ministry of Labor and Social Security has started work on the preparation of the **National Just Transition Strategy**. It is important that this policy document addresses the circular economy from the perspective of a responsible, inclusive and socially just transition. The strategy is planned to cover different policy areas including education, employment, social protection, social protection, social assistance, occupational



health and safety and migration in order to manage the employment and social impacts of climate change and green transformation process with a just transition perspective.

In our country, studies to identify new occupations and skills emerging with the development of the circular economy and to reflect them to training and active labor force programs are being carried out by the relevant institutions. Technical studies are being carried out by the Ministry of Labour and Social Security to identify green occupations and skills in our country and to determine the change in demand for green occupations. The findings of the study are shared with relevant institutions, especially the Ministry of National Education. Vocational Qualifications Authority (MYK) has established an advisory board for green transformation and smart agriculture applications. The Turkish Employment Agency (İŞKUR) conducts field research on green jobs and works on active labor force programs to meet the labor demand for green jobs.

Directing private investments towards the transition to a climate-neutral, climate-resilient, resource-efficient and equitable economy is one of the main objectives and the EU Taxonomy Regulation entered into force on 12 July 2020 in order to ensure the achievement of the 2030 climate and energy targets set out by the European Green Deal and to ensure that investments are directed towards sustainable projects and activities.

Within the framework of the Green Deal Action Plan, the Ministry of Environment, Urbanization and Climate Change is responsible for finalizing the preparations for a national green taxonomy legislation defining which investments are environmentally sustainable and establishing prin

ciples and technical criteria for this. In this context, the Directorate of Climate Change prepared the draft national green taxonomy legislation and technical screening criteria.

Within the scope of the studies for the preparation of the **National Green Taxonomy**, it is aimed to support economic activities in Türkiye that are compatible with climate and other sustainable development goals in the national and international arena, to encourage the flow of financing to sustainable investments and to ensure transparency in the market regarding sustainable activities. The National Green Taxonomy is therefore intended to converge to the EU Taxonomy while taking national circumstances into account.

The National Green Taxonomy consists of 6 environmental objectives: reduction of greenhouse gas emissions, adaptation to climate change, sustainable use and conservation of water and marine resources, pollution prevention and control, protection and restoration of biodiversity and ecosystems, as well as transition to a circular economy. **Technical screening criteria for 6 environmental objectives**, including the transition to a circular economy, are expected to be published by 2026.

The National Green Taxonomy aims to provide a common language and standard framework and clear definitions for all stakeholders in the context of circular economy, to help businesses and investors identify economic activities that are compatible with circular economy principles, to create a systematic way to categorize and evaluate investments according to their contribution to circular economy and to prevent green washing.

Targets and actions have been set for different sectors in the **2024-2030 Climate Change Mitigation and Adaptation Strategies** of our country. Within the scope of these actions, issues related to support mechanisms are also included in policy documents. In addition, circular economy was referred to under many titles within the scope of the **2022 Climate Council Decisions**.

Türkiye's **Green Deal Action Plan** includes a review of the national incentive system and an assessment of the national energy efficiency financing mechanism.

The steps envisaged to be taken by the EU will directly affect not only its own industry but also non-EU countries through imports.

Our country is among the countries that will be most affected by the European Green Deal due to our relationship within the framework of the customs union and the fact that the EU is our largest investment and trade partner. Increasing Türkiye's share from international green finance and green investments and strengthening the ecosystem that will enable the development of green finance in our country in this direction is important in terms of supporting the development of a sustainable, resource-efficient and green economy. In light of this background information, as a strategic goal under the strategic area "Horizontal Actions", **the relationship between circular economy and just transition and affordability will be developed.**

The objectives in line with this strategic goal are;

- **Strengthening the link between Circular Economy and Just Transition,**
- **To increase the flow of financing by determining the criteria for transition to circular economy in the context of taxonomy, to improve institutional and technical infrastructure, investment and incentive mechanisms.**

2.3.6. Monitoring Circular Economy

Strategic Goal 6: Progress in the transition to a circular economy will be systematically monitored and evaluated.

In 2018, the European Commission established the **EU Monitoring Framework for the Circular Economy** under the first EU Circular Economy Action Plan. The core and sub-indicators have been selected to cover the main elements of a circular economy.

The European Commission continues to regularly update and elaborate the monitoring framework and indicators. In May 2023, the Commission published a Communication on a revised monitoring framework for the circular economy, increasing the number of sub-indicators under 5 thematic areas and 10 core indicators to 27. Data on some indicators are only monitored for the EU as a whole and are not reported separately by Member States.

²⁷ Monitored for the EU as a whole only.

Production and Consumption

1. Material Consumption
 - 1.1. Material Footprint
 - 1.2. Resource Productivity
 - 1.3. Green Public Procurement
2. Waste Generation
 - 2.1. Total Waste Generation Per Capita
 - 2.2. Waste Generation Excluding Major Mineral Waste per Unit of GDP
 - 2.3. Municipal Waste Generation Per Capita
 - 2.4. Food Waste
 - 2.5. Packaging Waste Generation Per Capita
 - 2.6. Plastic Packaging Waste Generation Per Capita

Waste Management

3. Total Recycling Rates
 - 3.1. Municipal Waste Recycling Rate
 - 3.2. Recycling Rate of All Wastes Excluding Major Mineral Wastes
4. Recycling Rates for Certain Waste Streams
 - 4.1. Overall Packaging Waste Recycling Rate
 - 4.2. Plastic Packaging Waste Recycling Rate
 - 4.3. The Recycling Rate of Separately Collected WEEE

Secondary Raw Materials

5. Contribution of Recycled Materials to Raw Material Demand
 - 5.1. Circular Material Utilization Rate
 - 5.2. End-of-Life Recycling Input Rates (EOL-RIR), Aluminum²⁷
6. Trade in Recyclable Raw Materials
 - 6.1. Imports from Non-EU Countries
 - 6.2. Exports to Non-EU Countries
 - 6.3. Intra-EU Trade

Competitiveness and Innovation

7. Private Investment, Jobs and Gross Value Added Related to Circular Economy Sectors
 - 7.1. Private Investments
 - 7.2. Employed Persons
 - 7.3. Gross Value Added
8. Innovation
 - 8.1. Patents Related to Waste Management and Recycling

Global Sustainability and Resilience

9. Contribution of Circular Economy to Global Sustainability
 - 9.1. Consumption Footprint
 - 9.2. Greenhouse Gas Emissions from Production Activities



10. Contribution of Circular Economy to Resilience
 - 10.1. Material Import Dependence EU's Self-Sufficiency for Raw Materials, Aluminum²⁸

In line with the EU monitoring framework, Türkiye is regularly reporting some of the above indicators (1.2, 2.1, 2.2, 2.3, 3.1, 10.1) to the EU within the framework of TÜİK's official statistics program. Some indicators (2.5, 2.6, 3.2, 4.1, 4.2, 4.3, 5.1, 6.1, 6.2, 9.2) are not reported to the EU although they are regularly monitored under different databases of the MoEUCC. A national monitoring mechanism needs to be established to ensure that the number and scope of these indicators are aligned with the "EU Monitoring Framework for Circular Economy".

