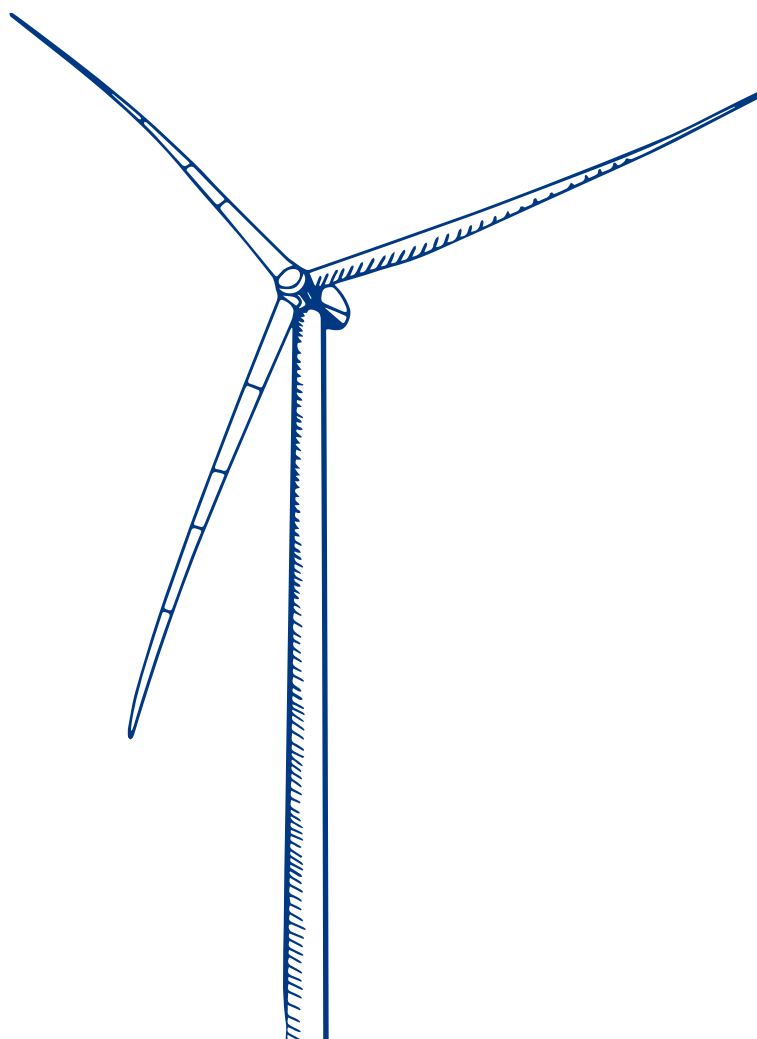


North Macedonia

Annual Implementation Report

1 November 2021





North Macedonia

Summary Implementation

Summary Indicators	Transposition Assessment	Implementation Status	Descriptions
 Electricity		 82%	Implementation in the electricity sector of North Macedonia is almost completed.
 Gas		 38%	Implementation in the gas sector of North Macedonia is still at an early stage.
 Oil		 75%	Implementation in the oil sector of North Macedonia is well advanced.
 Renewable Energy		 57%	Implementation in the renewable energy sector of North Macedonia is moderately advanced.
 Energy Efficiency		 62%	Implementation in the energy efficiency sector of North Macedonia is well advanced.
 Environment		 60%	Implementation in the environment sector of North Macedonia is moderately advanced.
 Climate		 76%	Implementation in the climate sector of North Macedonia is well advanced.
 Infrastructure		 12%	Implementation in the infrastructure sector of North Macedonia is yet to begin.
 Statistics		 83%	Implementation in the statistics sector of North Macedonia is almost completed.
 Cybersecurity		 45%	Implementation in the cybersecurity sector of North Macedonia is moderately advanced.

