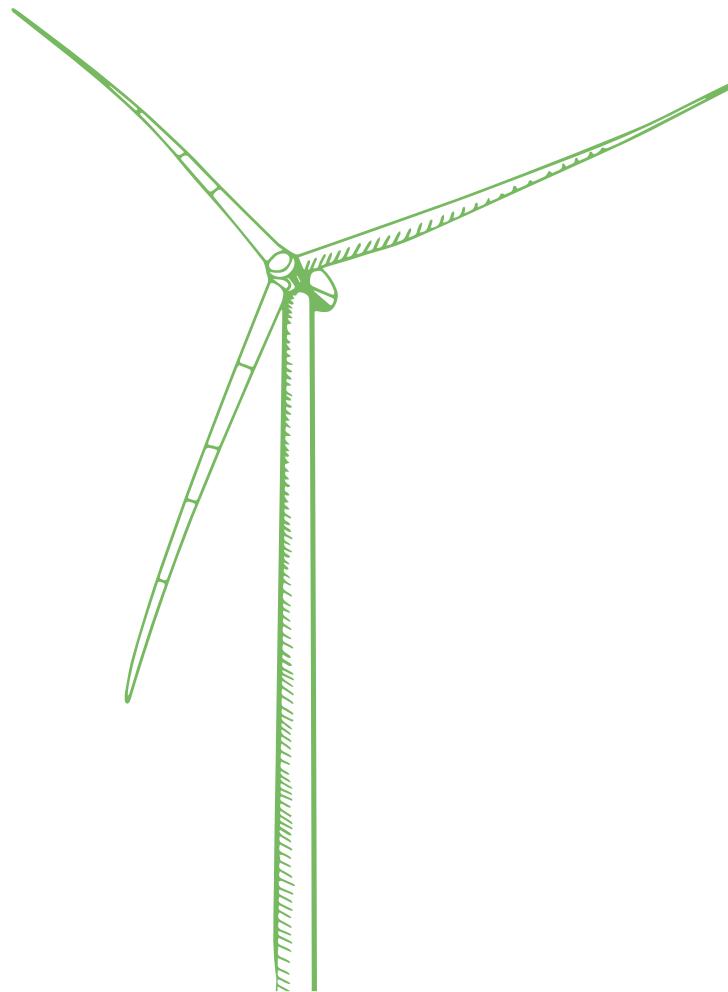


North Macedonia

Annual Implementation Report











1 November 2023



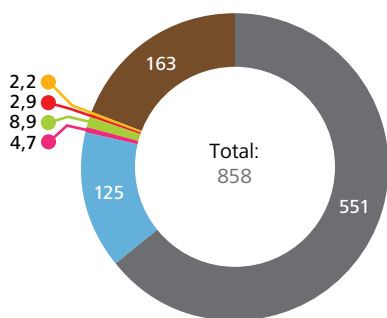


North Macedonia

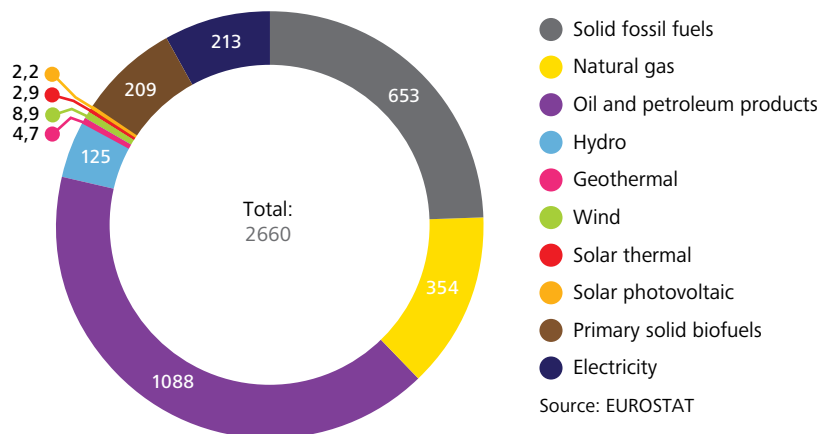
IMPLEMENTATION OVERVIEW

CLUSTER	IMPLEMENTATION STATUS	2023 HIGHLIGHTS AND NEXT STEPS
 Markets and integration	 64%	<p>A day-ahead electricity market was launched in May 2023 by the market operator MEMO. North Macedonia should focus on the transposition and implementation of the Electricity Integration Package as a precondition for the coupling of its day-ahead market. North Macedonia merged two gas companies into one functional transmission system operator and prepared its unbundling. The gas transmission system operator signed an interconnection agreement with Bulgaria, unlocking a part of hoarded gas capacities. The certification of Nomagas should be finalized.</p>
 Decarbonising the energy sector	 53%	<p>North Macedonia has considerably expanded its renewable energy capacities through a self-consumption scheme and has progressed on energy efficiency with a focus on finalising the amendments of the Energy Efficiency Law. North Macedonia should adopt the Renewable Energy Law and the amending the Energy Efficiency Law.</p>
 Ensuring energy security	 30%	<p>The regulatory authority adopted cybersecurity rules in June 2023. Regulation (EU) 2019/941 on Risk-preparedness in the Electricity Sector should be transposed and its implementation should start with the designation of a competent authority. North Macedonia should transpose the Security of Gas Supply and the Storage Regulations.</p>
 Improving the environment	 50%	<p>North Macedonia achieved limited progress in the area of environment. The long-standing non-compliance with the National Emission Reduction Plan ceilings remains unaddressed. Emission abatement measures must be taken immediately to address this.</p>
 Performance of authorities	 72%	<p>The regulatory authority completed the transposition of REMIT by adopting three secondary legal acts.</p>

2021 Fuel mix in primary production of energy (in ktoe)



2021 Gross available energy per product (in ktoe)



- Solid fossil fuels
 - Natural gas
 - Oil and petroleum products
 - Hydro
 - Geothermal
 - Wind
 - Solar thermal
 - Solar photovoltaic
 - Primary solid biofuels
 - Electricity
- Source: EUROSTAT

Overall number of cases: **1**

Procedure under Article **91** EnCT

ECS-22/21 Environment



North Macedonia

Markets and integration

ELECTRICITY

87%



UNBUNDLING

100%