In order to achieve circular economy goals, it is important to improve existing indicators, monitoring systems and databases and to develop new ones according to the needs, and to strengthen them in a way to increase the traceability of waste management, resource efficiency and material cycle. These infrastructures will enable more comprehensive and real-time data collection from the source to the disposal of products, while at the same time guiding strategies to increase reuse and recycling rates.

In the light of this background information, as a strategic goal under the strategic area of "Circular Economy Monitoring"; **progress in transition to circular economy will be systematically monitored and evaluated.**

²⁸ Monitored for the EU as a whole only.

The objective in line with this strategic goal is;

- **Development and monitoring of circular economy indicators.**

3. NATIONAL CIRCULAR ECONOMY ACTION PLAN

The action plan identifies the institution responsible for the realization of the actions grouped under the relevant objectives and other relevant institutions and stakeholders that will work in cooperation with these institutions. The outputs expected as a result of the implementation of the actions and the implementation schedule are also included in the action plan. It is aimed that the realizations and developments related to the actions will be monitored by the institution responsible for the action until the end of the calendar year determined **between 2025-2028** and reported regularly to the Specialized Working Group.

3.1. Objectives

The actions under the Plan are organized thematically under 22 objectives listed below. The achievement of the objectives is an intermediate target for Türkiye's transition to circular economy in different thematic areas.

Table 2 - Objectives

1. Circular Products

- 1.1. Promoting **environmentally responsible** design for more circular products
- 1.2. Preparing the necessary infrastructures for **new circular initiatives** within the scope of the EU Sustainable Product Policy
- 1.3. Integrating circular economy principles into **industrial production processes**

2. Priority Sectors

- 2.1. Increasing circularity at all stages of production, consumption and waste management in **priority sectors**
- 2.2. **Electronics and Information-Communication Technologies (ICT)**
- 2.3. **Battery and Vehicle**
- 2.4. **Packaging**
- 2.5. **Plastic**
- 2.6. **Textile**
- 2.7. **Construction and Building**
- 2.8. **Food and Biomass**

3. Waste and Wastage Prevention and Minimization

- 3.1. Improving **environmental legislation** in line with circular economy principles
- 3.2. Dissemination of **industrial symbiosis** applications
- 3.3. Developing **economic instruments** to accelerate the circular economy
- 3.4. Enhancing **digitalization** in waste management
- 3.5. To make **zero waste** applications widespread

4. Dissemination of Circular Economy

- 4.1. Developing **vocational skills and qualifications** for the transition to a circular economy
- 4.2. Building **circular cities**
- 4.3. **Increasing cooperation and raising awareness** on circular economy

5. Horizontal Actions

- 5.1. Strengthening the link between circular economy and **just transition**,
- 5.2. To increase the flow of **financing** by determining the criteria for transition to circular economy in the context of **taxonomy**, to improve **institutional and technical infrastructure, investment and incentive mechanisms**.

6. Monitoring Circular Economy

- 6.1. Development and monitoring **of circular economy indicators**

3.2. Action Tables

Of the 53 actions within the scope of the action plan, 28 are legislative and 25 are non-legislative (infrastructure, technology and innovation, institutional structure and cooperation, financing and economic instruments).

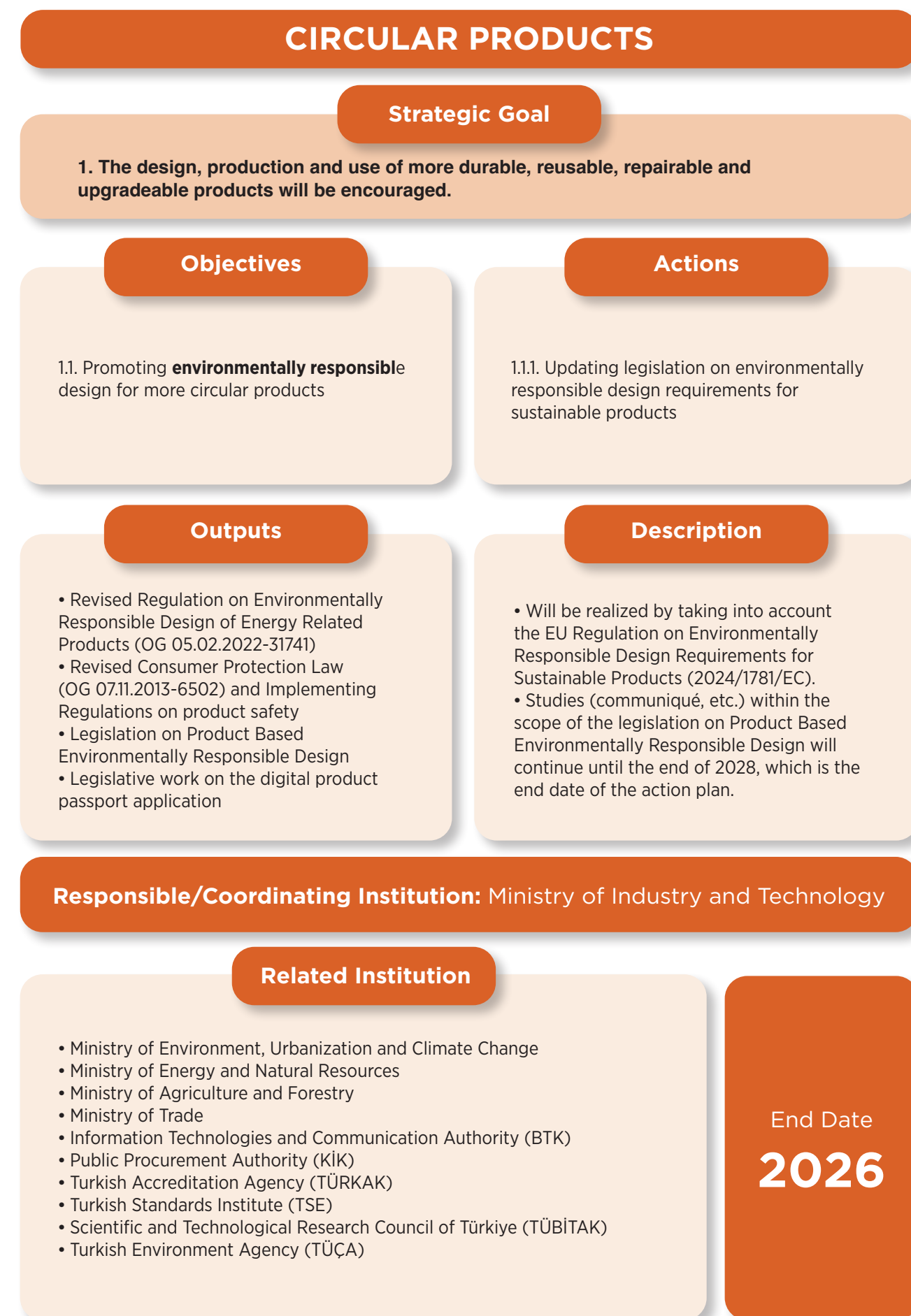
The distribution of actions according to responsible and related institutions is shown in the table below. Concrete contributions and opinions will be received from relevant institutions and stakeholders during the implementation of the actions within the scope of the Plan.