Overall number of cases: **2**

Procedure
by Article **91**

ECS-7/21 Environment

ECS-22/21 Environment



North Macedonia

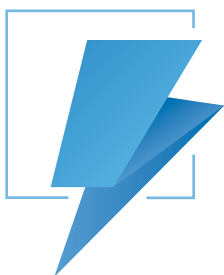
State of Energy Sector Reforms

The drive of North Macedonia in reforming its energy sectors observed in the previous reporting period has somehow slowed down. There was no tangible progress either in the unbundling of the gas transmission system operator, although a long standing dispute over its ownership was finally settled, the establishment of a day-ahead market or in the market coupling project with the Bulgarian exchange. The transposition of the

REMIT Regulation is pending due to necessary legislative changes. North Macedonia has yet to transpose the TEN-E Regulation. In terms of the environment, North Macedonia, as several other Contracting Parties, needs to update its legislation on environmental impact assessment. The National Energy and Climate Plan drafted last year, as the first in the Energy Community, and reviewed by the Secretariat is still not adopted.

North Macedonia's power generation mainly relies on lignite and hydropower and is dependent on electricity imports. The gas volumes consumed are modest and imported from Russia through an interconnector with Bulgaria. A second interconnector towards Greece is currently in an advanced stage of planning. North Macedonia was the first country in the Western Balkans to build a sizeable wind facility in 2014. However, no new wind capacities have been built since then. The country currently tenders for a new pumped storage facility at Cebren as well as additional solar PV capacities.





North Macedonia Electricity

Electricity Implementation

Electricity Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			Transmission and distribution network operators are unbundled in accordance with the acquis.
Access to the system			Access to the system is granted based on transparent and non-discriminatory rules and tariffs. Connection Network Codes are still not effectively implemented. The Transparency Regulation is transposed but its implementation is still to be completed.
Wholesale market			The wholesale market is open and the balancing market is operational. The establishment of the day-ahead market is delayed. REMIT has not been transposed.
Retail market			The retail market is open for competition. Small customers and households are entitled to universal service at regulated prices.
Regional integration			Interconnection capacities on the border with Greece and Kosovo* are allocated through SEE CAO, others bilaterally. The market coupling project with Bulgaria hinges on the creation of a day-ahead market in North Macedonia.

The state-owned transmission system operator MEPSO and the distribution system operator Elektro distribucija are unbundled in line with the acquis. Both transmission and distribution system operators prepare and publish a compliance programme and an annual compliance report. Pursuant to the Energy Law, Connection Network Codes should be directly applicable. However, the implementing rules of network operators have not been amended accordingly.

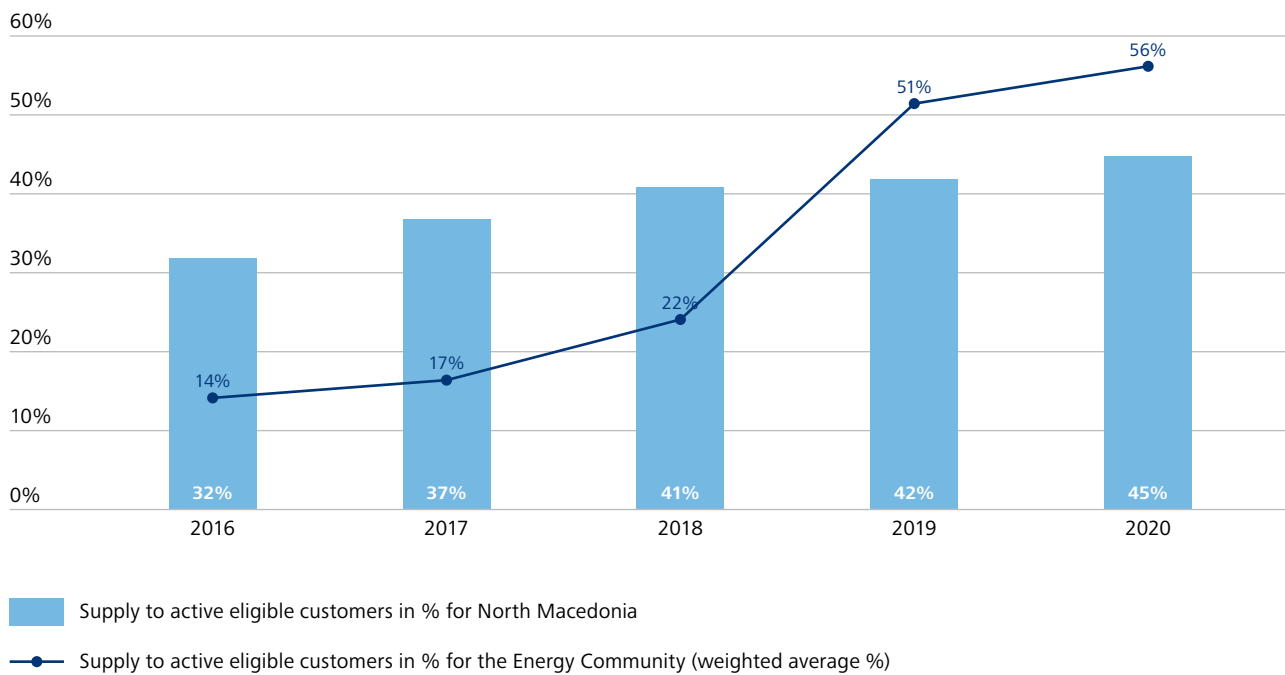
The wholesale electricity market is open. From September 2020, a subsidiary of MEPSO, the National Electricity Market Operator (MEMO), acts as the nominated operator of the organised electricity market. MEMO conducted a tender for a service provider of the trading platform for the day-ahead market and market coupling, but no contract was awarded. Additional efforts are needed to finally set up the day-ahead market and couple with Bulgaria after years of delay. Given the state of play, it is expected that the functioning of the day-ahead market and its coupling with Bulgarian IBEX will be further delayed.

