



Mapping of Circular Economy in North Macedonia

Diagnostic meeting with the Working Group

8 June 2023

Agenda



Key features of the project: objectives, timeline and main project pillars

North Macedonia's key economic features and their relevance to circular economy

Environmental trends and recent developments relevant to circular economy

Existing circular economy policy landscape and initiatives in North Macedonia

Potential circular economy priority areas for North Macedonia



PROJECT PRESENTATION



Project objectives

- Building on the greening work carried out as part of *the OECD South East Europe's Competitiveness Outlook* and *SME Policy Index* assessments, drawing on the OECD circular economy roadmap methodology and following the identified needs of the WB economies:
 - **Support for design** of circular economy (CE) roadmaps to Albania and North Macedonia to serve as blueprint for their CE transition
 - **Support for implementation** of CE roadmaps for WB economies, through different capacity building activities
- Broad **societal consensus** – involvement of **a wide range of stakeholders** in a continuous dialogue
- Direct contribution to the **Economic and Investment Plan** and the **Green Agenda** for the Western Balkans
- Compass and the engine for a **sustainable recovery**



CE roadmap methodology

1. Diagnostics: state of play of circular economy in North Macedonia

- **Sectoral analysis and comprehensive review of the policy and regulatory frameworks**
- **Consultation process with key stakeholders** to obtain insight into their views, experiences, challenges, needs and concerns regarding the circular transition:

2. Prioritisation: identification of priority sectors/focus areas key to CE transition

- **Assessment to identify key economic sectors to be involved in the circular economy transformation, by considering:**
 - Economic importance (e.g. contribution to GDP, employment, productivity)
 - Circular potential (waste management, resource and energy intensiveness)
 - Government priorities
 - Gaps and feasibility for CE transformation
- **Identification of good practices that can be transferred to the economy**



Timeline and key milestones

Q4 2022

- **Inception meetings to understand specific CE-related needs**
- **Mapping relevant stakeholders and institutions** to create a wider CE stakeholder platform

Q1 2023

- Nomination of the **CE coordinator and the CE working group**
- **Analytical work:** identifying the state-of-play of CE in North Macedonia
- **Kick-start meeting** with the key CE stakeholders in North Macedonia

Q2, Q3 2023

- **19 April: Regional kick-off event** at OECD Istanbul Centre coupled with a study visit
- **Diagnostics meeting and consultation with key stakeholders** on the CE transition and the state of play of CE
- Identifying the **priority CE-related sectors/focus areas**

September 2023

- Meeting with CE working group **to reach consensus on identified priority areas**

Q4 2023, Q1 2024

- **Review** of the draft CE roadmap **by the CE working group**
- **Wider consultation** process

Q2 2024

- **Publishing** of the CE roadmap

Role of the CE working group

- Led by the CE coordinator and the OECD team, **facilitate the CE roadmap development process**
- **Participate in meetings throughout the project**, as part of the support for CE roadmap design:
 - Take part in **consultations run by the OECD to share views on the circular economy transition** in North Macedonia and **provide further information/data** where necessary
 - **Participate in prioritisation meeting** to reach agreement on the priority CE areas/sectors in September in Skopje
- Provide **feedback on the draft CE roadmap**
- Participate in the **support for implementation activities and regional knowledge sharing**, if relevant



DIAGNOSTIC OF CIRCULAR ECONOMY IN NORTH MACEDONIA



North Macedonia's key economic features and their relevance to circular economy



North Macedonia's key economic features relevant to circular economy

SERVICES

North Macedonia is a **service-oriented economy**, with wholesale and retail trade accounting for the largest share.

Exports of services grew substantially but remain relatively low despite the strong potential.

The **large share of SMEs working in the service sector** can be a key driver in achieving circular objectives.