Table 3 - Distribution of Actions according to Responsible and Relevant Institutions

Institution Name	Number of Actions	
	Responsible/Coordinating Institution	Related Institutions and Stakeholders
Ministry of Environment, Urbanization and Climate Change	25	24
Ministry of Industry and Technology	6	32
Ministry of Agriculture and Forestry	6	16
Ministry of Trade	3	36
Ministry of Treasury and Finance	3	3
Turkish Standards Institute (TSE)	2	6
Ministry of Energy and Natural Resources	1	26
Turkish Environment Agency (TÜÇA)	1	19
Ministry of Labor and Social Security	1	12
Local Administrations	1	10
Presidency of the Republic of Türkiye, Presidency of Strategy and Budget	1	5
Directorate of Climate Change	1	5
Turkish Statistical Institute (TÜİK)	1	4
Ministry of National Education	1	2
Public Procurement Authority (KİK)	1	1
Vocational Qualifications Authority (MYK)	1	1
Ministry of Foreign Affairs	1	-
Union of Municipalities of Türkiye (TBB)	-	12

Scientific and Technological Research Council of Türkiye (TÜBİTAK)	-	11
The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)	-	7
Information Technologies and Communication Authority (BTK)	-	5
Presidential Investment and Finance Office	-	4
Supreme Organization of Organized Industrial Zones (OSBÜK)	-	4
Ministry of Health	-	4
Universities	-	3
İLBANK A.Ş.	-	2
Turkish Employment Agency (İŞKUR)	-	2
Directorate of Small and Medium-Sized Enterprises Development and Support Administration (KOSGEB)	-	2
Turkish Energy, Nuclear and Mineral Research Agency (TENMAK)	-	2
Turkish Accreditation Agency (TÜRKAK)	-	2
Council of Higher Education (YÖK)	-	2
Disaster and Emergency Management Presidency (AFAD)	-	1
Banking Regulation and Supervision Agency (BDDK)	-	1
Revenue Administration (GİB)	-	1
Ministry of Interior	-	1
Organized Industrial Zones	-	1
Capital Markets Board of Türkiye (SPK)	-	1
Insurance and Private Pension Regulation and Supervision Authority (SEDĐK)	-	1
Central Bank of the Republic of Türkiye (TCMB)	-	1
Turkish Radio and Television Corporation (TRT)	-	1
Ministry of Transport and Infrastructure	-	1

Table 4 - Action Plan Timetable



CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.1. Promoting environmentally responsible design for more circular products

Actions

1.1.2. Increasing and disseminating the number of environmental labelling criteria for products and services within the scope of Türkiye Environmental Labelling System (TÇES)

Outputs

- A total of 27 national product/service criteria including the new criteria

Description

- Work will continue within the scope of the Türkiye Environmental Labelling System (TÇES) Dissemination Project.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)

End Date
2028

CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.2. Preparing the necessary infrastructures for new circular initiatives

Actions

1.2.1. Updating legislation on green washing and verification of green declarations

Outputs

- Revised Law on Consumer Protection (OG 07.11.2013-6502)
- Revised Regulation on Commercial Advertisements and Unfair Commercial Practices

Description

- Will be realized taking into account the developments in the framework of the EU Sustainable Product Policy and the EU Directive on Empowering Consumers for Green Transformation (EU 2024/825).

Responsible/Coordinating Institution: Ministry of Trade

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Information Technologies and Communication Authority (BTK)
- Turkish Standards Institute (TSE)

End Date
2026

CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.2. Preparing the necessary infrastructures for new circular initiatives

Actions

1.2.2. Preparation of legislation to support new circular economy models such as reuse and repair

Outputs

- Revised Regulation on the Sale of Refurbished Products (OG 22.08.2020-31221)
- Revised Law on Consumer Protection (OG 07.11.2013-6502)

Description

- Will be realized taking into account the developments in the framework of the EU Sustainable Product Policy and the Directive on Common Rules for the Promotion of the Repair of Goods (Right to Repair) (EU 2024/1799).
- The scope of the Regulation on the Sale of Refurbished Products will be extended to different products and sectors.

Responsible/Coordinating Institution: Ministry of Trade

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Information Technologies and Communication Authority (BTK)
- Turkish Standards Institute (TSE)

End Date
2026

CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.2. Preparing the necessary infrastructures for new circular initiatives

Actions

1.2.3. Expanding adequate and easily accessible authorized repair and maintenance service providers and establishing a publicly accessible database infrastructure, taking product safety into account

Outputs

- Disseminated authorized maintenance and repair service providers and a public database infrastructure

Description

- A system will be developed where consumers can access and view these points online.

Responsible/Coordinating Institution: Ministry of Trade

Related Institution

- Ministry of Industry and Technology
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)
- Local Administrations

End Date
2028

CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.2. Preparing the necessary infrastructures for new circular initiatives

Actions

1.2.4. Updating national public procurement policies to incorporate Green Public Procurement (GPP) principles

Outputs

- Green public procurement strategy and criteria

Description

- Green public procurement strategies, which are also included in the Twelfth Development Plan, will be developed, alternative procurement criteria will be determined and carbon footprint will be reduced.
- Public procurement legislation will be updated in line with international norms and standards with a procurement approach that supports and prioritizes digitalization, innovation and sustainability, and sectoral public procurement regulation will be implemented.

Responsible/Coordinating Institution:

Ministry of Treasury and Finance Public Procurement Authority (KİK)

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Trade

End Date
2026

CIRCULAR PRODUCTS

Strategic Goal

1. The design, production and use of more durable, reusable, repairable and upgradeable products will be encouraged.

Objectives

1.3. Integrating circular economy principles into **industrial production processes**

Actions

1.3.1. Establishing the legislative infrastructure for the management of industrial emissions within the scope of green transformation in industry

Outputs

- Communiqués to be prepared within the framework of Best Available Techniques (BAT)
- Sectoral Guidelines

Description

- Issues related to renewable energy and energy efficiency, which is a component of the circular economy approach, will be addressed in the communiqués to be prepared within the framework of the BAT.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade

End Date
2025

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.1. Increasing circularity at all stages of production, consumption and waste management in **priority sectors**

Actions

2.1.1. Improving the existing incentive mechanisms for the use of advanced technologies in the waste collection, sorting and recycling sector to provide better quality recycled materials

Outputs

- Incentive mechanisms for the use of advanced technologies in the waste collection, sorting and recycling sector to provide better quality recycled materials

Description

- The physical and technological capacities of the existing waste collection, sorting and recycling facilities in Türkiye will be improved in order to provide quality recycled materials.