MEPSO procures both the balancing reserve and balancing energy in a competitive procedure, albeit only with two registered balancing service providers.

The Transparency Regulation is partially implemented, but the publication of missing data on the ENTSO-E Transparency Platform requires a new market management system, which is currently being procured by MEPSO. An amendment to the Energy Law, required to transpose the REMIT Regulation, has not been adopted yet. ERC performs only general market monitoring functions.

Retail prices are deregulated, except for the universal service supplier, EVN Home. The latter was appointed to provide the universal service for the period of five years until 2024. The price for the supplier of last resort is based on the reference market price, currently the HUPX's day-ahead price. Despite that the Law allows for the recognition of supply licenses issued abroad on the basis of the reciprocity principle, foreign suppliers have not emerged in the market so far.

Retail Market Opening



Source: Ministry of Economy, compiled by the Energy Community Secretariat

The Energy Regulatory Commission (ERC) set up a web platform with a comparison tool to facilitate switching for households and small customers.

Protection of vulnerable customers is provided by the Government's programme for protection of vulnerable customers, adopted in January 2021. The programme defines the users, the conditions to classify categories of vulnerable customers, support measures and the funding for support measures.

MEPSO allocates interconnection capacities with Greece and Kosovo* through the SEE CAO. Interconnection capacities with Bulgaria and Serbia are allocated bilaterally. Signature of the agreement on grid control cooperation within the control block of transmission system operators of Montenegro, North Macedonia and Serbia awaits approval of MEPSO.



North Macedonia

Gas

Gas Implementation

Gas Indicators	Transposition Assessment	Implementation Status	Descriptions
Unbundling			The transmission system operator is not unbundled and certified in line with the Third Energy Package. Distribution companies have less than 100.000 customers and are thus exempt from the unbundling rules.
Access to the system			An entry/exit transmission tariff methodology and provisions on capacity allocation are in place. However, the capacity is not offered at the capacity platforms. The national grid code has not been revised to implement the Network Codes. The transmission system operator publishes only basic information, not in line with the scope required by Annex I of Regulation (EU) 715/2009.
Wholesale market			Wholesale gas prices are deregulated, but not reported as required by the REMIT Regulation. That Regulation is not transposed. The market remains illiquid, without a virtual trading point. All contracts are concluded bilaterally on a monthly and yearly basis.
Retail market			All customers are formally eligible, and end-user gas prices are deregulated. Customer protection measures are defined in line with Annex I of Directive 2009/73/EC.
Interconnectivity			Security of supply provisions are in line with Directive 2004/67/EC and partly Regulation (EU) 2017/1938. The obligation to submit the Security of Supply Statement to the Secretariat was fulfilled. The existing technical agreement for the interconnector with Bulgaria and a Memorandum of Understanding with Greece still have to be harmonised with the Network Code on Interoperability and Data Exchange.