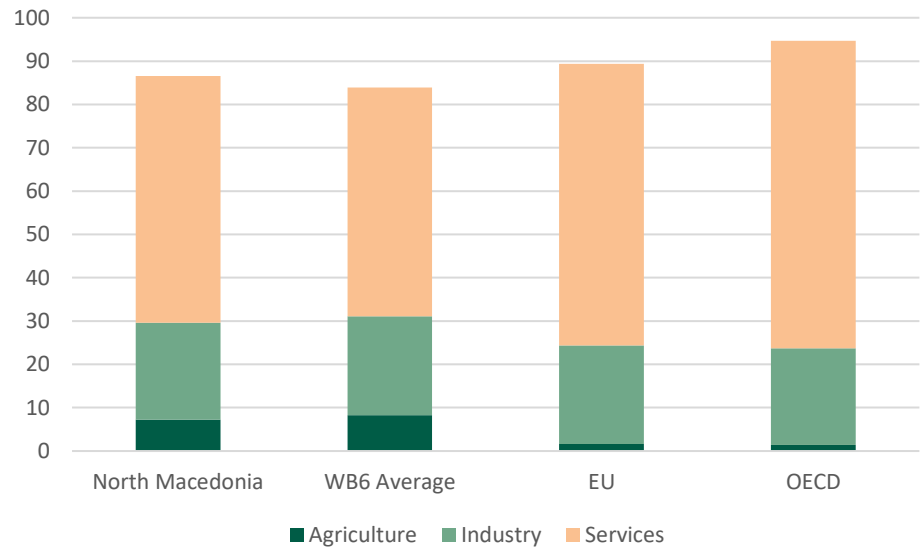
Services represent **57%** of GDP and **58%** of employment

Services account for **25%** of total exports

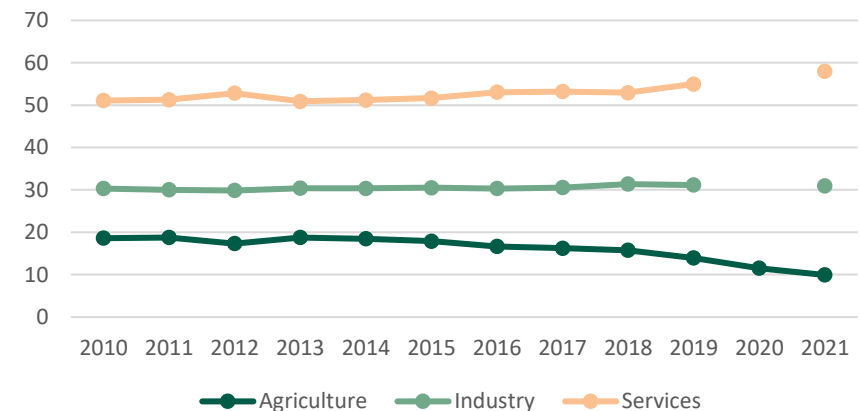
Wholesale and retail trade account for **19%** of GDP

69% of SMEs work in the service sector

Value added by grouped activity in North Macedonia (% of GDP), 2021



Employment by grouped activity in North Macedonia (% of GDP), 2012-21



North Macedonia's key economic features relevant to circular economy

INDUSTRY

Expanded over the past decade: establishment of **special economic zones** played important role.

Metallurgy is the largest industry but is energy and carbon-intensive and the production of secondary materials is almost non-existent.

Textile is the second biggest industry but is characterised by low recycling and reuse, leading to pressure on resources.

The strong recovery of the **automotive industry** is a key driver of economic rebound.

