# REPUBLIC OF TÜRKİYE

# MINISTRY OF ENVIRONMENT, URBANIZATION AND CLIMATE CHANGE

**Training Course on**

**"Climate Change Adaptation Planning and Environmental Management"**

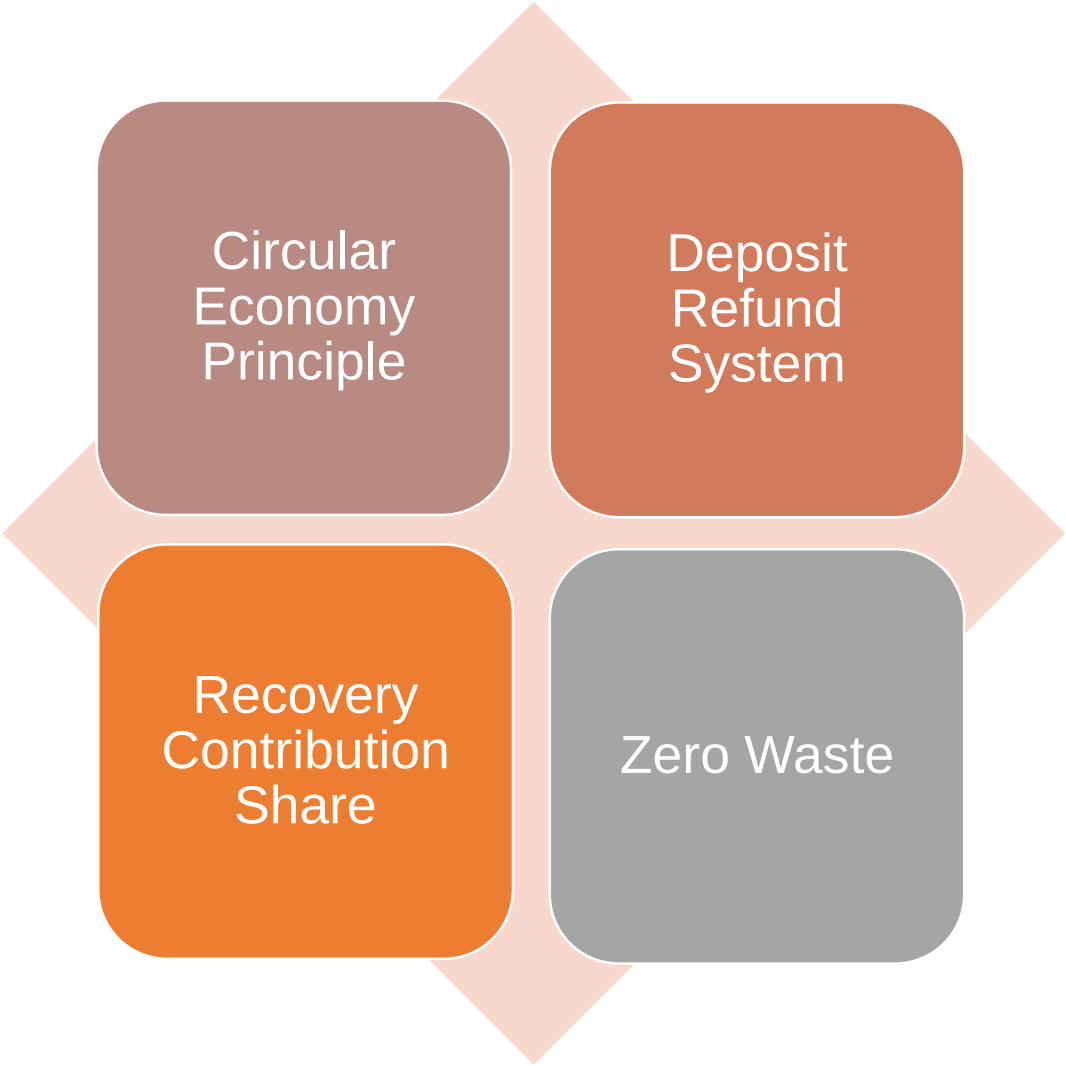
The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