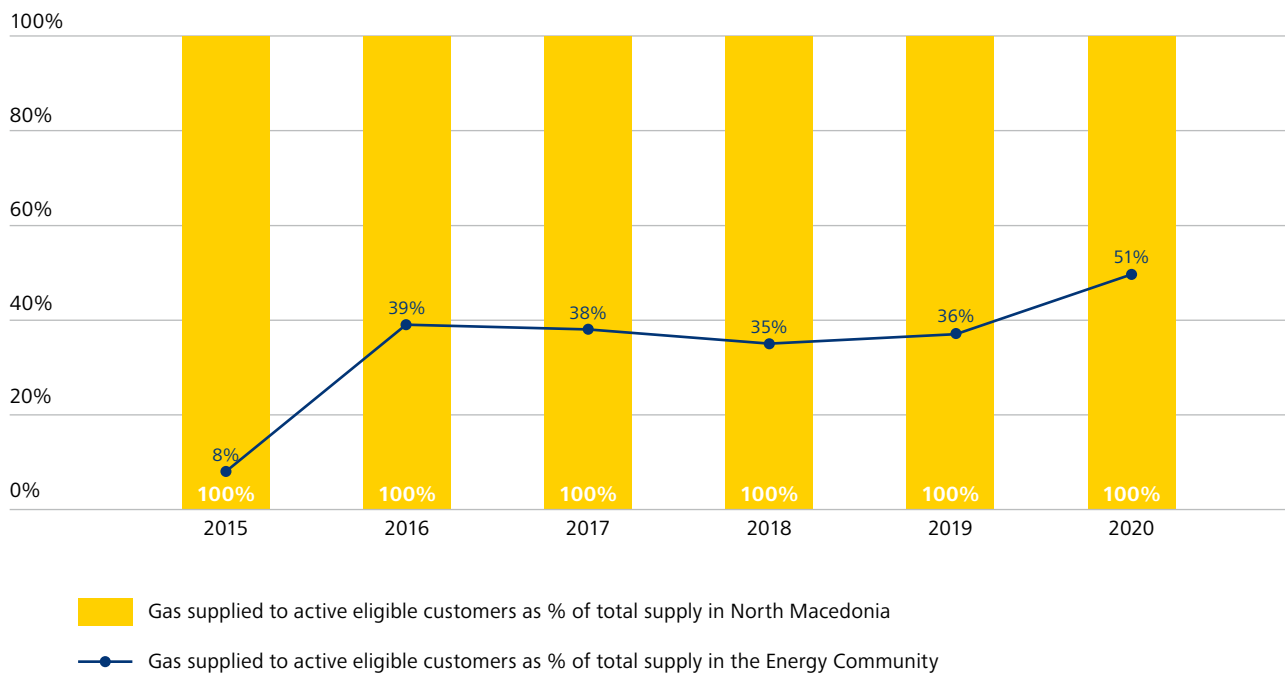
The implementation status of the gas acquis has unfortunately stagnated for the second reporting period in a row. However, the recent action by the Government to finally resolve the long-standing dispute with the private supplier Makpetrol, brokered by the Secretariat's Dispute Resolution and Negotiation Centre, will allow the establishment of an unbundled transmission system operator. The issue was finally settled by the transfer of Makpetrol's shares in GA-MA, a company operating as transmission system operator between the North Macedonian-Bulgarian border and Skopje, to the Government.

The establishment of a functional transmission system operator should ultimately unlock progress on other pending issues, such as the proper implementation of the Network Codes, re-

lated to capacity allocation, congestion management, tariffs, balancing, interoperability and cooperation with neighbouring transmission system operators. In July 2021, North Macedonia and Greece signed an agreement for the construction of a gas interconnector of 1,5 Bcm annual capacity. The final investment decision is expected to be taken by early 2022.

The company Nacionalni Energetski Resursi continues to make progress in constructing new transmission infrastructure, despite delays caused by the Covid-19 lockdown. Two sections, Klecovice - Negotino and Negotino - Bitola, are expected to be finished by the end of 2021. Once finalised, these pipelines will be integrated into the single national transmission grid.