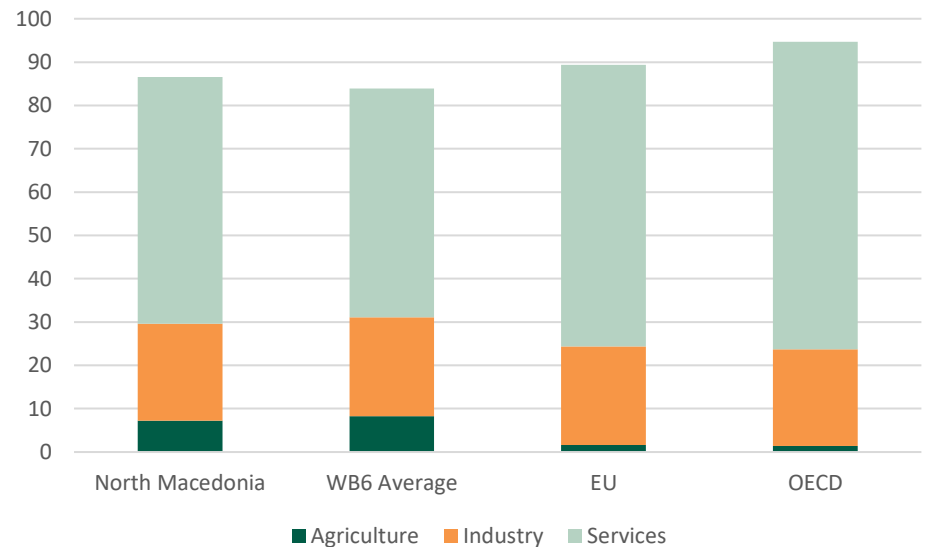
Industry represents **22.5%** of GDP and **31%** employment

Metals production accounts for **11%** of exports

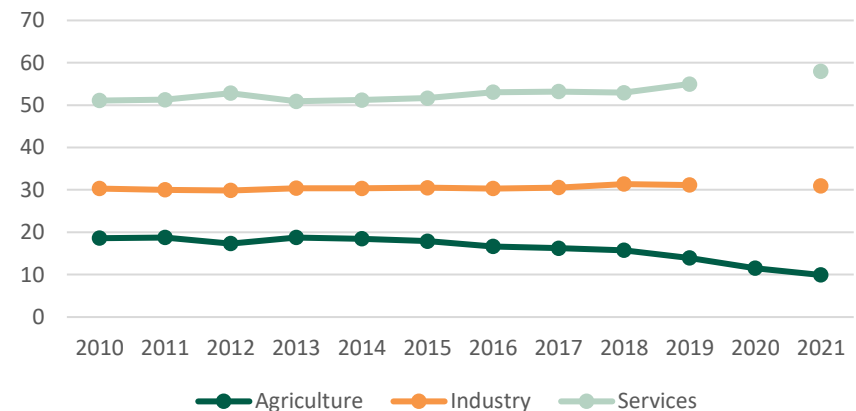
Textile accounts for **10%** of exports and **13%** of industrial GDP

The automotive industry was responsible for **65%** of exports in Jan 2021

Value added by grouped activity in North Macedonia (% of GDP), 2021



Employment by grouped activity in North Macedonia (% of GDP), 2012-21



North Macedonia's key economic features relevant to circular economy

AGRICULTURE

Prevalence of **subsistence farming, low-skilled and low-waged jobs** in the agriculture sector.

Agricultural productivity is very low and further development of the sector is undermined by several factors.

Agricultural and food products exported most: tobacco, lamb meat, vegetables and fruits and wine.

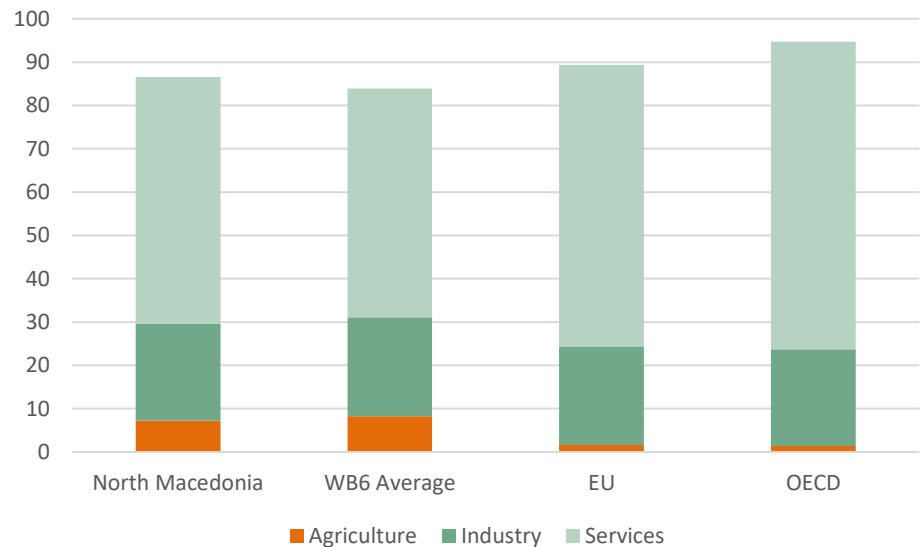
Organic production has grown in recent years.