5-6 March 2024

# CIRCULAR ECONOMY
# &
# CLIMATE CHANGE

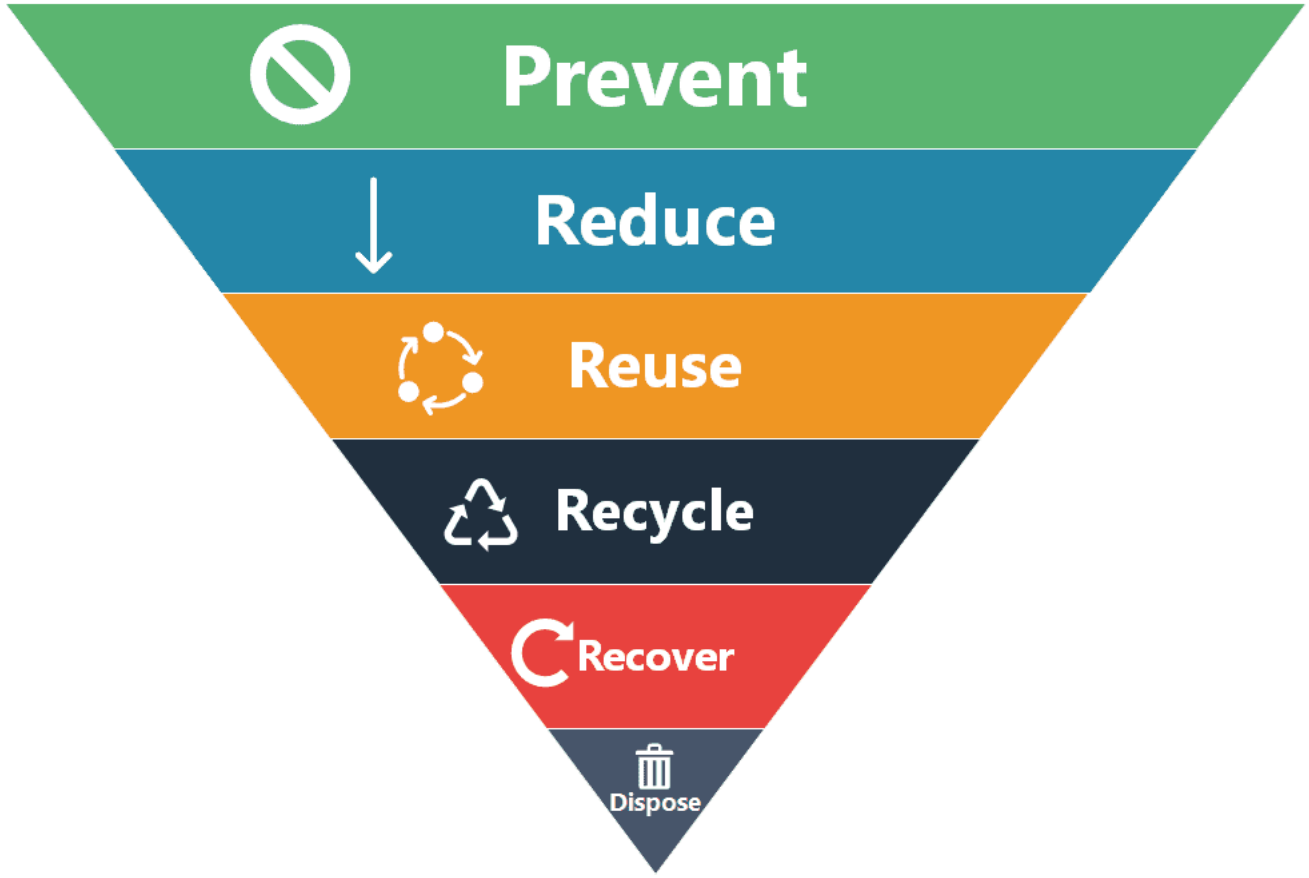
- Reduced Resource Extraction
- Energy Efficiency
- Emission Reduction
- Sustainable Practices
- Resilience to Climate Change