Responsible/Coordinating Institution: Ministry of Industry and Technology

Related Institution

- Presidency of the Republic of Türkiye, Presidency of Strategy and Budget
- Presidential Investment and Finance Office
- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Agriculture and Forestry
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)
- Supreme Organization of Organized Industrial Zones (OSBÜK)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.1. Increasing circularity at all stages of production, consumption and waste management in **priority sectors**

Actions

2.1.2. Developing national/international R&D, P&D, technology, innovation support programs, projects and infrastructures

Outputs

- National circular economy programs and projects
- Necessary laboratory, test, etc. infrastructures within universities and institutes
- Circular economy transition support programs for the private sector, in particular SMEs and young entrepreneurs developing technology specifically in priority sectors
- Young entrepreneurs supported under the Global Clean Technologies Entrepreneurship Program

Description

- Programs and projects will be developed to support the transition of enterprises to circular economy and resource efficiency.

Responsible/Coordinating Institution: Ministry of Industry and Technology

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Treasury and Finance
- Ministry of Trade
- Directorate of Small and Medium-Sized Enterprises Development and Support Administration (KOSGEB)
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)
- Turkish Energy, Nuclear and Mineral Research Agency (TENMAK)
- Supreme Organization of Organized Industrial Zones (OSBÜK)
- Organized Industrial Zones
- Universities

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.1. Increasing circularity at all stages of production, consumption and waste management in **priority sectors**

Actions

2.1.3. Carrying out studies to create financing opportunities and support mechanisms for circular economy

Outputs

- Special financing opportunities and support mechanisms for circular economy business models

Description

- In order to reduce the cost of transition to circular economy and to encourage the dissemination of circular economy models, special financing models, financial instruments and support mechanisms will be worked on.

Responsible/Coordinating Institution: Ministry of Treasury and Finance

Related Institution

- Presidency of the Republic of Türkiye, Presidency of Strategy and Budget
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Banking Regulation and Supervision Agency (BDDK)
- Revenue Administration (GİB)
- Directorate of Climate Change
- Central Bank of the Republic of Türkiye (TCMB)
- Capital Markets Board of Türkiye (SPK)
- Insurance and Private Pension Regulation and Supervision Authority (SEDDK)

End Date
2026

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.1. Increasing circularity at all stages of production, consumption and waste management in **priority sectors**

Actions

2.1.4. Increasing the functionality and accessibility of civic amenity sites

Outputs

- Digital Civic Amenity Sites mapping infrastructure at provincial level
- Increased number of Civic Amenity Sites
- Civic Amenity Sites with integrated reuse function

Description

- With the reuse function, it is envisaged to integrate units such as second-hand sales shops, exchange centers, repair ateliers into Civic Amenity Sites.

Responsible/Coordinating Institution: Local Administrations

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Union of Municipalities of Türkiye (TBB)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.2.Increasing circularity in the **Electronics and Information and Communication Technologies (ICT)** sector at all stages covering production, consumption and waste management

Actions

2.2.1. Revision of the Regulation on the Management of Waste Electrical and Electronic Equipment (WEEE) and the Regulation on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (EEE) within the framework of circular economy principles

Outputs

- Revised WEEE Regulation and EEE Regulation

Description

- Will be realized by taking into account the developments within the framework of the EU Circular Electronics Initiative.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Health
- Ministry of Industry and Technology
- Ministry of Trade
- Information Technologies and Communication Authority (BTK)
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.2.Increasing circularity in the **Electronics and Information and Communication Technologies (ICT)** sector at all stages covering production, consumption and waste management

Actions

2.2.2. Nationalization of international standards on WEEE and incorporation of these standards into environmental permit and license criteria

Outputs

- National standards for WEEE processing and preparation for reuse

Description

- Will be realized by taking into account the standards of the European Committee for Electrotechnical Standardization (CENELEC).

Responsible/Coordinating Institution: Turkish Standards Institute (TSE)

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.3.Increasing circularity in the **Battery and Vehicle** sector at all stages covering production, consumption and waste management

Actions

2.3.1. Updating the legal framework on batteries and waste batteries

Outputs

- Regulation on the Management of Batteries and Waste Batteries

Description

- Will be realized by taking into account the EU Battery and Waste Battery Regulation (2023/1542).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Industry and Technology
- Ministry of Labor and Social Security
- Ministry of Energy and Natural Resources
- Ministry of Trade
- Ministry of Transport and Infrastructure
- Information Technologies and Communication Authority (BTK)
- Directorate of Climate Change
- Turkish Environment Agency (TÜÇA)

End Date
2025

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.3.Increasing circularity in the **Battery and Vehicle** sector at all stages covering production, consumption and waste management

Actions

2.3.2. Preparation of a National Critical Raw Material Strategy and Action Plan and making regulations to ensure that wastes containing critical raw materials are processed domestically

Outputs

- National Critical Raw Material Strategy and Action Plan
- Revised legal regulations to encourage domestic recovery investments for wastes containing rare earth elements and critical raw materials

Description

- As stated in the Twelfth Development Plan, the strategy will be prepared to reduce import dependency and ensure security of supply in the fields of digital and green transformation.
- It will be prepared taking into account the EU Code on Critical Raw Materials (EU 2024/1252).

Responsible/Coordinating Institution:

Ministry of Energy and Natural Resources

Related Institution

- Presidential Investment and Finance Office
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Industry and Technology
- Ministry of Trade
- General Directorate of Mining and Petroleum Affairs (MAPEG)
- Turkish Energy, Nuclear and Mineral Research Agency (TENMAK)
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)

End Date
2026

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.3.Increasing circularity in the **Battery and Vehicle** sector at all stages covering production, consumption and waste management

Actions

2.3.3. Revising the Regulation on Control of End-of-Life Vehicles

Outputs

- Revised ELV Regulation (OG 30.12.2009-27448)

Description

- Will be realized taking into account the EU circularity requirements for vehicle design and the Proposal for a Regulation on the management of end-of-life vehicles (COM(2023) 451).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Interior
- Ministry of Industry and Technology
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2026

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.4.Increasing circularity at all stages of production, consumption and waste management in the **packaging** sector

Actions

2.4.1. Updating the legislation on packaging and packaging waste

Outputs

- Revised Regulation on Control of Packaging Waste in line with EU legislation (OG 26.06.2021-31523)

Description

- It will be realized taking into account the EU Packaging and Packaging Waste Regulation (EU 2025/40).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Standards Institute (TSE)
- Union of Municipalities of Türkiye (TBB)
- Turkish Environment Agency (TÜÇA)

End Date
2027

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.5.Increasing circularity at all stages of production, consumption and waste management in the **plastics** sector

Actions

2.5.1. Development of legal infrastructures for single-use plastics and microplastics

Outputs

- Regulation on single-use plastics
- Regulatory framework for microplastics

Description

- Will be realized taking into account the EU Single Use Plastics Directive and (EU 2019/904) and the Regulation on the restriction of microplastics intentionally added to products (EU 2023/2055).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Health
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.5.Increasing circularity at all stages of production, consumption and waste management in the **plastics** sector