Agriculture represents **7.2%** of GDP and **10%** of employment

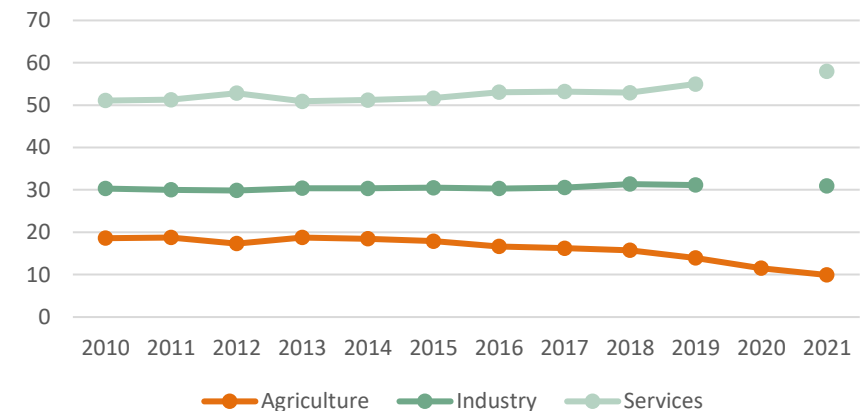
Agricultural productivity is **less than 25%** of the EU

Agricultural and food products account for **10%** of exports

Value added by grouped activity in North Macedonia (% of GDP), 2021



Employment by grouped activity in North Macedonia (% of GDP), 2012-21



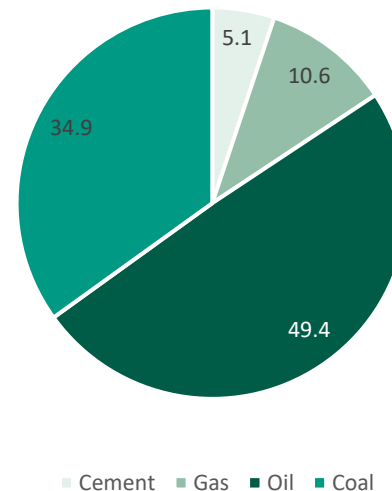
*Environmental trends and recent
developments relevant to circular
economy*



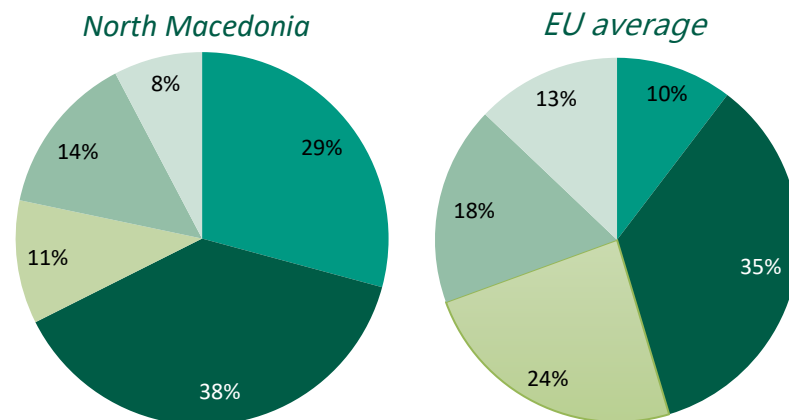
Environmental trends relevant to circular economy – *Energy and emissions trends*

High dependency on oil and coal energy generation undermines North Macedonia's climate commitments and the long-run sustainability of its energy sector. **Electricity and heat generation** is responsible for 72% of CO₂ emissions, mainly covered by coal.