# Amendment on Environmental Law (2020)




- Promoting zero waste
- Implementation of circular economy principles
- Promoting recovery
- Reducing plastic bags and disposables
- Setting up and operating a zero waste system
- Mandatory use of recycled materials

# FROM WASTE MANAGEMENT TO A CIRCULAR ECONOMY



# FROM WASTE MANAGEMENT TO A CIRCULAR ECONOMY

- Municipal Waste Management
- Alternative Raw Material Implementations
- Waste Oil Management
- Textile Waste Management
- Plastics
- Charging of Plastic Bags

# MUNICIPAL WASTE MANAGEMENT

According to 2022 TURKSTAT statistics;

- 30.3 million tons of municipal waste were collected.
- The daily amount of waste per person is calculated as 1.03 kg.
- The number of landfills : 93
- The recovery rate for 2022 reached 30.13%

# ALTERNATIVE RAW MATERIAL IMPLEMENTATIONS

- 3.7 M tons of waste was used as alternative raw materials
- 2.1 M tons of waste as additional fuel in the cement, lime, ceramics, brick and iron-steel sectors in Türkiye in 2022.
- 920 thousand tons of petroleum was saved and 1.3 million tons of $CO_2$ emissions from fossil fuels were prevented.

# WASTE OIL MANAGEMENT

The Regulation revision for production of high added value base oil from waste mineral oils was made in 2019.

Waste Oil Collection Authorization has begun to be granted to facilities whose trial productions are deemed appropriate and which have been granted a refining license.

Waste Oil Refining License/Temporary Activity Certificate was given to 16 facilities.

The practice regarding the compulsory use of base oil obtained from waste oils in the production of mineral oil has been initiated.

# TEXTILE WASTE

- Within the Zero Waste Legislation;
  - prevention of textile waste,
  - extend the life of used textile products,
  - separate collection and deliver to people in need,
  - re-use and recycling
- In addition, the responsibility for separate collection of textile wastes has been given to the municipalities and civic amenity centers are needs to be placed.
- These centers should be established by local administrations to collect non-hazardous recyclable textile wastes originating from households or commercial before they are delivered to waste treatment facilities.

# PLASTICS

- In terms of plastic processing capacity, Turkey became the 2nd country in Europe and the 6th country in the world in 2022.
- In order to support the determination of the right strategies specific to our country in the fight against plastic pollution;
  - Plastic raw material and product production and areas of use,
  - An overview report discussing issues related to the management of plastic waste was prepared with the coordination of our Ministry and by UNDP Turkey also with the support of academics.

# PLASTICS

Within the scope of DEEP Project;

- In accordance with the EU Plastics Strategy, a country-specific "Single-Use Plastics and Marine Litter Roadmap" will be developed.
- A public survey will be conducted on microplastics and restricting single-use plastics.
- A Life Cycle Assessment of Plastics has been conducted for the plastics industry.
- In addition, the negotiation processes of the United Nations Environment Program (UNEP) "Intergovernmental Negotiating Committee (INC) established to Prevent Plastic Pollution" are closely monitored.

# CHARGING OF PLASTIC BAGS

The Charging of Plastic Bags has started as of January 1, 2019.

With the implementation of charging plastics bags, approximately 62.5% decrease in the use of plastic bags between 2019-2022.

With the paid bag application, the generation of 760,000 tons of plastic waste from plastic bags has been prevented to date.

Reduction of 31,500 tons of greenhouse gases.