Actions

2.5.2. Development of guidance documents for biobased, biodegradable and compostable plastics

Outputs

- Guidance documents on biobased, biodegradable and compostable plastics

Description

- Will be realized taking into account the Communiqué on Biobased, Biodegradable and Compostable Plastics (COM(2022) 682).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Health
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.5. Increasing circularity at all stages of production, consumption and waste management in the **plastics** sector

Actions

2.5.3. Preparation of a national strategy and action plan on plastics

Outputs

- National Plastics Strategy and Action Plan

Description

- Will be realized by taking into account the legally binding document to be prepared by the United Nations Intergovernmental Negotiating Committee in order to reduce global plastic pollution.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Labor and Social Security
- Ministry of Energy and Natural Resources
- Ministry of Health
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)
- Turkish Environment Agency (TÜÇA)
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.6. Increasing circularity at all stages of production, consumption and waste management in the **textile** sector

Actions

2.6.1. Developing environmentally responsible design legislation for textile products

Outputs

- Legislation harmonized with environmentally responsible design requirements for textile products to be placed on the EU market

Description

- Will be realized by taking into account the policy document on environmentally sensitive design to be prepared in line with the EU Sustainable Textile Strategy.

Responsible/Coordinating Institution: Ministry of Industry and Technology

Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.6.Increasing circularity at all stages of production, consumption and waste management in the **textile** sector

Actions

2.6.2. Updating the legislation on textile wastes

Outputs

- Revised Waste Management Regulation (OG 02.04.2015-29314) on separate collection of textile wastes and coverage of Extended Producer Responsibility

Description

- Will be realized taking into account the Proposal for a revised EU Waste Framework Directive (COM(2023) 420).
- Measures will be taken to include textile wastes within the scope of extended producer responsibility and to collect them separately at source.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Labor and Social Security
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.7.Increasing circularity in the **Construction and Building** sector at all stages covering production, consumption and waste management

Actions

2.7.1. Updating the legislation on construction materials according to circular economy principles

Outputs

- Revised legislation on construction materials

Description

- Will be realized taking into account the EU Renovation Wave Initiative (COM(2020) 662) and the EU Construction Materials Regulation (EU 2024/3110).

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Trade
- Directorate of Climate Change

End Date
2027

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.7.Increasing circularity in the **Construction and Building** sector at all stages covering production, consumption and waste management

Actions

2.7.2. Establishing guidelines on the management of disaster wastes within the framework of circular economy principles

Outputs

- National Disaster Wastes Management Guideline

Description

- In order to minimize possible environmental pollution, public health problems and economic losses, a guiding document will be prepared for the management of all wastes generated after disasters within the framework of circular economy principles.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Interior Disaster and Emergency Management Directorate (AFAD)
- Union of Municipalities of Türkiye (TBB)
- Local Administrations

End Date
2025

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8.Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.1. Publication of the National Bioeconomy Strategy

Outputs

- National Bioeconomy Strategy

Description

- Will be prepared by taking into account the EU Bioeconomy Strategy.

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Trade
- Directorate of Climate Change
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)

End Date
2026

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8.Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.2. Accelerating the sale of products with an approaching recommended consumption date and/or expiry date and preparing the legal framework for the donation of products with an approaching recommended consumption date within the scope of food banking

Outputs

- Legal framework for accelerating the sale of products approaching their Best Before Date and/or Expiration Date, or for donating products approaching their Best Before Date to food banks
- Collection, storage and distribution infrastructure for food banking

Description

- The practice of accelerating the sale of products with approaching ROC and EOD, which is one of the important practices to prevent food waste, will be encouraged.
- Legal framework and infrastructure will be prepared for food banking practices and donation of these products.

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Trade
- Local Administrations

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8.Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.3. Establishment of a digital data collection infrastructure to register facilities where agricultural waste and food waste can be processed as animal feed

Outputs

- Digital data collection infrastructure to register facilities where agricultural waste and food waste can be processed as animal feed

Description

- Re-utilization of high amounts of agricultural and food wastes as animal feed before disposal or recycling will be prioritized and the amount of waste processed will be monitored by registering the processing facilities operating in this field.

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Turkish Statistical Institute (TÜİK)

End Date
2026

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8. Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.4. Making regulations to improve incentive mechanisms in order to promote the recycling of food waste and the use of the obtained products.

Outputs

- Regulation for improving incentive mechanisms in order to increase the reuse, recycling and recovery of food waste, and to expand the use of the obtained products.

Description

- In addition to reducing the amount of food waste, incentive mechanisms will be designed to promote the recovery and use of the products obtained.

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Industry and Technology
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)
- Local Administrations

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8. Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.5. Increasing the efficiency of separate collection at source for the recovery of biodegradable wastes, including food waste

Outputs

- Increase in the number of municipalities carrying out separate collection for the recovery of biodegradable wastes, including food waste, within the framework of the zero waste management system by years

Description

- Separate collection at source and recycling of biodegradable wastes, including food wastes will be ensured.

Responsible/Coordinating Institution: Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Agriculture and Forestry
- Union of Municipalities of Türkiye (TBB)
- Local Administrations

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8.Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.6. Making regulations to prevent the incineration of biomass that can be utilized within the framework of circular economy principles

Outputs

- Regulation to ensure the utilization of biomass, which can be evaluated within the framework of circular economy principles, as raw material and to prevent incineration

Description

- Obtaining energy by incineration biomass is not in accordance with the principles of circular economy. For this reason, regulations will be made to utilize biomass through material recovery rather than energy generation by incineration.

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources

End Date
2028

PRIORITY SECTORS

(i) Electronics and Information and Communication Technologies (ICT), (ii) Batteries and Vehicles, (iii) Packaging, (iv) Plastics, (v) Textiles, (vi) Construction and Building, (vii) Food and Biomass

Strategic Goal

2. The circular economy will be integrated into product life cycles in priority sectors.

Objectives

2.8.Increasing circularity in the **Food and Biomass** sector at all stages covering production, consumption and waste management

Actions

2.8.7. Updating the relevant legislation in order to increase the use of compost and fermented products, especially those obtained from food waste, and to improve product quality

Outputs

- Regulation on Fertilizers Used in Agriculture
- Legislation to be prepared in line with the EU Fertilizer Regulation (2019/1009)
- Guidelines/regulation on the promotion of the use of compost and fermented products from the processing of animal waste and food waste

Description

- Will be realized taking into account the EU Fertilization Regulation (2019/1009).