Retail Market Opening



Source: Energy Regulatory Commission (ERC), compiled by the Energy Community Secretariat

The wholesale market is deregulated. However, the REMIT Regulation is neither transposed nor implemented. In the absence of a virtual trading point, gas trade is based solely on bilateral contracts. Supply is based on contracts with Gazprom and its affiliates. Several companies import gas to the country, via the sole interconnection point with Bulgaria. Non-applicability of EU rules from the Bulgarian side of that interconnector constitutes

an obstacle to the booking of unused cross-border capacity at the exit from the Bulgarian system.

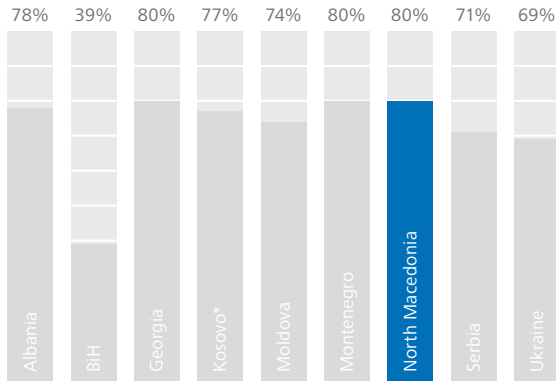
In November 2020, the Government invited bidders to the second stage of the tender for distribution network development on the national level, but the final decision has not been made yet.



North Macedonia National Authorities



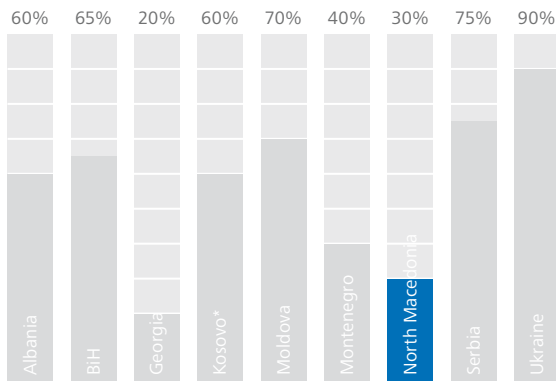
Regulatory Authority



The Energy Regulatory Commission (ERC) has a high technical profile and continued to demonstrate regulatory independence. The need for approval of ERC's annual employment plan and the requirement to follow cumbersome selection procedures remain a barrier to attracting human resources. Incorporation of the electricity and gas Network Codes into the national grid code by the system operators as well as full compliance with the Electricity Transparency Regulation should be more effectively enforced by ERC. The definition of criteria based on which derogations from the Network Code Regulations can be granted and the transposition of the REMIT Regulation are pending due to lack of competences. ERC's chairman currently assumes the position of ECRB President.



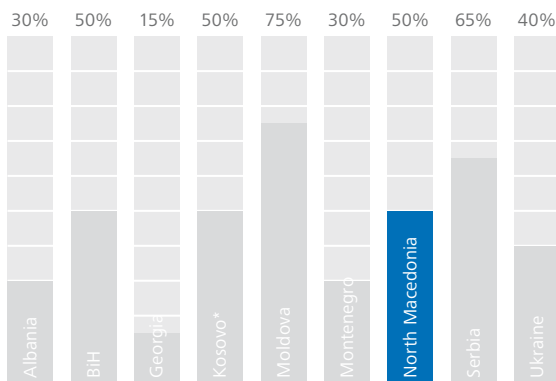
Competition Authority



The Commission for Protection of Competition (CPC) once again did not render any decision in the area of competition, nor did it carry out any investigation in the energy sector. Effective enforcement of competition law is needed in order for North Macedonia to comply with the obligations under the Energy Community Treaty.



State Aid Authority



In the reporting period, the Commission for Protection of Competition (CPC) did not render any decision nor open any investigation into State aid in the energy sector.