# Technical Assistance for Assessment of Türkiye's Potential on Transition to Circular Economy (DEEP)

| | |
|---|---|
| **Project Budget** | 3.2 Million Euros (IPA funded) |
| **Starting date:** | 07.02.2022 |
| **End Date:** | 06.02.2025 |
| **Duration:** | 36 months |

**For detailed information about the project:**
dongusel.csb.gov.tr

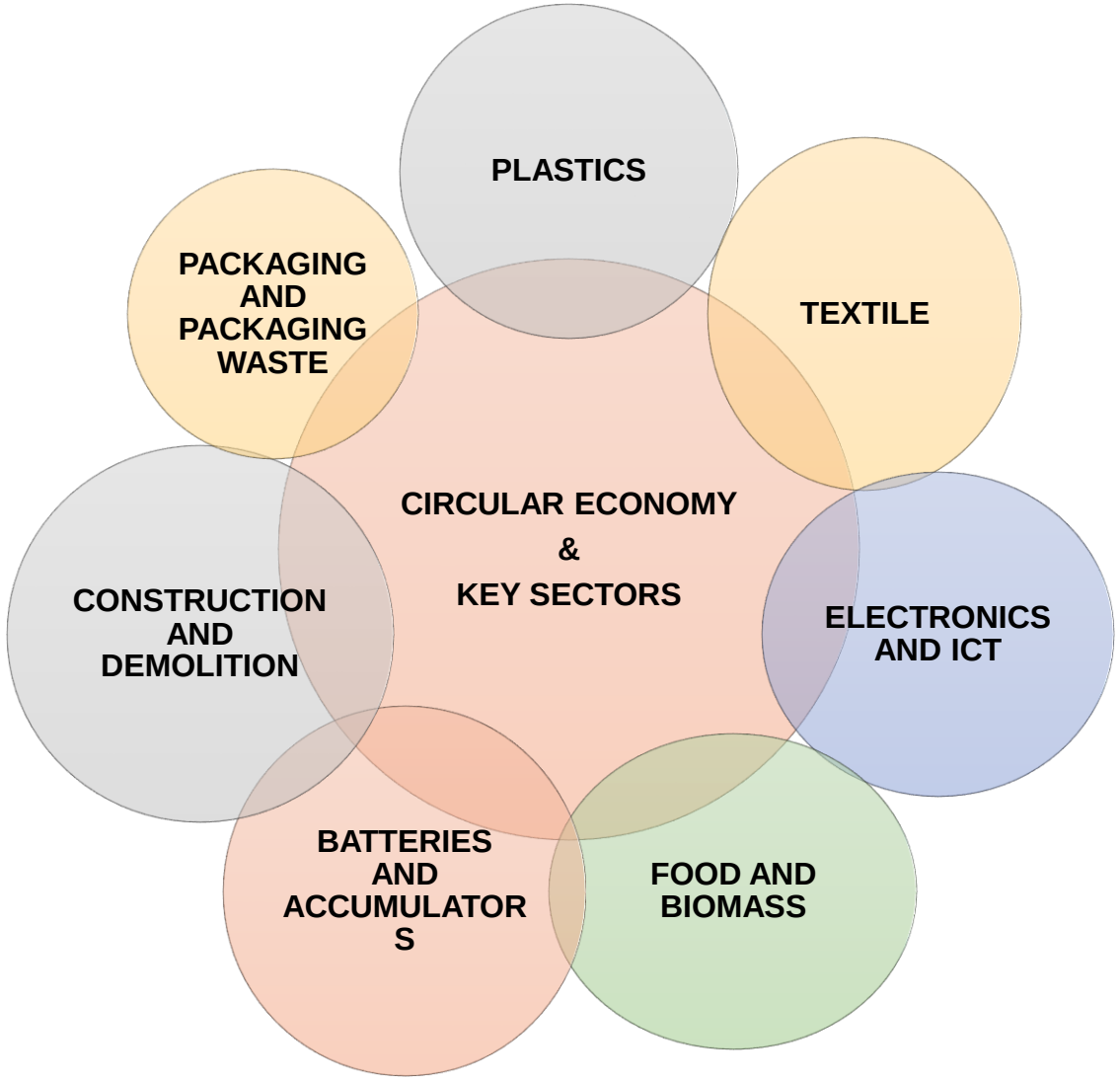
**Main Outputs**

1. **Potential of Türkiye on transition to circular economy** based on EU Circular Economy Package is **analyzed**.
2. A comprehensive **national strategy and action plan** harmonized with the EU Circular Economy Package is developed.
3. **Management capacity of national and local authorities** in terms of integrated waste management is improved.