The state-owned transmission system operator MEPSO is unbundled and certified in accordance with the acquis.

The distribution system operator Elektdistribucija is legally and functionally unbundled from other branches. The compliance report for 2022 was approved by the regulator but is not yet published.

With regards to balancing, MEPSO operates a competitive platform where it procures balancing services. Transmission and distribution losses are procured through transparent and market-based tendering procedures.

The REMIT Regulation is transposed and implemented.

ACCESS TO THE SYSTEM

91%

Access to and use of the system is based on compliant rules and published tariffs. The regulator's latest decisions set the currently applicable transmission and distribution tariffs from July 2023, applicable for one year.

The transmission grid code was amended in December 2021 to implement the Connection Codes. It defines most of the non-exhaustive requirements from the Connection Codes but is only applicable to generators with installed capacity equal to or greater than 10 MW. The distribution grid code was amended in 2022. However, it did not implement all required provisions of the Connection Codes and is yet to be upgraded to reflect all required parameters.

The Transparency Regulation is transposed and largely implemented. MEPSO publishes most information on consumption, generation and transmission and all information related to balancing.

RETAIL MARKET

100%

All customers are free to choose their supplier. In 2022, approximately 40% of the consumption was supplied at non-regulated prices. To incentivize energy savings, four block tariffs for household customers under universal service supply, from the lowest thresholds of 210 kWh/month to a monthly consumption exceeding 1050 kWh, were introduced in 2022 and continue to apply.

The Government adopted annual programmes to support vulnerable customers. The system for protection of vulnerable customers was further improved with amendments of the Energy Law in 2022.

REGIONAL INTEGRATION

50%

The regional auction platform SEE CAO is used for capacity allocation with Greece and Kosovo*. Allocation for Serbia is done by MEPSO for the yearly and monthly capacities and by the transmission system operator of Serbia, EMS, for daily and intraday capacities. On the Bulgarian border, MEPSO performs the annual allocation and the transmission system operator of Bulgaria, ESO, the daily one.

MEPSO cooperates with the transmission system operators of Montenegro and Serbia within the same control block on the exchange of balancing energy.