North Macedonia Oil

Oil Implementation

Oil Indicators	Transposition Assessment	Implementation Status	Descriptions
Stockholding obligation		<div style="width: 58%;"><div style="width: 58%;"></div></div> 58%	The Law on Compulsory Oil Reserves, which transposes Directive 2009/119/EC, was adopted on 1 January 2021. In practice, oil stocks corresponded to 52 days of average daily consumption in September 2021, a decrease from September 2020 when stocks stood at 80 days.
Emergency procedures		<div style="width: 100%;"><div style="width: 100%;"></div></div> 100%	The Law on Compulsory Oil Reserves foresees that the Government will adopt a decision on releasing compulsory reserves into circulation in the case of an oil supply emergency. The Intervention Plan was adopted and published by the Government in January 2021. It put in place the necessary procedures and measures in order to enable the competent authorities to release quickly, effectively and transparently emergency stocks in the event of a major supply disruption.
Fuel specifications of petrol, diesel and gas oil for non-road mobile machinery (NRMM)		<div style="width: 75%;"><div style="width: 75%;"></div></div> 75%	North Macedonia transposed the main provisions of the Fuel Quality Directive in 2007. The environmental specifications of petrol and diesel are in conformity with European standards but not for gas oil for NRMM.
Monitoring compliance and reporting including the lay down the rules on penalties		<div style="width: 75%;"><div style="width: 75%;"></div></div> 75%	The quality of the oil fuels placed on the market is monitored by the supplier pursuant to the annual plan for monitoring of the quality of liquid fuels, prepared and implemented by the Ministry in charge of energy. Penalty provisions for non-compliance with fuel quality standards are stipulated in the Law on Product Safety.

The Law on Compulsory Oil Reserves, adopted already in October 2014, finally came into effect on 1 January 2021. In June 2021, the Law was amended to transpose Commission Implementing Directive (EU) 2018/1581 on the Methods for Calculating Stockholding Obligations and align with the new Energy Law and the Misdemeanours Law. As of 13 July 2021, the Directorate of Compulsory Reserves of Oil and Oil Derivatives became the Compulsory Oil Reserves Agency (MACORA), as the central body responsible for the formation and maintenance of compulsory oil reserves.

As of September 2021, the average occupancy level of the compulsory oil reserves, calculated in accordance with the new methodology prescribed in Commission Implementing Directive (EU) 2018/1581, corresponded to 52 days of the average daily net imports, as daily net imports are greater than daily inland consumption. There was considerable revert in oil stockpiling during the reporting period due to the different methods for calculating the stockholding obligation in compliance with Implementing Directive (EU) 2018/1581. The oil stocks corresponding to the average daily consumption shrunk by 28 days compared to the

last reporting period. This decrease of average daily net imports may cause non-fulfilment of the final 90 days obligation by 1 January 2023.

In the reporting period, activities on the preparation of draft by-laws, including those transposing Annexes I - IV of Directive 2009/119/EC, continued. The majority of the by-laws were already adopted by the competent authorities during the first and second quarter of 2021. The Action Plan for formation of mandatory reserves was adopted in May 2021.

North Macedonia's legal framework conforms to the Fuel Quality Directive to a large extent. The most critical issue is the non-specification of the sulphur content of the gas oil used for non-road mobile machinery (NRMM).

In accordance with the current Energy Law, the Government of North Macedonia should adopt a new Rulebook on the Quality of Liquid Fuels within 18 months from the date of entry into force of the 2018 Energy Law. The act's adoption is pending.



North Macedonia Renewable Energy

Renewable Energy Implementation

Renewable Energy Indicators	Transposition Assessment	Implementation Status	Descriptions
National Renewable Energy Action Plan			In 2019, renewables accounted for 16,81% of North Macedonia's energy consumption, which is far less than the indicative target of 23%. The country has reached its sectorial target for heating and cooling, but not targets for electricity and transport.
Quality of support schemes			Administratively set feed-in tariffs (FiT) are still granted for wind projects with installed capacity up to 50 MW and hydropower plants with installed capacity up to 10 MW. The other support mechanism is a feed-in premium (FiP) granted on a competitive basis. Producers granted with FiTs are exempt from balancing responsibility whereas producers with support granted via tenders bear balance responsibility.
Grid integration			Transmission and distribution system operators are obliged to ensure priority connection to the systems and priority in the dispatching of electricity produced from renewable energy sources.
Administrative procedures and guarantees of origin			No progress has been made to simplify administrative procedures and establish a one-stop shop in the reporting period. Given the absence of such a system at national level, North Macedonia has expressed interest to join the Energy Community regional initiative to establish an electronic system for guarantees of origin.
Renewable energy in transport			The draft law on biofuels, prepared by the Ministry of Economy, is waiting for the Government's approval. The share of renewables in transport remained negligible in 2020, not reaching even 0,5%.

