

Green Industrial Policy Framework in the Western Balkans

GAP Institute – Kosovo

Green Industrial Policy in North Macedonia

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Tirana, 2024

EU-North Macedonia

- Republic of North Macedonia is EU accession country,
- Screening process completed and expected negotiations,
- Continuous alignment with EU policies and single market rules in accelerating fundamental reforms,
- Active role in WB regional initiatives for boosting economic integration through CRM.

Current energy status and GIP in North Macedonia – Key Challenges

- **Low level of technology readiness and competitiveness**, limited innovation and research capacity
- **Electricity generation is highly dependent on coal** with domestic coal reserves declining (more than 50% of electricity generation mix is based on coal fired thermal power production by TPP Bitola and Oslomej - Kicevo)
- **High level of air pollution** (high GHG emissions)
- **Low efficiency in energy production and use.**
- **High-energy intensity** (three times higher than EU average)
- **High energy import dependency** (Imports account for over half of energy consumption)
- **Inappropriate waste management system and climate/environmental protection**

GIP priorities in North Macedonia

- **Decarbonisation of the economy** by increasing the public investment in green transition and renewable energy production (35-45% of energy consumption by 2040 to be based on renewable energy resources)
- **Improvements of energy efficiency**, including in residential and public buildings.
- Stimulate the implementation of **Circular economy concept** and **efficient waste management system**
- **Smart mining and sustainable use of materials**
- **Improving the skills** for strategic areas with regards to green industry
- **Supporting innovations and competitiveness** of Macedonian industry – structural changes

Strategic documents linked to GIP

- National Development Strategy (2024-2044)
- Industry Policy Strategy (2018-2027)
- SMEs Strategy (2018-2023)
- Sustainable Development Strategy (2010-2030)
- Smart Specialization Strategy S3 (2024-2034)
- Growth Acceleration Plan (2022-2026)
- National Energy Development Strategy (2019-2040)
- Energy Efficiency Action Plan /National Energy and Climate Plan
- Strategy on Climate Action (2021-2051) / Nationally Determined Contributions on Climate Change (NDC),
- Waste Management Strategy (2008-2030)
- Mineral Resources Strategy (draft)
- Just Transition Roadmap
- Circular Economy Roadmap

National Development Strategy – strategic mission

- The strategic mission of the Republic of North Macedonia is to work on **green energy transformation** and to position itself as a regional leader in sustainable development and care for the environment, implementing the **transition to a low-carbon economy** while ensuring long-term growth.
- The main primary goal in this direction is to significantly **reduce greenhouse gas emissions, improve air quality and improve energy efficiency**, thereby ensuring a healthier living environment for citizens, integrating the gender perspective in policies and programs for environment.
- At the same time, the **waste and wastewater management system** needs to be rebuilt by increasing recycling rates and establishing standardized landfills, thereby **reducing environmental footprint**. The protection of nature and biodiversity is essential for the improvement of the country's environment.

Industrial Strategy with a focus on Manufacturing sector (2018-2027)

- The **Industrial Strategy with a focus on Manufacturing (2018-2027)** aims to strengthen industry by stimulating the growth and development of the manufacturing sector in order to boost productivity and add higher quality and better paying jobs, while addressing the challenges of the circular economy.
- One of the **key objectives** of the strategy is to “*Catalyse Green Industry and Green Manufacturing*” through stimulating resource and energy efficiency and low carbon production in the manufacturing sector.

Energy Development Strategy – strategic framework

It is based on **five closely related pillars** and mutually reinforcing dimensions:

- 1) Security, solidarity and trust;
- 2) Fully integrated internal energy market;
- 3) Energy efficiency,
- 4) Climate action - decarbonising the economy
- 5) Research, innovation and competitiveness.

Decarbonisation and Just transition

Decarbonisation of the North Macedonia's economy is related to **four important aspects**:

- 1) **Closing down the thermal power plants** Oslomej and Bitola (stop production of electricity from coal);
- 2) **Increase the share of renewables** in the electricity production mix;
- 3) **Reduce electricity import dependence** (that reached high 65% in 2021) and
- 4) **Preserve the forests and protect the biodiversity** (can be easily undermined by the non-efficient management of forest resources).

Just transition roadmap (JTD)

The **main objectives** of the JTD are to:

- 1) **Diversify the economic model** in the affected regions to become more knowledge-intensive and resource-efficient,
- 2) **Make the regions more attractive** for young people and enterprises,
- 3) **Detach the Macedonian power production sector** from increasingly uneconomic fuels and
- 4) **Support people and communities** affected by the coal phase out.