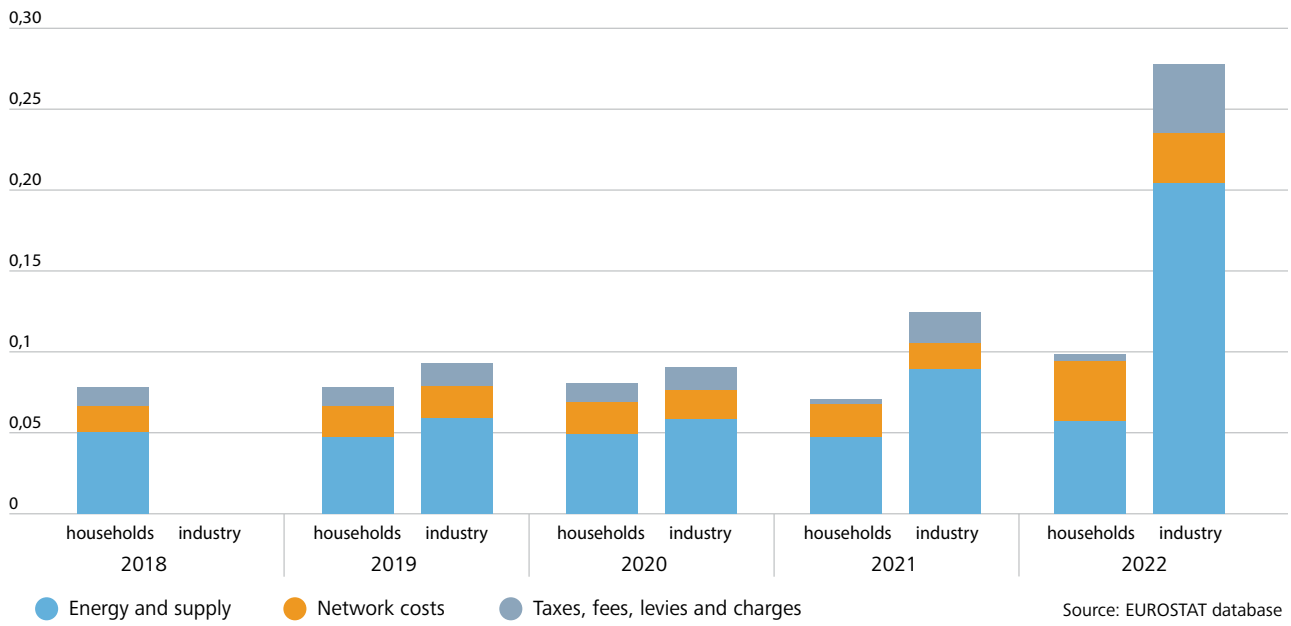
In 2022, North Macedonia adopted amendments to the Energy Law, partially transposing the TEN-E Regulation (EU) 347/2013. There is currently no electricity PECEI project in North Macedonia. The previous one, 400 kV OHL Bitola (MK) - Elbasan (AL), is under construction but lagging behind the schedule.

WHOLESALE MARKET

93%

The wholesale market in North Macedonia is liberalised since 2019. The day-ahead market was launched by the national electricity market operator, MEMO, on 10 April 2023. The corresponding market rules were adopted at the beginning of 2023. The go-live of the intraday market necessary to allow market participants to balance their positions closer to real-time is still pending. The emergency measure of limiting the trading margins for retail market participants of 10% was phased out in April 2023.

Average annual prices of electricity for end users per component [EUR/kWh]



GAS

41%



UNBUNDLING

36%

North Macedonia has not complied with the unbundling requirements. The merging of two companies involved in operation of existing gas system (GA-MA) and the infrastructure developer (NER) was finalised by the end of 2022. The new company, Nomagas, is fully state-owned. An application for the certification in line with the Third Energy Package was submitted at the beginning of October 2023.

All existing distribution companies have less than 100.000 customers and are exempt from the unbundling provisions.

ACCESS TO THE SYSTEM

10%

The tariff methodology is in place, but non-compliant with the Tariff Network Code. The CAM Network Code is not implemented in practice. The Energy Law stipulates the direct applicability of mandatory network codes, whereas balancing elements and market rules were further determined by by-laws adopted in December 2022. Transparency is well below the level required by Annex I of Regulation (EC) 715/2009.

WHOLESALE MARKET

25%

There are only two active traders in the wholesale market, selling at market prices. All contracts are concluded bilaterally, on a monthly and yearly basis. However, the market remains illiquid, without a virtual trading point. REMIT Regulation (EU) 1227/2011 is not implemented.

RETAIL MARKET

81%

End-user gas prices are deregulated and all customers are formally eligible. Customer protection measures are defined in line with Annex I of Directive 73/2009/EC.