CO₂ emissions by source, 2021



Energy mix in North Macedonia and the EU (% of total energy), 2020



Renewable energy only accounts for 14% of North Macedonia's energy supply, the lowest share in the Western Balkans, and nearly all is derived from hydro generation.



Environmental trends relevant to circular economy – *materials trends*

North Macedonia is endowed with **considerable natural resources**, but **high levels of extraction** cause environmental pressures.

North Macedonia's **DMC** has been on a slight decreasing trend since 2015, with **resource productivity** reaching an all-time high value in 2018.

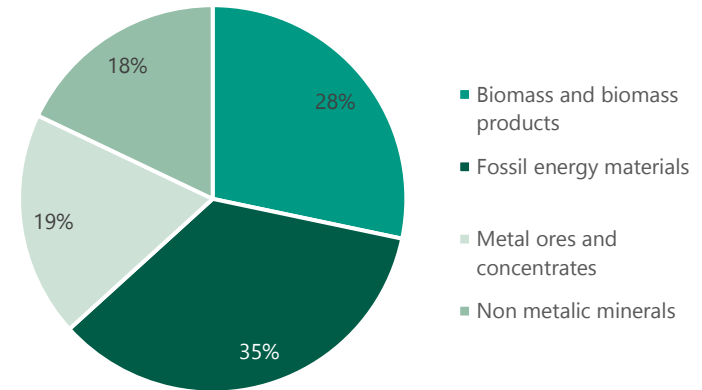
North Macedonia's DMC is dominated by **fossil energy materials** due the high reliance on fossil fuels followed by **biomass**, due to the relatively high contribution of agriculture to GDP and the use of firewood for heating.

Metal ores' DMC is 3 times higher than in the EU due to the strong mining sector.

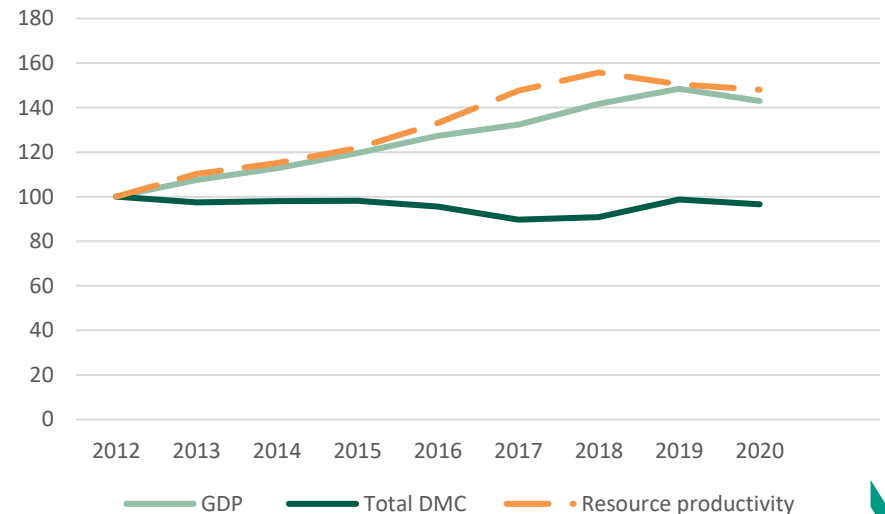
Circular bioeconomy: more resource efficient primary production, waste management (composition and anaerobic digestion) and the use of residues in agricultural practices

Resource efficiency efforts in mining operations, smelting and refining: processing of residues and secondary metals and materials

Structure of DMC in North Macedonia (% of total DMC), 2021



GDP, DMC and Resource Productivity in North Macedonia, 2012-2020
(Index 2012=100)



Sources: [MAKSTAT, 2021](#); [Eurostat, 2022](#)