There were negligible improvements in the transposition and implementation of the renewable energy acquis in the reporting period. Although the country overreached its sectorial target for the share of renewable energy in heating and cooling and almost reached its electricity target, the overall target of 23% of renewable energy in gross final energy consumption by 2020 is far from being achieved because of the insignificant share of renewable energy in the transport sector.

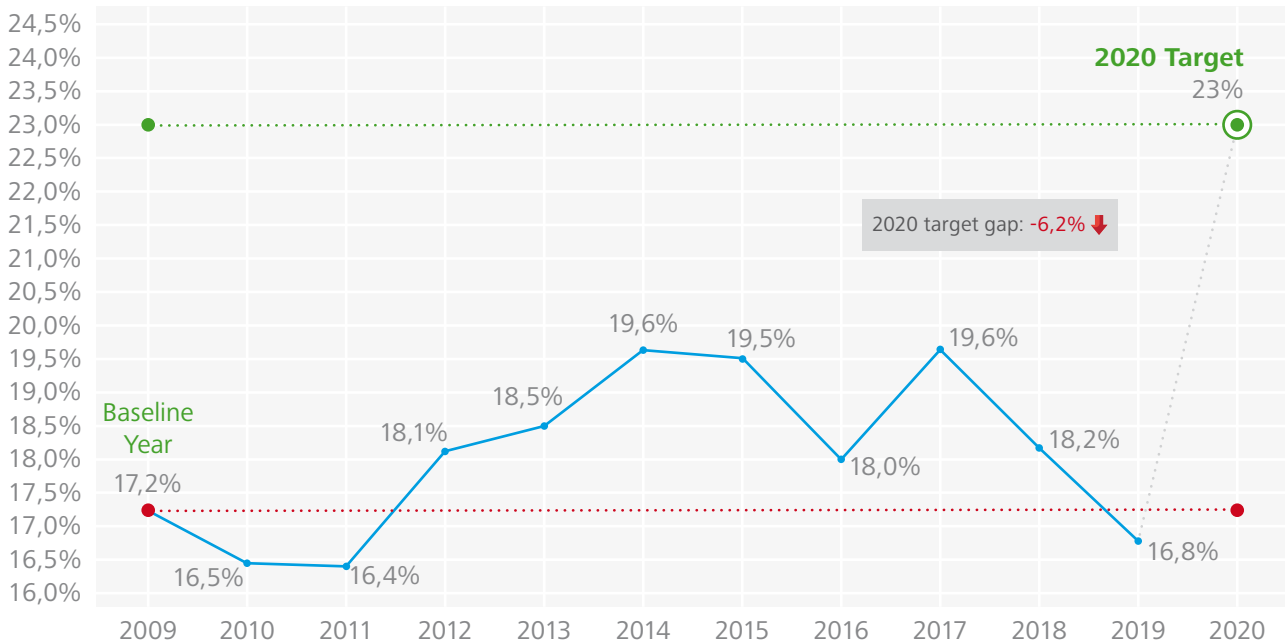
In line with the Government programme for financial support for the production of electricity from preferential producers using premiums for 2021, the maximum reference amount of the fixed premium for generation of electricity from solar PV was set at 15 EUR/MWh. The average feed in premium as a result of the last solar PV auction in 2020 was around 4 EUR/MWh

for state-owned land and around 11 EUR/MWh for private land.

According to the Rulebook on Renewable Energy, the threshold for the net billing scheme is 4 kW for households and 20 kW for small consumers. So far, 42 self-consumers are registered under the currently applicable net billing scheme.

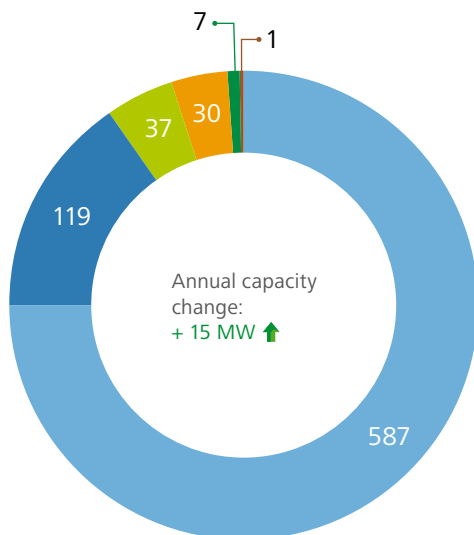
The priority for North Macedonia should be the transposition of provisions related to the sustainability of biofuels. Thresholds for administratively set feed-in tariffs (FiT) have to be aligned with the Guidelines on State Aid for Environmental Protection and Energy. The country should also implement an electronic system for guarantees of origin and continue with the further implementation of existing legislation while promoting the use of renewable energy.