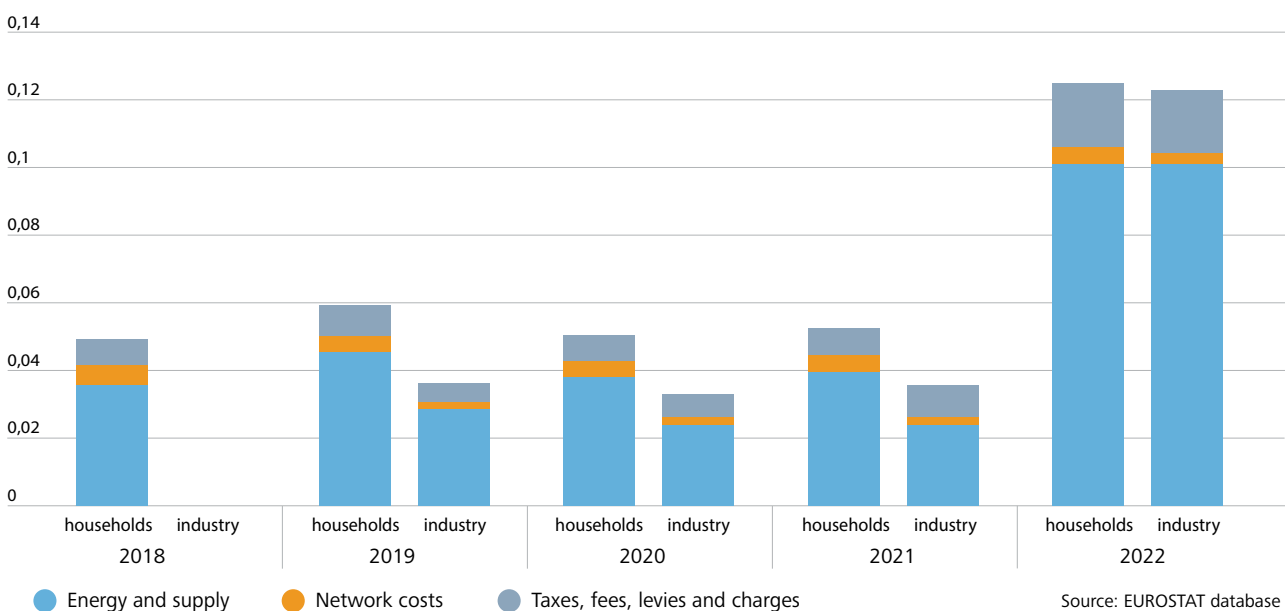
REGIONAL INTEGRATION

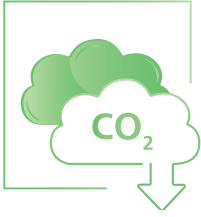
84%

In 2022, North Macedonia adopted amendments to the Energy Law, partially transposing the TEN-E Regulation (EU) 347/2013. The gas network of North Macedonia is connected only to the Bulgarian gas system. The interconnection agreement in line with the Network Code on Interoperability and Data Exchange between two adjacent operators fully in force as of 1 January 2023 was a game changer. It finally enables gas supply to North Macedonia from sources other than deliveries under long term contract with Gazprom. Additional release of booked and non-used capacity at the interconnection point Kyustendil-Zidilovo from the Bulgarian side would enhance the liquidity of the Macedonian gas market and regional integration.

The North Macedonia - Kosovo* Interconnector and the Serbia - North Macedonia Interconnector are PECI projects. Only the North Macedonia - Greece interconnector, a PMI, is progressing. Following the finalisation of the financing structure and successful market test in Greece, tendering is ongoing and the start of construction is imminent, with commercial operation expected to commence in the fourth quarter of 2025. The final investment decision of the project was announced in October 2023.

Average annual prices of gas for end users per component [EUR/kWh]





North Macedonia

Decarbonising the energy sector



GOVERNANCE / CLIMATE IMPLEMENTATION

46%

NATIONAL ENERGY AND CLIMATE PLANS

70%

The National Energy and Climate Plan (NECP), which was adopted in May 2022, is to be updated to ensure full compliance with the provisions of the Governance Regulation, as the draft Plan was developed prior to the adoption of the Regulation.

GREENHOUSE GAS 2030 TARGET

80%

North Macedonia has not defined the 2030 climate target in its national legislation, but has defined it in the NECP. The target is in line with the 2030 targets set by the Energy Community.

NATIONAL SYSTEMS FOR CLIMATE REPORTING

25%

There is no legal basis for the national inventory system. North Macedonia has not yet established a national inventory system or a national system on policies, measures, and projections.

North Macedonia has initiated reporting on national systems for policies and measures and projections, but has yet to submit a report.

North Macedonia is currently working on a draft Law on Climate Action that will contain provisions, among others, for a national greenhouse gas inventory system.

NATIONAL GREENHOUSE GAS EMISSIONS POLICIES AND MEASURES / ADAPTATION

13%

Reporting obligations have not been transposed in legislation. North Macedonia has nominated lead reporters for the Governance Regulation reporting activities. The reporting obligation was initiated, but not yet submitted on policies and measures (PaMs). In the context of Reportnet system, no reporting was initiated on carbon revenues and adaptation strategies.

LONG-TERM STRATEGY AND CLIMATE NEUTRALITY

44%

The legal basis for a long-term strategy has not been adopted. Nonetheless, North Macedonia has submitted the long-term strategy to the UNFCCC Secretariat in 2021. However, it does not contain the 2050 climate neutrality objective.