The following **pathways**, which include short-term, mid-term and long-term projects, interventions, and investments, have been identified to deliver the objectives: (1) Private Investments and Startup Economy Pathway, (2) Green and Smart Infrastructure Pathway, (3) Clean Energy Pathway, and (4) Skills Development Pathway.

Smart specialization strategy – S3 MK

PRIORITY DOMIANS

VERTICAL

Smart agriculture and Food with higher added value	ICT	Sustainable materials and Smart buildings	Electrical equipment & machinery parts / Industry 4.0
Smart agriculture	Custom Software Development	Sustainable materials	
Food with higher added value	Data Driven IT solutions	Smart buildings	

HORIZONTAL

Energy - cross sector interrelatedness, EE, eco solutions, renewable energy, climate changes, decarbonisation

Tourism - cross sector relatedness with ICT and Agro

The Growth Acceleration Plan 2022-2026: Framework

- **GAP** aims to improve the enabling environment, develop regulatory conditions, build capacities, introduce standards and reduce risks. **The framework represents alternative sources of financing in order to provide greater support to the private sector, innovation and strengthening of competitiveness and green transition in North Macedonia.**
- **Beneficiary sectors:**
 - public sector entities (both at the central and local level),
 - the private (financial and non-financial) sector, and
 - the civil (non-governmental) sector
- **Priority areas:**
 - Green economy;
 - Digitalization;
 - Innovation and technology development
 - Human capital;
 - Physical infrastructure and
 - Social cohesion.

Growth Acceleration Plan (GAP) 2022-2026

Instruments that have already been established are:

- 1) **Guarantee scheme** within the *Development Bank*, wherein the state offers an opportunity for easier access to finance by taking part of the credit risk together with commercial banks.
- 2) **Development Fund** has already been established in 2022 within the *Development bank*, which will support export-oriented companies in the field of research and development with favorable credit products, as well as financing projects to improve energy efficiency and long-term energy sustainability.
- 3) Mechanism for the functioning of the **Hybrid Strategic Green Investment Fund** has been put into operation, with the aim of supporting investments in practices in accordance with the European Green Agreement.
- 4) **Energy efficient fund** was established within the *Development Bank* in 2023.

Financing instruments and mechanisms

Financing instruments and mechanisms:

- Budget revenues and borrowings:
 - CAPEF
 - Development bond
 - Green bond
- Public asset management
- Public-Private Partnership
- Concessions

▪ **Blended financing:**

- Guarantee Fund
- Energy efficiency fund
- Fund for local and regional development
- Fund for research and development
- Hybrid SMEs investment fund (FITD)
- Hybrid Green Strategic investment fund (TIRZ)
- Venture Capital Fund
- Fund of Funds
- Crowd-funding platforms

National Financial instruments

- **Fund for innovation and technology development** – different instruments
- **IPA project Greening Business Facility** - 27 mill EUR
- **EBRD and other EU programs** for green transition
- **Law on financial support of investments**
- **Law on strategic investments**
- **Measures from** the *Annual Programs of the Ministry of Economy, Ministry of Environment and other agencies*
- **Macedonian Development Bank** with EE Fund
- **Government's Intervention Investment Plan 2021-2027**, EUR 3.1 billion is expected to be invested in the energy sector, mostly in renewable energy sources