Environmental trends relevant to circular economy – *waste trends*

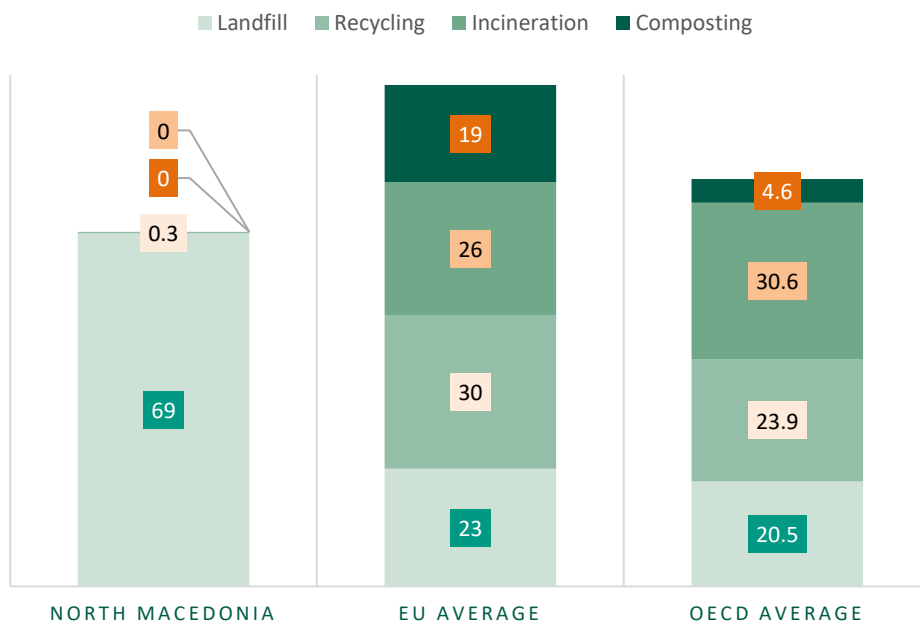
North Macedonia level of **municipal waste generation** has been increasing over years, but data collection remains a challenge (based on estimations).

80% of the population was served by **waste collection services** in 2020, mainly so in urban areas (compared to 98% in the EU).

Municipal and industrial waste management is a challenge. Waste separation at source is almost non-existent and the majority of waste is landfilled or untreated. Recycling is mainly conducted by informal waste pickers.

Bring systems for **packaging waste**, regulated under **EPR schemes** are established.