RENEWABLE ENERGY IMPLEMENTATION

46%



2030 RENEWABLE ENERGY TARGETS **85%**

The overall target of achieving a 38% share of renewable energy in the gross final energy consumption, as outlined in the NECP, is in line with the 2030 target set by the Energy Community. The overall 2030 renewable energy target is subdivided into sectorial targets for electricity (66%), transportation (10%), and heating and cooling (45%). In line with Article 26 of the Renewable Energy Directive (REDII), North Macedonia has adjusted its minimum target for renewable energy in transport to 7% by 2030. The 2030 target for renewable energy in heating and cooling of 45% aligns with the requirements of Article 23 of REDII.

QUALITY OF SUPPORT SCHEME **65%**

Under the existing legal framework market-based support is granted in the form of a fixed premium. Administratively set feed-in tariffs are still applied for wind projects with an installed capacity of up to 50 MW and hydropower plants with installed capacity of up to 10 MW based on available quotas. This is not in line with the Energy Community law.

SELF-CONSUMPTION AND ENERGY COMMUNITIES **50%**

North Macedonia has implemented a self-consumption scheme in the form of net metering for households with installed capacity up to 6 kW and business up to 40 kW. The adoption of a Renewable Energy Law is crucial to facilitate the establishment of renewable energy communities in accordance with REDII requirements.

GUARANTEES OF ORIGIN **25%**

North Macedonia joined the Energy Community initiative to establish a regional system for guarantees of origin. The national electronic registry was created and can be utilized as soon as the market operator, as the designated issuing body, signs an agreement with the service provider. The existing legal framework governs the issuance of guarantees of origin solely for renewable electricity, without encompassing other energy carriers as specified by REDII.

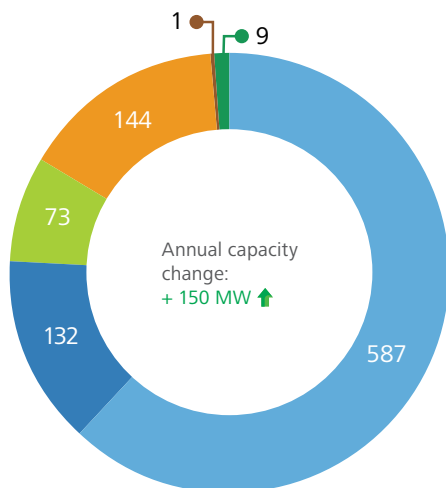
SUSTAINABILITY CRITERIA FOR BIOFUELS, BIOLIQUIDS/BIOMASS FUELS **0%**

Provisions related to the sustainability and greenhouse gas emission saving criteria for biofuels, bioliquids, and biomass fuels are still not transposed and the legal framework remains completely non-compliant with REDII. It is crucial to adopt a new Renewable Energy Law that includes specific provisions designed to introduce these provisions.

RENEWABLE ENERGY IN HEATING AND COOLING **33%**

Programmes for subsidizing households to replace inefficient fossil fuel and biomass appliances with efficient heat pumps are implemented. This underpins the NECP estimation of 24% of heat demand to be supplied by heat pumps in 2030. Measures to integrate renewable energy or waste heat into the Skopje district heating system are missing.

Total Capacities of Renewable Energy 2022 (MW)



- Large hydropower
- Small hydropower <10 MW
- Wind
- Solar
- Biogas
- Biomass

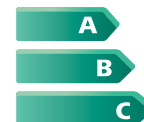
Total capacities of renewable energy (MW):

946

Source: Energy and Water Services Regulatory Commission

ENERGY EFFICIENCY IMPLEMENTATION

66%



2030 ENERGY EFFICIENCY TARGETS AND POLICY MEASURES

70%

The 2030 energy efficiency targets in the adopted NECP are aligned with the 2030 targets set by the Energy Community. The 2020 Law on Energy Efficiency transposed the 2012 Energy Efficiency Directive and set the specific targets required under Articles 5 and 7. The Ministry recently finalized draft amendments of the Law, to align it with Clean Energy Package requirements.

ENERGY EFFICIENCY IN BUILDINGS

52%

The Law on Energy Efficiency transposed the Energy Performance of Buildings Directive. The adoption of drafted rulebooks on energy audits of buildings and on energy performance of buildings is still pending. The long-term buildings renovation strategy is still not finalized.

ENERGY EFFICIENCY SCHEME AND FINANCING

63%

North Macedonia should adopt the amendments of the Law on Energy Efficiency and update the specific targets required in Article 7, introduced previously in 2020. It is in the process of setting up a National Energy Efficiency Fund, but the legal and regulatory framework for its establishment and operationalization remains to be adopted.