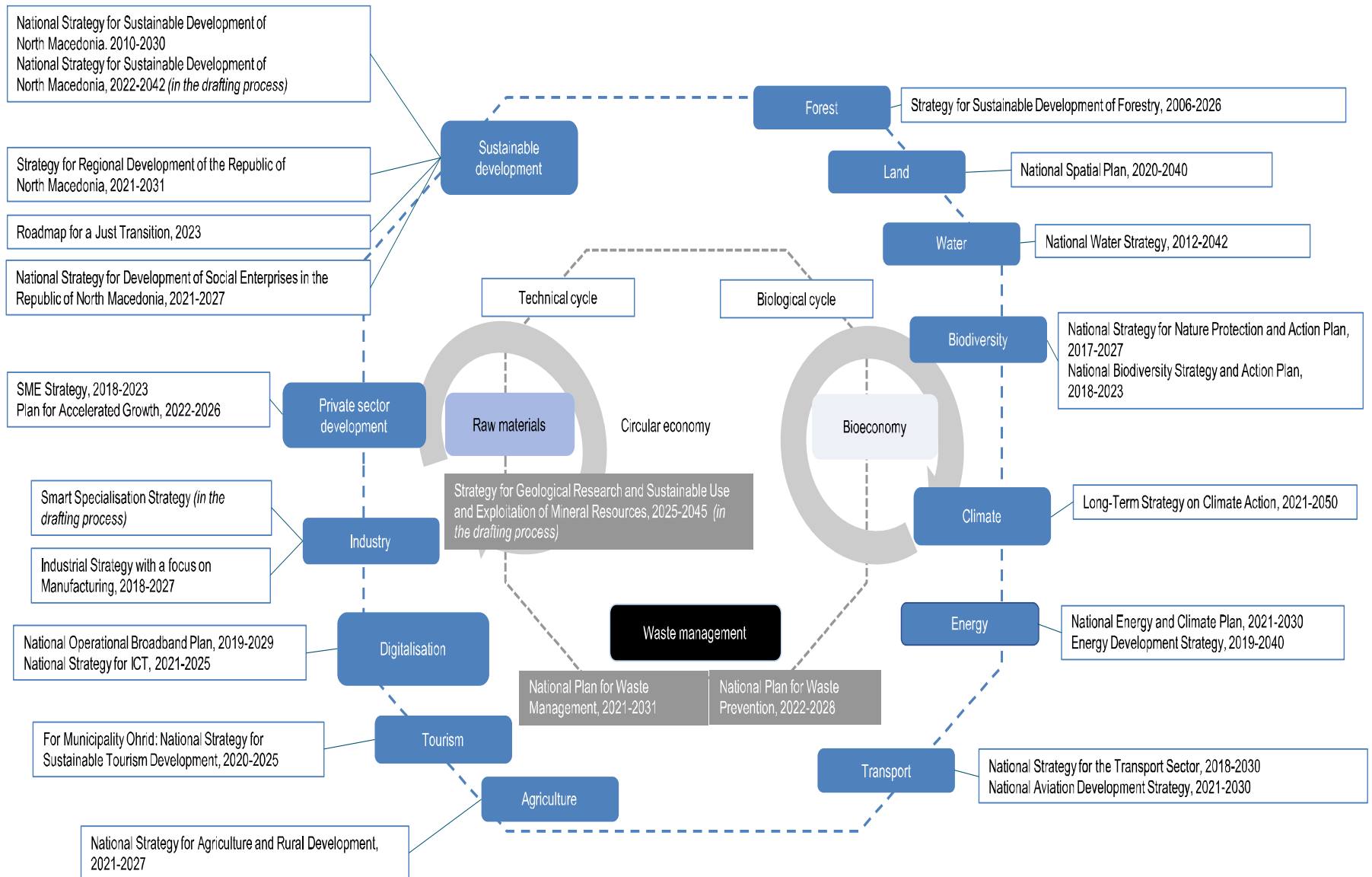
Mineral resources and critical raw materials

- **A Strategy for geological research and sustainable use and exploitation of mineral resources for 2025 – 2045 in draft**
- diversification of metal products through more complex production processes
- **Link to Critical Raw Materials** - Ensuring secure and sustainable supply chains of these so-called critical and strategic raw materials is a key objective of, (copper, which can be found in North Macedonia, is a strategic raw material according to the 2023 list of critical raw materials for the EU
- **Link to S3 and the domain Smart buildings and sustainable materials**

Circular Economy

- Circular Economy Roadmap is drafted with support of OECD
- Leading institutions – Ministry of Economy and Ministry of Environment
- Proposed new measures for support of CE in business
- Trainings and awareness raising activities
- Efforts towards sustainable product design, a circular economy and increased collection and recycling of raw materials, as well functioning market for secondary raw materials
- Link to all S3 domains and green transition

CE and related documents



CBAM

- Framework for introducing Carbon pricing and Emission Trading Scheme planned in Climate Law (in draft)
- Preparation for introduction of framework for Monitoring, Reporting, Verification and Accreditation for enabling ETS of green house gas emissions
- Active role of Chamber of Commerce in awareness raising and trainings for CBAM

EU and regional finances for Green/Energy transition

- KfW Development Bank – 1 bill including grants and development loans until 2030
- Green Climate Fund up to 5 mill.
- European Climate Initiative
- Economic and Investment Plan – 30 bill EUR
- The New Growth Plan for WB – 6 billion EUR
- The Green Economy Financing Facility – led by UNDP and EBRD – are one of the successful examples of such type of blended finance options.
- EIB credit lines through Development Bank of RNM
- Western Balkans Sustainable Energy Financing Facility EBRD 117 mil EUR
- IPA, Growth Plan and other funds with blended finance structure