Municipal waste treatment (%), 2020



45% of waste produced is organic

Over 1/3 of industrial waste generated by the mining sector

Around **1000** illegal waste dumpsites

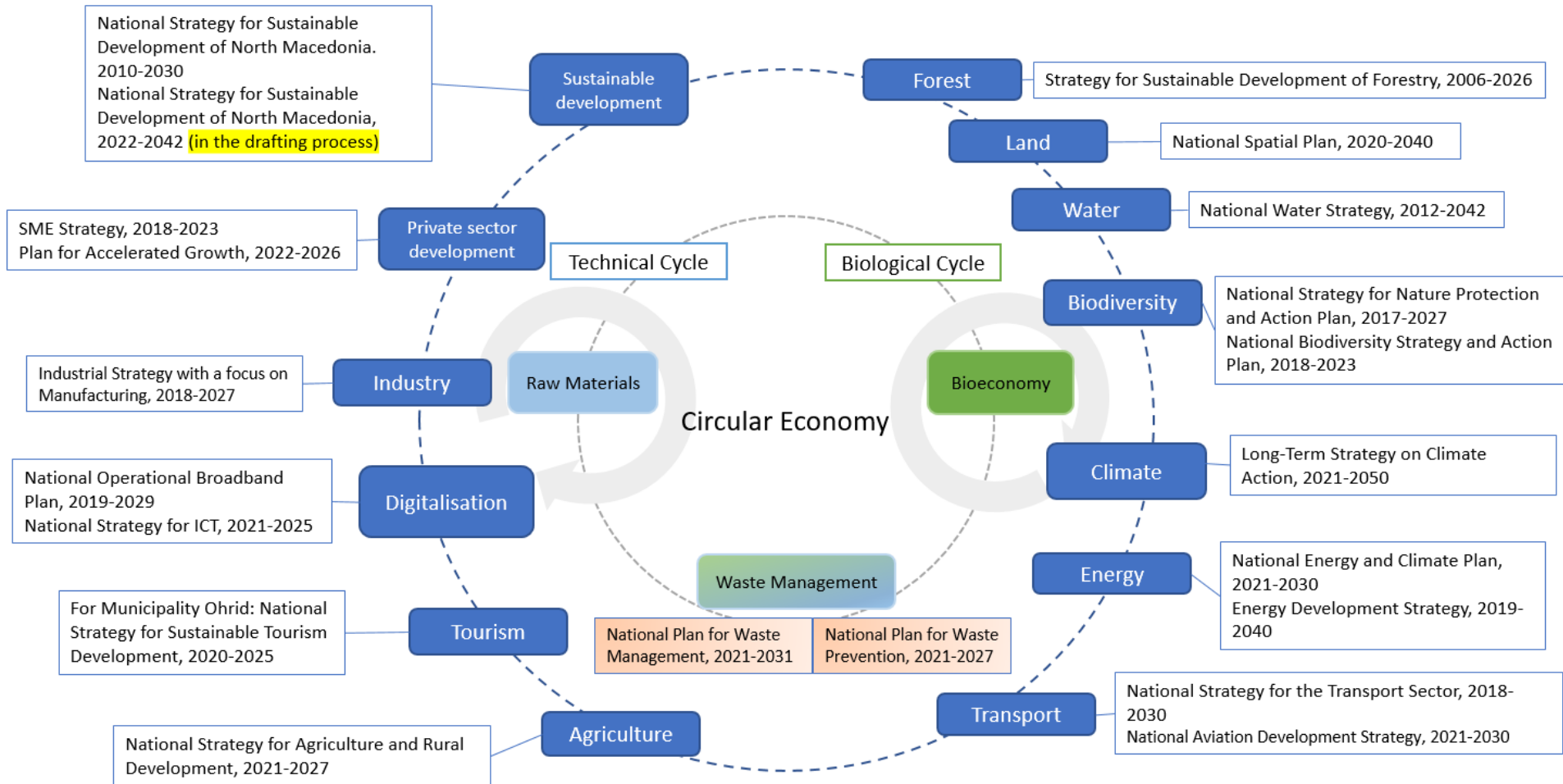
40% of packaging waste placed on the market is recycled



*Existing circular economy policy
landscape and initiatives in North
Macedonia*



Existing policy landscape relevant to circular economy



Existing policy and regulatory landscape relevant to circular economy

Waste management

The **Law on Waste Management** was adopted in 2021 and a set of laws targeting specific waste streams and management schemes were adopted in parallel, **fully transposing the EU waste Framework** and regulating **EPR schemes**.

The **National Plan for Waste Management (2021-2031)** and the **National Waste Prevention Plan (2022-2028)** are expected to accelerate the circular transition by reducing waste production and increasing levels of reuse, recycling, and recovery of products.

Public procurement

The **Law on Public Procurement** (2019) includes relevant provisions on green public procurement, and the **Law on Energy Efficiency** (2020) introduces requirements specific to energy efficiency.

Private sector and industry

The **Industrial Strategy with a focus on Manufacturing (2018-2027)** has a key objective to “Catalyse Green Industry and Green Manufacturing”.