ENERGY EFFICIENT PRODUCTS – LABELLING

76%

Rulebooks implementing Directive 2010/30/EU were adopted. Rulebooks implementing the Framework Labelling Regulation 2017/1369/EU and implementing acts on labelling are under preparation.

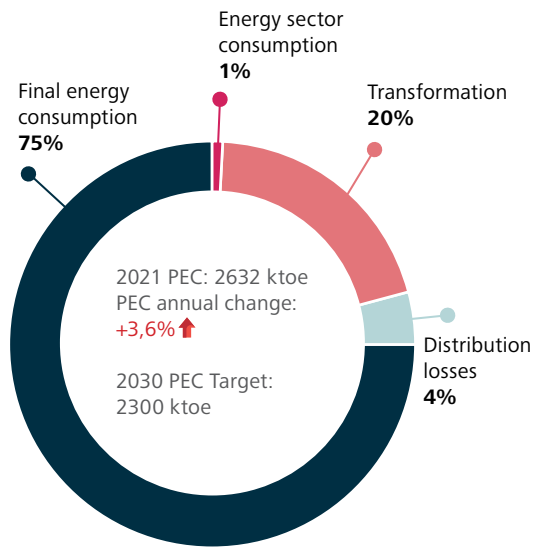
EFFICIENCY IN HEATING AND COOLING

70%

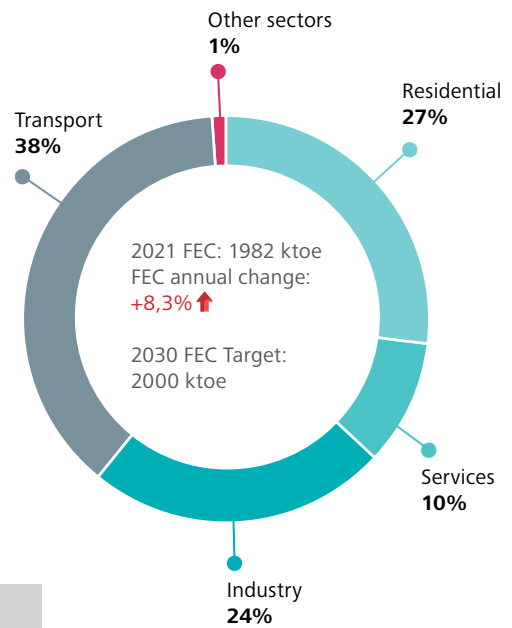
In December 2022, North Macedonia introduced provisions for inspecting heating and air conditioning systems in the Law on Energy Efficiency. While the transposition of district heat metering and billing provisions are in place, the full implementation of consumption-based billing in the Skopje district heating system is missing.

2021 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2021 value and trends:
0,30 ktoe/mil EUR, **-0,9%** ↓

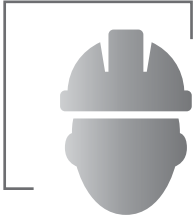
Source: EUROSTAT 2023 data and 2022 Ministerial Council Decision

Status of transposition and implementation of energy efficiency acquis of the Clean Energy Package

Building Renovation Strategy	Central Government Buildings Renovation	Energy Efficiency Obligation Scheme	Alternative Policy Measures	Metering and Billing Information for District Heating
●	●	●	●	●

● In place ● In progress ● Not in place

Source: compiled by the Energy Community Secretariat



North Macedonia

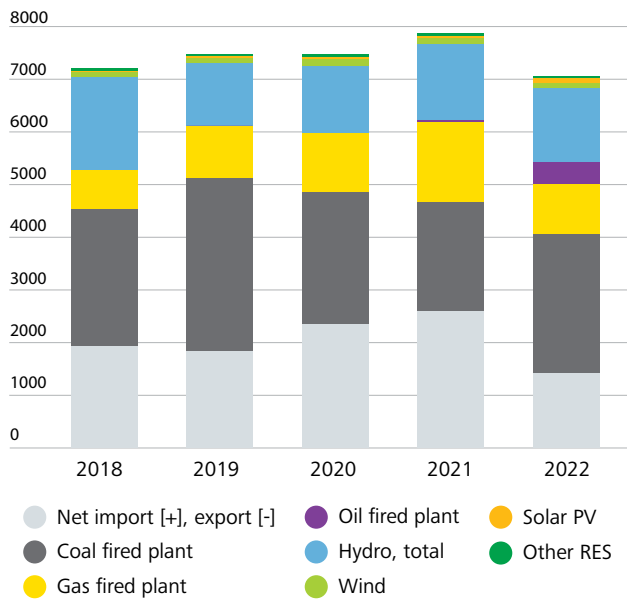
Ensuring energy security

ELECTRICITY SECURITY OF SUPPLY 48%

The Energy Law transposes Directive 2005/89/EC. The last Security of Supply Statement for electricity was submitted in 2019.