# DEEP PROJECT ACTIVITIES

- Institutional Needs and Gap Analysis
- General Assessment Report
- Strategy Development Workshops
- Green Deal Specialized Working groups
- SIA
- Remarks of line Ministries on CE Action Plan
- Publication of CE Action Plan

# 7 KEY SECTORS




Türkiye Döngüsel Ekonomi Eylem Planı

# SECTORAL IMPACT ASSESSMENT

**The main effects that evaluated;**

- Investment and operating costs,
- Employment,
- Greenhouse gas emissions and
- Other relevant environmental issues are included.

# SECTORAL IMPACT ASSESSMENT (PRELIMINARY RESULTS)

- It shows that, in general, all CE actions will lead to increases in costs for the private sector, but can sometimes be compensated by reductions in environmental costs.
- The positive effects on sectoral added value and reducing environmental impacts are clear.
- The sectors most likely to be financially impacted are packaging, plastics and textiles.

# STRATEGY DEVELOPMENT WORKSHOPS

## MAY 2023

# Preparation of the National Circular Economy Action Plan

- Baseline Analysis, Gap Analysis, Needs Assessment studies are completed.
- At the **Strategy Development Workshops** held on May 2023, preparations for the National Circular Economy Strategy and Action Plan were initiated in a participatory manner.

# Preparation of the *National Circular Economy Action Plan* (Draft Actions)

This project is co-funded by the
European Union and the Republic of Türkiye

**Technical Support Project for the Evaluation of Turkey's Transition Potential to a Circular Economy**

**Activity. 2.1.3. Preparation of the National Circular Economy Strategy and Action Plan**

-Recommended Actions related to Regulation-

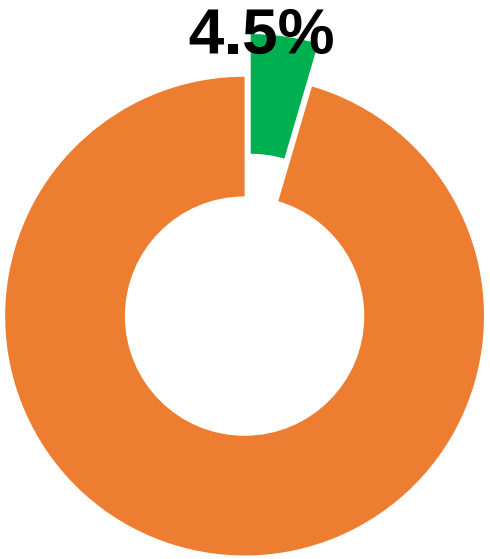
| Strategic Goal (Example) | Recommended Actions related to Regulation | Duration of Implementation | Estimated Cost | Responsible/ Coordinating Institution | Relevant Institutions and Stakeholders | Outputs |
|---|---|---|---|---|---|---|
| **0. General** | | | | | | |
| **A national circular economy model specific to our country will be developed.** | 0.1. Revision of the Environmental Law, Regulations on Waste Management and Zero Waste to determine the basic procedures and principles in accordance with the basic principles of EU DEEP | Medium | Low | MoEUCC | MoT | • Revised Environmental Law,<br>• Revised Regulation on Waste Management<br>• Revised Regulation on Zero Waste |
| **1. Sustainable Product Policy** | | | | | | |
| **The design, production and use of more durable, reusable, repairable and updatable products will be encouraged.** | 1.1. Harmonization of the national legal framework following the final approval of the EU Eco-Design Regulation proposal | Medium | Low | MoIT | MoEUCC<br>MoT<br>MoAF<br>TÜBİTAK<br>TSE<br>TÜRKAK (Turkish Accreditation Agency)<br>TOBB | • Revised Eco-design Regulation |
| | 1.2. Updating of the National Environmental Label system following the final approval of the EU Eco-Design Regulation proposal | Short | Low | MoEUCC | MoIT<br>MoT<br>MoAF | • Revised Regulation on Environmental Labeling |