Responsible/Coordinating Institution: Ministry of Agriculture and Forestry

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Industry and Technology
- Ministry of Trade
- Turkish Standards Institute (TSE)

End Date
2026

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.1. Improving **environmental legislation** in line with circular economy principles

Actions

3.1.1. Revising environmental legislation in line with circular economy principles and waste management requirements

Outputs

- Revised Waste Management Regulation (OG 02.04.2015/29314)
- Revised Regulation on Landfilling of Wastes (OG 26.03.2010-27533)

Description

- Will be realized by taking into account the basic principles of the EU Circular Economy Action Plan and the Revised EU Waste Framework Directive (COM(2023) 420).
- Related regulations will be revised in order to reduce landfilling and incineration of waste.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Industry and Technology
- Ministry of Trade
- Union of Municipalities of Türkiye (TBB)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.2. Dissemination of **Industrial Symbiosis** applications

Actions

3.2.1. Establishing a circular economy network on a national scale to promote industrial symbiosis and resource efficiency

Outputs

- A country-scale circular economy network

Description

- The circular economy network will be designed as a platform for material, waste and information sharing.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Industry and Technology
- Ministry of Energy and Natural Resources
- Ministry of Trade
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)
- Supreme Organization of Organized Industrial Zones (OSBÜK)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.2. Dissemination of **Industrial Symbiosis** applications

Actions

3.2.2. Establishing standardization and certification infrastructure for processing and reuse of recycled content and waste in priority sectors

Outputs

- Standards and certification for recycled content for seven priority sectors
- Standards for the treatment and preparation of waste for reuse

Description

- Product standards containing recycled materials and waste processing and reuse preparation facility standards will be established in our country by taking into account the recycled content obligation measures in the relevant regulations of the EU.

Responsible/Coordinating Institution: Turkish Standards Institute (TSE)

Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Trade
- Turkish Accreditation Agency (TÜRKAK)
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.2. Dissemination of **Industrial Symbiosis** applications

Actions

3.2.3. Establishment of a legal framework for industrial symbiosis and determination of "end of waste" criteria in line with country conditions

Outputs

- Legal framework for industrial symbiosis
- Relevant criteria on end of waste

Description

- Will be realized by taking into account the end-of-waste criteria developed by the Joint Research Centre (JRC) of the European Commission.

Responsible/Coordinating Institution:
Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Standards Institute (TSE)
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.2. Dissemination of **Industrial Symbiosis** applications

Actions

3.2.4. Making legal regulations on support mechanisms for industrial symbiosis initiatives and R&D studies

Outputs

- Legal regulation on support mechanisms for industrial symbiosis initiatives and R&D studies

Description

- Legislative work will be carried out on support mechanisms for industrial symbiosis initiatives and R&D activities.

Responsible/Coordinating Institution: Ministry of Industry and Technology

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Agriculture and Forestry
- Scientific and Technological Research Council of Türkiye (TÜBİTAK)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.3. Development of **economic instruments** to accelerate the circular economy

Actions

3.3.1. Diversification of existing economic instruments for separate collection of municipal waste at source and reduction of the amount of waste going to landfill with new instruments

Outputs

- Revised legislation on separate collection of municipal waste at source and new economic instruments to reduce the amount of waste going to landfill

Description

- It is aimed to diversify and generalize the existing economic instruments with new instruments such as landfill fee and deposit return system.

Responsible/Coordinating Institution: Ministry of Environment, Urbanization and Climate Change

Related Institution

- Turkish Environment Agency (TÜÇA)
- Union of Municipalities of Türkiye (TBB)
- Local Administrations

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.3. Development of **economic instruments** to accelerate the circular economy

Actions

3.3.2. Conducting studies for the realization of exemptions, discounts and increases through the Recovery Participation Fee (GEKAP) by disseminating circular economy practices

Outputs

- Revised Environmental Law
- Revised GEKAP Regulation

Description

• Efforts will be made to realize exemptions, discounts and increases in GEKAP fees collected from those who place products on the domestic market within the scope of the Environmental Law, similar to eco-modulation practices according to the practices carried out within the framework of circular economy.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Presidency of the Republic of Türkiye, Presidency of Strategy and Budget
- Ministry of Treasury and Finance
- Ministry of Industry and Technology
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.4. Enhancing **digitalization** in waste management

Actions

3.4.1. Improvement of existing indicators, monitoring systems and databases by monitoring current studies on waste management and development of new systems according to the needs

Outputs

- Improvements to existing waste management indicator and monitoring systems
- New indicators and systems to be created in line with the needs

Description

• Improvements will be made so that waste management tracking/monitoring databases or systems such as Mobile Hazardous Waste Tracking System (MoTAT), Mass Balance System (MBS), Zero Waste Information System (SABS), Packaging Information System (ABS) can work in harmony and efficiently with each other and similar systems to be developed will be integrated with the existing systems.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Turkish Environment Agency (TÜÇA)

End Date
2026

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.4. Enhancing **digitalization** in waste management

Actions

3.4.2. Organization of Extended Producer Responsibility (EPR) databases under a single roof and entering the data of products placed on the market into the system

Outputs

- Integrated Extended Producer Responsibility (EPR) database

Description

- The entire life cycle of the products within the scope of EPR, from manufacturing to the recycling process, will be monitored and controlled.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change Turkish Environment Agency (TÜÇA)

Related Institution

- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Statistical Institute (TÜİK)
- Local Administrations

End Date
2027

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.5. Making of **zero waste** applications widespread

Actions

3.5.1. Development of policies and infrastructures to strengthen Zero Waste applications that will increase the separate collection of waste at source in line with circular economy principles

Outputs

- National Waste Prevention Plan
- Increase in zero waste good practice examples by years

Description

- In line with our country's Zero Waste vision, a national waste prevention plan will be published and good practice examples will be implemented in order to prevent waste, use resources more efficiently and prevent waste generation.
- Will be realized by taking into account the national waste prevention programs expected to be prepared in accordance with the EU Waste Framework Directive.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Turkish Environment Agency (TÜÇA)
- Union of Municipalities of Türkiye (TBB)
- Local Administrations
- Supreme Organization of Organized Industrial Zones (OSBÜK)

End Date
2028

PREVENTION AND REDUCTION OF WASTE AND WASTAGE

Strategic Goal

3. Waste generation will be prevented according to circular economy principles and the amount of waste sent to landfill and incineration facilities will be reduced.

Objectives

3.5. Making of **zero waste** applications widespread

Actions

3.5.2. Promoting the UN Zero Waste Resolution, of which Türkiye is a pioneer, on international platforms

Outputs

- References to the UN Zero Waste Decision (A/RES/77/161) in different international texts (decision, declaration, recommendation, concept document, etc. policy documents)
- Bilateral cooperation agreements/ protocols

Description

- The continuity of pioneering efforts to promote the Zero Waste vision on a global scale will be ensured.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change Ministry of Foreign Affairs

Related Institution

- Presidency of the Republic of Türkiye, Presidency of Strategy and Budget

End Date
2028

DISSEMINATION OF CIRCULAR ECONOMY

Strategic Goal

4. Relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.

Objectives

4.1. Developing **vocational skills and qualifications** for the transition to a circular economy

Actions

4.1.1. Reflection of the skills and qualification requirements that circular economy basic principles will bring with them into education curricula and programs

Outputs

- Updated secondary and higher education curricula to include the basic principles of circular economy
- Projects and programs for school administrators, teachers and parents
- Training programs for young people on sustainability and circular economy

Description

- A curriculum will be prepared to increase the level of basic knowledge in primary and secondary education that will accelerate the transition to circular economy in our country.
- Courses and departments on circular economy will be opened in undergraduate and graduate programs of universities, and the necessary professional skills and human capacity for circular economy will be developed.
- Training programs will be prepared to increase the knowledge, skills and competencies of young people on sustainability and circular economy to be offered within the scope of the Education Management System (EYS) in Youth Centers and dormitories serving under the Ministry of Youth and Sports.