North Macedonia is preparing a new national strategy for cybersecurity 2023 - 2027, aiming to improve national capacities for cybersecurity, security and resilience of critical information infrastructure, international cooperation and raising awareness. The draft Law on Security of Networks and Information Systems underwent public consultation, but has not been adopted. The regulator issued cybersecurity rules in June 2023.

Fuel mix and primary supply of electricity (in GWh)



Source: Energy and Water Services Regulatory Commission, compiled by the Energy Community Secretariat

GAS SECURITY OF SUPPLY 0%

Security of supply provisions are not compliant with Regulation (EU) 2017/1938 or Regulation (EU) 2022/1032. North Macedonia's existing emergency rules are rudimentary at best.

OIL SECURITY OF SUPPLY 53%

Primary and secondary legislation are transposed and compliant with Directive 2009/119/EC. As of August 2023, the average occupancy level of the compulsory oil reserves, calculated following the new methodology prescribed in the Commission Implementing Directive (EU) 2018/1581 corresponded to 52 days of the average daily net imports. The decrease by three days compared to last year's period is due to the new calculation method used during the first half of 2023.

North Macedonia still needs to achieve full compliance with the emergency oil stocks obligation of 90 days net imports and the 2023 - 2025 action plan for the formation of mandatory reserves adopted in February 2023.

The Intervention Plan consists of the necessary procedures and measures to enable the competent authorities to release quickly, effectively, and transparently the emergency stocks in the event of a major supply disruption.

Reporting is partially fulfilled. The annual report is not submitted by 31 January as specified by Directive 2009/119/EC. The same applies for the summary copy of the stock register showing the quantities and nature of the emergency stocks included on the last day of the preceding calendar year. The Monthly Oil Statistics Questionnaire (MOS Oil) is submitted regularly.



North Macedonia

Improving the environment

ENVIRONMENTAL ASSESSMENTS **40%**

North Macedonia's failure to amend its legislation on environmental impact assessment (EIA) means that the breach established by the Ministerial Council persists. It also poses a significant risk to a quality EIA process for strategic energy projects. There has also been no improvements in secondary legislation concerning the screening processes for small hydropower projects with an installed capacity of less than 2 MW. The nature impact assessment required by the Nature Protection Law and the EIA is not integrated into a streamlined or coordinated process. The Secretariat received a complaint related to the EIA for the gas interconnector project between North Macedonia and Greece, alleging the lack of proper public participation in the decision-making process.

North Macedonia encounters challenges in implementing the legislation related to strategic environmental assessment (SEA). There is a lack of synchronised development of the draft plan or program and the SEA report, often leading to the adoption or endorsement of the plans before the SEA process is completed.

LARGE COMBUSTION PLANTS **43%**

North Macedonia complied with its emissions reporting obligations for the reporting year 2022. Compared to 2021, a major increase in the emissions of all three pollutants was observed, exacerbating the already significant non-compliance with the NERP ceilings. Emissions of sulphur dioxide and dust increased by 40%, while the increase in the case of nitrogen oxides was over 60%. The Secretariat referred an infringement case to the Ministerial Council in July 2023.

SULPHUR IN FUELS **92%**

The Sulphur in Fuels Directive has been transposed into national legislation and is being implemented via the annual fuel quality monitoring programme. The provisions on marine fuels do not apply.

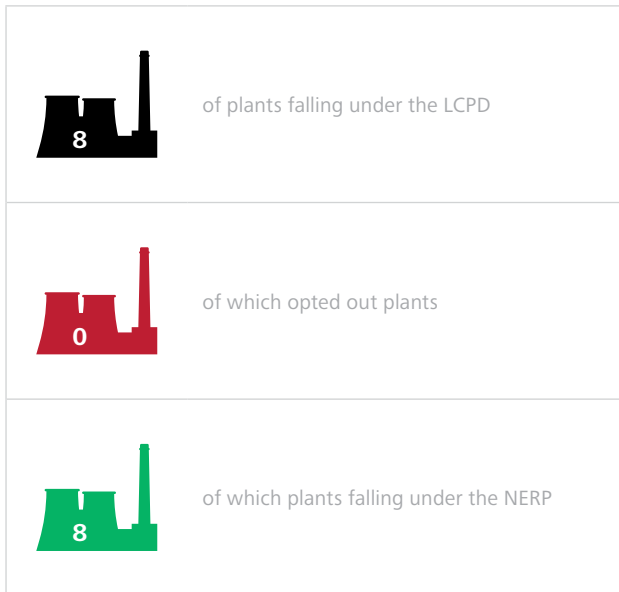
NATURE PROTECTION **60%**

The process of identifying Natura 2000 areas in North Macedonia has not been completed. So far, five sites have been identified as potential Special Protected Areas (SPAs) under the Birds Directive, covering around 2,3% of the country's total land area. The development of management plans for all Ramsar wetlands of international importance also has not been finalized. The preparation of Standard Data Forms for these proposed SPAs has been completed. During the reporting period, a draft national list of birds from Appendix I of the Birds Directive has been prepared. However, a national Red List specifically for birds has yet to be developed.