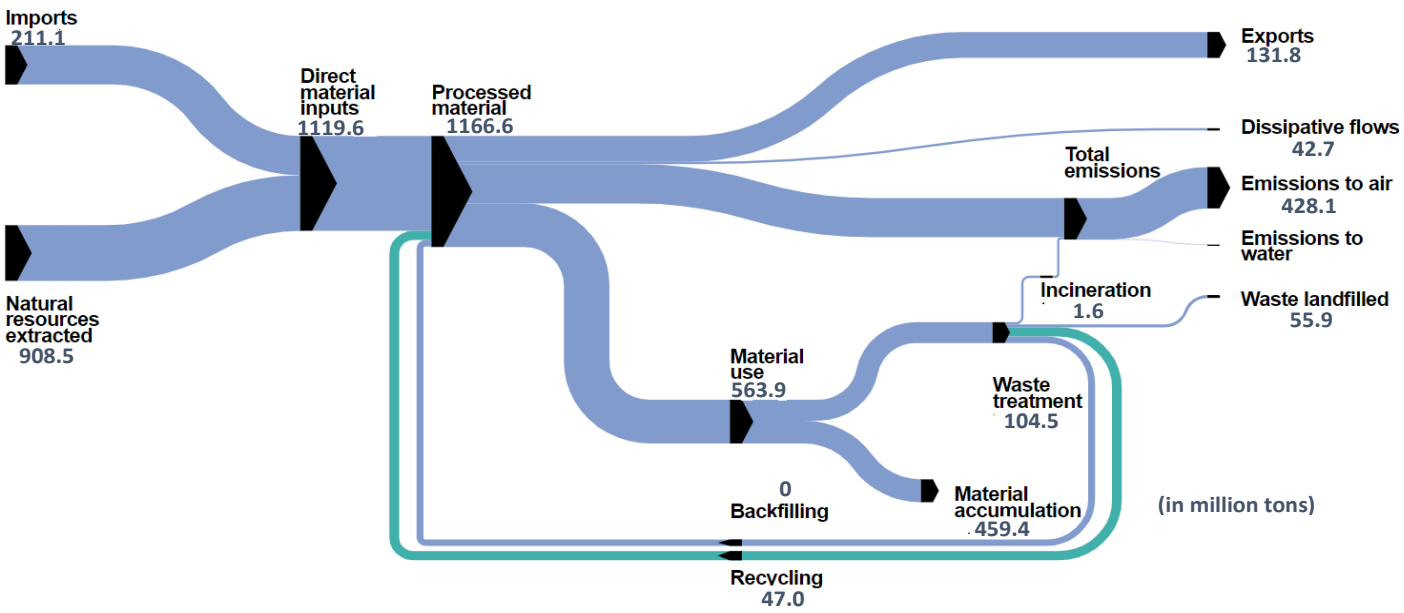
# CIRCULARITY IN TÜRKİYE

In line with the **Eurostat** circular analysis methodology, the first results of the studies on **circularity calculations** for Türkiye were presented. The methodology is based on the **Material Flow Accounting (MFA)** method.