Responsible/Coordinating Institution: Ministry of National Education

Related Institution

- Ministry of Environment, Urbanization and Climate Change
- Ministry of Labor and Social Security
- Ministry of Youth and Sports
- Ministry of Industry and Technology
- Vocational Qualifications Authority (MYK)
- Turkish Employment Agency (İŞKUR)
- Universities

End Date
2026

DISSEMINATION OF CIRCULAR ECONOMY

Strategic Goal

4. Relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.

Objectives

4.1. Developing **vocational skills and qualifications** for the transition to a circular economy

Actions

4.1.2. Defining new professions that will emerge within the scope of twin transformation and sustainability understanding and updating existing occupational standards with this understanding

Outputs

- Occupational standards to be prepared and updated

Description

- In order to increase the qualified labor force and human capacity to accelerate the transition to circular economy in Türkiye, vocational standards for new skills and business lines will be developed.

Responsible/Coordinating Institution:
Vocational Qualifications Authority (MYK)

Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Industry and Technology
- Ministry of Trade
- Directorate of Small and Medium-Sized Enterprises Development and Support Administration (KOSGEB)
- Turkish Statistical Institute (TÜİK)
- Turkish Employment Agency (İŞKUR)
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)
- Local Administrations

End Date
2028

DISSEMINATION OF CIRCULAR ECONOMY

Strategic Goal

4. Relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.

Objectives

4.2. Building **circular cities**

Actions

4.2.1. Making studies to make local initiatives and circular city concepts widespread

Outputs

- Practical guidelines and guidance documents for circular local initiatives and cities

Description

- Guidance documents and implementation manuals will be prepared for the development of different cities of Türkiye in different fields and for the dissemination of circular economy principles in cities.

Responsible/Coordinating Institution:
Ministry of Environment, Urbanization and Climate Change

Related Institution

- İLBANK A.Ş.
- Turkish Environment Agency (TÜÇA)
- Union of Municipalities of Türkiye (TBB)
- Local Administrations

End Date
2028

DISSEMINATION OF CIRCULAR ECONOMY

Strategic Goal

4. Relevant structures will be established at all levels (citizen, company, city) in the transition to circular economy.

Objectives

4.3. **Increasing cooperation and raising awareness** on circular economy

Actions

4.3.1. Carrying out awareness-raising and consciousness-building activities for circular economy and its initiatives

Outputs

- Training and volunteering activities, social media campaigns, public service announcements, etc.
- Student clubs to work in the field of circular economy
- Awareness-raising activities in the field of circular economy covering the reduction of external dependence on energy and conscious consumption

Description

- Consciousness-building and awareness-raising activities will be carried out for circular economy initiatives such as digital product passport, right to repair, recycled content, advanced recycling that appeal to all segments and all ages.
- Awareness-raising video-based training programs on sustainability and circular economy will be prepared on the Ministry of Youth and Sports Education Experience Application (EDU) Portal.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Energy and Natural Resources
- Ministry of Youth and Sports
- Ministry of National Education
- Ministry of Industry and Technology
- Ministry of Agriculture and Forestry
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)
- Turkish Radio and Television Corporation (TRT)
- Council of Higher Education (YÖK)
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)
- Universities

End Date
2026

HORIZONTAL ACTIONS

Strategic Goal

5. The relationship between circular economy and just transition and financeability will be improved.

Objectives

5.1. Strengthening the link between Circular Economy and **Just Transition**

Actions

5.1.1. Preparation of the National Just Transition Strategy taking circular economy principles into account

Outputs

- National Just Transition Strategy

Description

- As stated in the Twelfth Development Plan, a fair transition strategy will be prepared with the participation of all relevant parties within the scope of the twin transformation process and a need assessment will be conducted for those employed in sectors and occupational groups that may be affected by the green transformation in the implementation process of the strategy.
- It will be carried out taking into account the EU Just Transition Mechanism.

Responsible/Coordinating Institution: Ministry of Labor and Social Security

Related Institution

- Presidency of the Republic of Türkiye, Presidency of Strategy and Budget
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of National Education
- Ministry of Industry and Technology
- Ministry of Trade
- Council of Higher Education (YÖK)

End Date
2026

HORIZONTAL ACTIONS

Strategic Goal

5. The relationship between circular economy and just transition and financeability will be improved.

Objectives

5.2. Increasing the flow of **financing** by determining the criteria for transition to circular economy in the context of **taxonomy**, to improve **institutional and technical infrastructure, investment and incentive mechanisms**.

Actions

5.2.1. Preparation of technical screening criteria for transition to circular economy under the national Green Taxonomy legislation

Outputs

- Technical screening criteria for transition to circular economy under the national Green Taxonomy legislation

Description

- Will be realized taking the EU Taxonomy Regulation ((EU) 2020/852) into account.

Responsible/Coordinating Institution: Ministry of Environment, Urbanization and Climate Change (Directorate of Climate Change)

Related Institution

- Presidential Investment and Finance Office
- Ministry of Energy and Natural Resources
- Ministry of Treasury and Finance
- Ministry of Industry and Technology
- Ministry of Trade
- Union of Municipalities of Türkiye (TBB)

End Date
2026

HORIZONTAL ACTIONS

Strategic Goal

5. The relationship between circular economy and just transition and financeability will be improved.

Objectives

5.2. Increasing the flow of **financing** by determining the criteria for transition to circular economy in the context of **taxonomy**, to improve **institutional and technical infrastructure, investment and incentive mechanisms**.

Actions

5.2.2. Taking initiatives to support circular economy with international financial resources

Outputs

- Access to international finance for circular economy

Description

- Efforts will be made to distribute the resources provided by international financial institutions and climate funds in proportion to the emission reductions made by enterprises through circular economy practices.

Responsible/Coordinating Institution: Ministry of Treasury and Finance

Related Institution

- Ministry of Trade
- Directorate of Climate Change

End Date
2028

HORIZONTAL ACTIONS

Strategic Goal

5. The relationship between circular economy and just transition and financeability will be improved.

Objectives

5.2. Increasing the flow of **financing** by determining the criteria for transition to circular economy in the context of **taxonomy**, to improve **institutional and technical infrastructure, investment and incentive mechanisms**.

Actions

5.2.3. Updating investment incentive programs according to circular economy criteria

Outputs

- Investment incentive programs updated according to circular economy criteria

Description

- The existing investment incentive programs of the will be restructured according to circular economy criteria.

Responsible/Coordinating Institution: Ministry of Industry and Technology

Related Institution

- Presidential Investment and Finance Office
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Energy and Natural Resources
- Ministry of Trade

End Date
2028

HORIZONTAL ACTIONS

Strategic Goal

5. The relationship between circular economy and just transition and financeability will be improved.

Objectives

5.2. Increasing the flow of **financing** by determining the criteria for transition to circular economy in the context of **taxonomy**, to improve **institutional and technical infrastructure, investment and incentive mechanisms**.