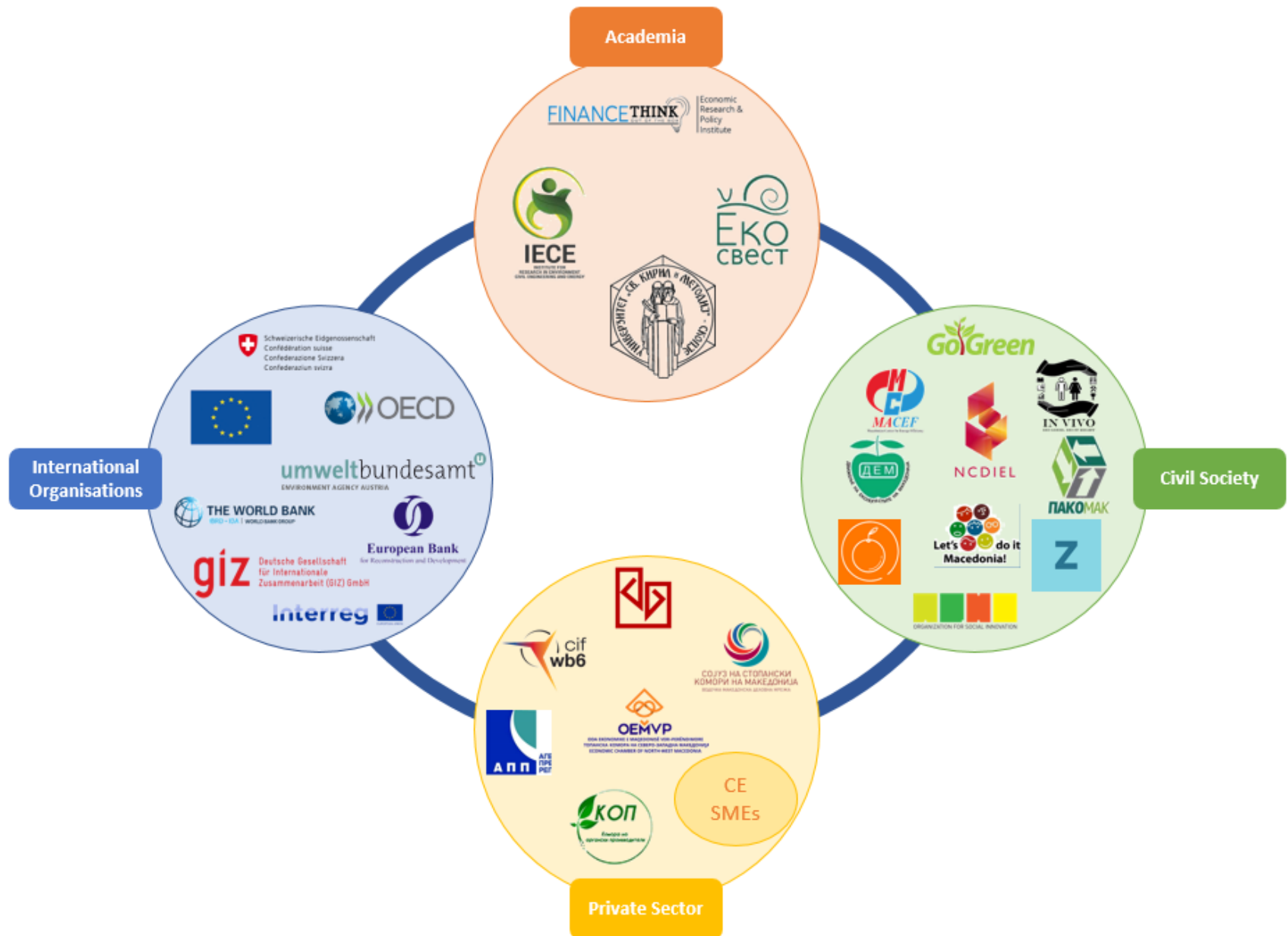
The **SME Strategy (2018-2023)** has a special focus on environmental policies.

The **Plan for Accelerated Growth (2022-2026)** foresees the introduction of several instruments to promote and finance green projects.

The development of the **Smart Specialisation Strategy** envisage the transition to the circular economy.



Overview of main circular economy stakeholders in North Macedonia



POTENTIAL CIRCULAR ECONOMY PRIORITY AREAS FOR NORTH MACECONIA



Potential CE priority areas for North Macedonia

1. Textile
2. Metallurgy
3. Automotive
4. Mining
5. Agri-food sector
6. Municipal waste / improving waste prevention and recycling
7. Plastics
8. Upscaling CE business models
9. *Horizontal*: Economic instruments (green public procurement, landfill tax, household waste charge, extended producer responsibility schemes)



Thank you for your attention!

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