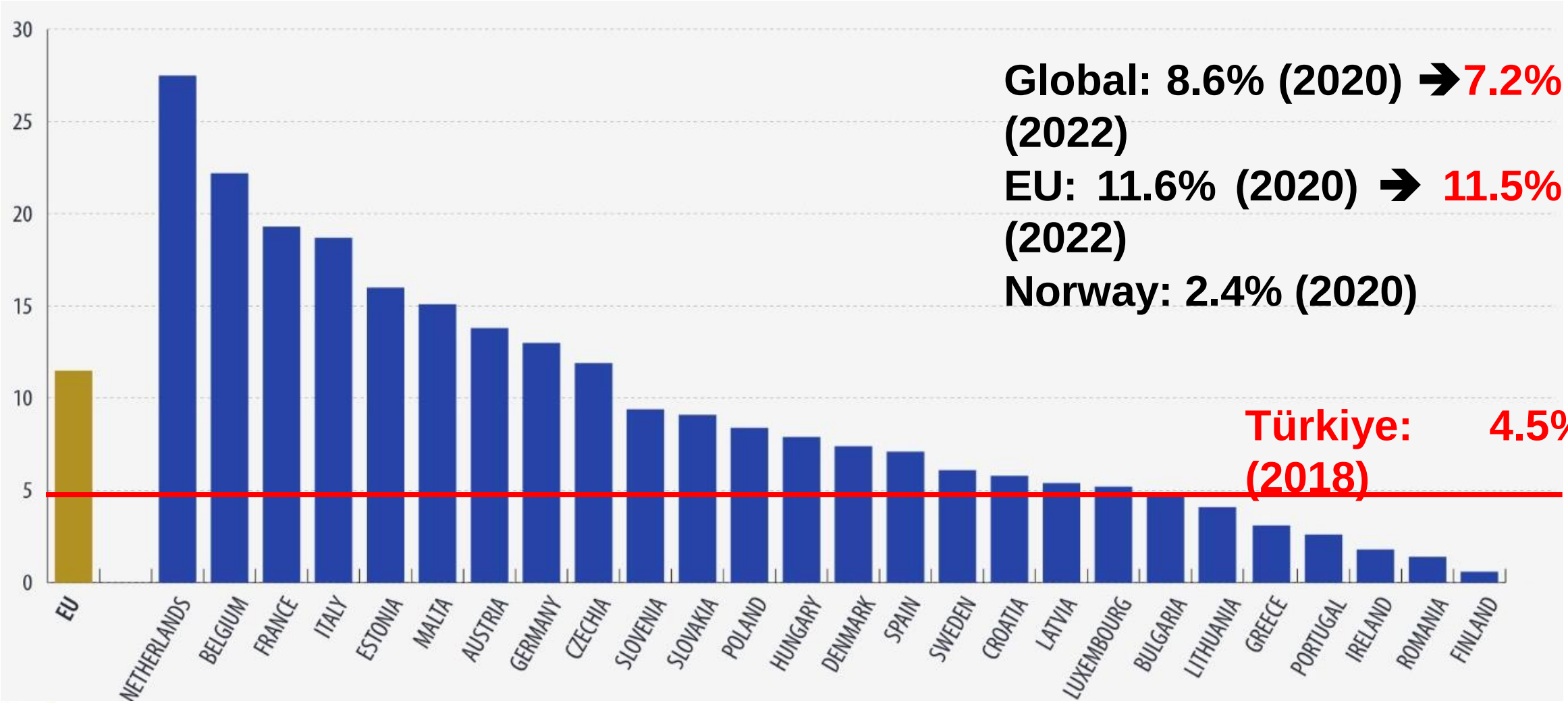
- Sankey Diagram
- Circularity Rate (circular material utilization/total material utilization)

**Draft National Circularity Ratio**



# CIRCULARITY IN EU AND WORLD




**Global: 8.6% (2020) ➔7.2% (2022)**

**EU: 11.6% (2020) ➔ 11.5% (2022)**

**Norway: 2.4% (2020)**

**Türkiye: 4.5% (2018)**

# A Livable World with Circular Economy and Green Development

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|---|---|
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