Actions

5.2.4. Supporting financial projects to improve the institutional capacity of national and local public institutions

Outputs

- Budget increase for institutional capacity building of central and local public institutions on circular economy

Description

- Budget transfers will be made from central public resources to relevant public institutions and organizations to be allocated for capacity building projects on circular economy.

Responsible/Coordinating Institution: Ministry of Treasury and Finance

Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Trade
- İLBANK A.Ş.
- Union of Municipalities of Türkiye (TBB)
- The Union of Chambers and Commodity Exchanges of Türkiye (TOBB)

End Date
2026

MONITORING CIRCULAR ECONOMY

Strategic Goal

6. Progress in the transition to a circular economy will be systematically monitored and evaluated.

Objectives

6.1. Development and monitoring of circular economy indicators

Actions

6.1.1. Establishment of a legal framework for monitoring the circular economy and setting national and sectoral indicators for monitoring

Outputs

- Regulation for monitoring circular economy

Description

- A monitoring system will be developed to measure Türkiye's level of transition to circular economy and the effectiveness of the policies implemented after the implementation of the action plan.
- Will be realized by taking the EU Circular Economy Monitoring System into account.

Responsible/Coordinating Institution:

Ministry of Environment, Urbanization and Climate Change

Related Institution

- Ministry of Trade
- Ministry of Labor and Social Security
- Ministry of Industry and Technology
- Turkish Statistical Institute (TÜİK)
- Turkish Environment Agency (TÜÇA)
- Union of Municipalities of Türkiye (TBB)

End Date
2027

MONITORING CIRCULAR ECONOMY

Strategic Goal

6. Progress in the transition to a circular economy will be systematically monitored and evaluated.

Objectives

6.1. Development and monitoring of circular economy indicators

Actions

6.1.2. Incorporation of national and sectoral indicators for circular economy monitoring into the Official Statistics Program

Outputs

- Set of indicators for monitoring national progress towards transition to a circular economy

Description

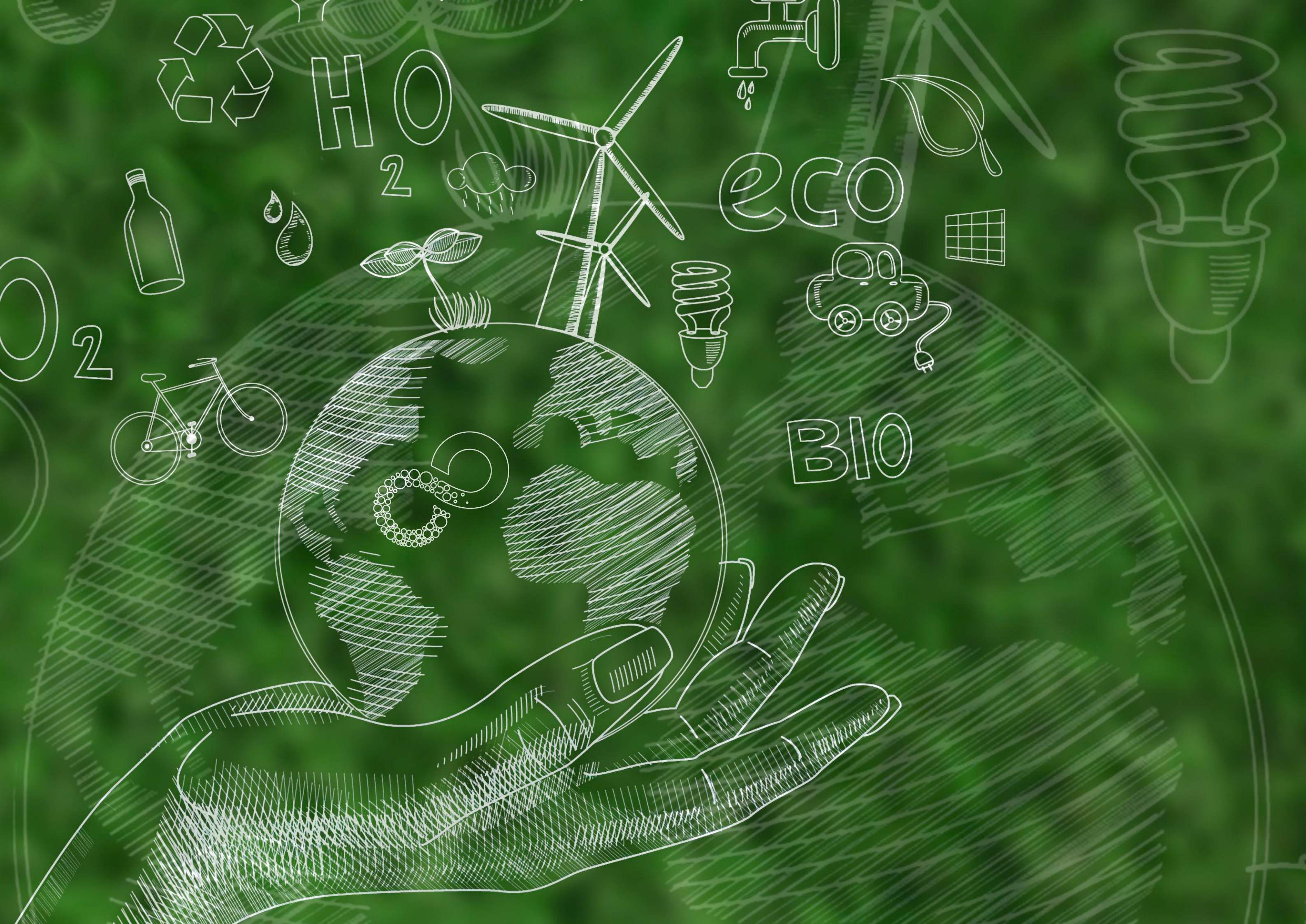
- In order for the indicators to be determined within the scope of the monitoring system to be comparable with EU indicators and to be reported as country data to Eurostat's Circular Economy Monitoring Mechanism, they will be included in the Official Statistics Program.

Responsible/Coordinating Institution: Turkish Statistical Institute (TÜİK)

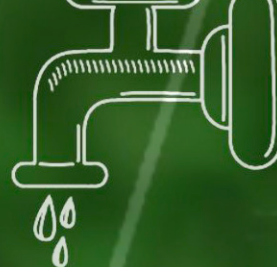
Related Institution

- Ministry of Labor and Social Security
- Ministry of Environment, Urbanization and Climate Change
- Ministry of Industry and Technology
- Ministry of Trade
- Turkish Environment Agency (TÜÇA)
- Union of Municipalities of Türkiye (TBB)

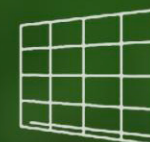
End Date
2027



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REPUBLIC OF TÜRKİYE
MINISTRY OF ENVIRONMENT,
URBANIZATION AND CLIMATE CHANGE