ENVIRONMENTAL LIABILITY **20%**

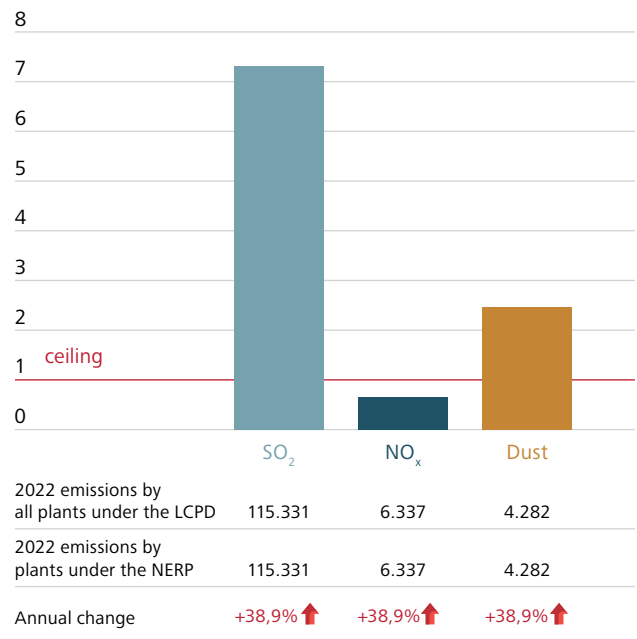
North Macedonia has transposed certain provisions of the Environmental Liability Directive via the Law on Environment. Secondary legislation remains to be adopted and the financial mechanisms to ensure implementation of the Directive's provisions is yet to be set up.

Installations under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat

2022 emissions versus NERP ceilings





North Macedonia

Performance of authorities



REGULATORY AUTHORITY

90%

The legal framework that governs the functioning of the Energy and Water Services Regulatory Commission of the Republic of North Macedonia (ERC) is largely aligned with Energy Community legislation. However, the management does not have full autonomy on internal organization, including staff appointment, since Parliament approves the statutes. Furthermore, the lack of annual budget approval by Parliament in the previous years represents an obstacle to the financial autonomy of ERC.

Within the reporting period, ERC approved natural gas distribution grid code, electricity and natural gas transmission and distribution network development plans, cybersecurity rules,

rules for operation of the organized electricity market, tariff systems for electricity universal supplier and the supplier of last resort, rulebooks for energy market monitoring, rules for supervision and guidance for inside information disclosure (the latter three as part of REMIT transposition). The regulator also approved the new gas transmission tariff methodology, however without implementing the Network Code on Harmonized Transmission Tariff Structures. Finally, the electricity end-user price regulation is maintained, with block-tariffs introduced to incentivize energy savings. There is no record of ERC performing enforcement actions.



COMPETITION AUTHORITY

25%

In the reporting period, the activities of the Commission for Protection of Competition (CPC) focused on the assessment of concentrations. Effective enforcement of competition law, in

particular with regard to anticompetitive agreements and the abuse of dominance, is required for North Macedonia to comply with its obligations under the Treaty.



STATE AID AUTHORITY

55%

In the reporting period, the CPC opened an investigation into the support granted by the Ministry of Finance to the Joint Stock Company for Performing Energy Activities National Energy

Resources Skopje. Rendering a decision on this case should be a priority for the future.



STATISTICAL AUTHORITY

100%

The State Statistical Office (SSO) is responsible for national energy statistics. The five annual questionnaires for 2021 are communicated to EUROSTAT timely and in compliance with the acquis, along with disaggregated data on residential consumption of energy and the questionnaire on renewables shares. Four out of five mini-questionnaires with preliminary questionnaires for 2022 were prepared and transmitted on time. SSO has established a system for producing quality reporting, and provided corresponding quality reports.

SSO releases monthly energy statistics on solid fuels, electricity, natural gas, oil and petroleum products including oil stocks. These are subsequently published by EUROSTAT, in compliance with the acquis, except for the crude oil import questionnaire.

Prices of electricity and natural gas charged to industrial end-users and households are compiled and submitted to EUROSTAT, together with the breakdown of prices per component, in line with the acquis. SSO prepared and submitted the quality report for statistics on electricity and natural gas prices to EUROSTAT.