Shares of Energy from Renewable Sources



Source: EUROSTAT

Total Capacities of Renewable Energy 2020 (MW)



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

The renewable energy portfolio of North Macedonia is mainly based on hydropower. In 2020, only 6 MW of solar PV were added. The only wind farm remains Bogdanici (37 MW), which is in operation since 2014.

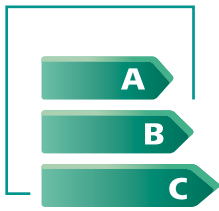
The total share of renewables decreased in 2019 compared to 2018 due to the decrease of the share of renewables in heating and cooling.

In August 2021, North Macedonia announced a public call to support individual solar PV plants with total installed capacity of 80 MW.

Total capacities of renewable energy (MW):

782

Source: Energy Regulatory Commission of the Republic of North Macedonia



North Macedonia

Energy Efficiency

Energy Efficiency Implementation

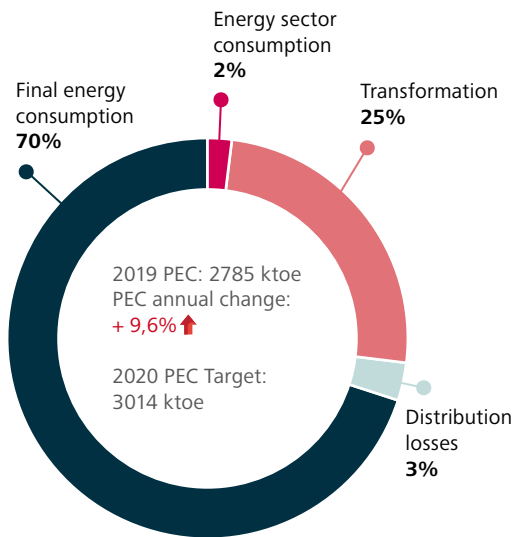
Energy Efficiency Indicators	Transposition Assessment	Implementation Status	Descriptions
Energy efficiency targets and policy measures			The 2020 Law on Energy Efficiency transposed the Energy Efficiency Directive and set the specific targets required under Articles 5 and 7. The fifth Annual Progress Report indicated increased savings in 2020 and confirmed that the country is on track to meet the 2020 target. By-laws on the obligation scheme, buildings renovation strategy and energy audits are still not adopted.
Energy efficiency in buildings			The Law on Energy Efficiency transposed the Buildings Directive. Implementation is still lagging behind as key by-laws are either missing or are not updated. North Macedonia is preparing rulebooks on energy performance of buildings, energy audit of buildings and an energy performance certificates verification system.
Energy efficiency financing			The Energy Efficiency Fund is being set up and will be funded through a EUR 24 million loan from the World Bank. The Government programme for renewables and energy efficiency for 2021 was adopted. A buildings renovation programme of approx. EUR 24,5 million is being implemented.
Energy efficient products - labelling			Rulebooks implementing EU Directive 2010/30/EU were adopted. Rulebooks implementing the new Regulation 2017/1369/EU on labelling are in the drafting process.
Efficiency in heating and cooling			In 2019, the share of district heating in total heat supply was 8% and entirely produced by gas, of which 45,5% in cogeneration units. 30,5% of heating and cooling was generated from renewables, but efficiency is low as the majority of biomass-based boilers and stoves use old technologies. The country has not yet prepared the assessment of its high-efficiency cogeneration and efficient district heating potential required by the Energy Efficiency Directive.

In this reporting period, North Macedonia has not made any significant progress with the adoption of the needed by-laws to implement the 2020 Law on Energy Efficiency. Nevertheless, drafts are being prepared. Some (for labelling and eco-design) are expected to be adopted before the end of 2021. Financing of energy efficiency measures, including for residential and public buildings, continues to be supported by international financial institutions and soon also by the national Energy Efficiency Fund.

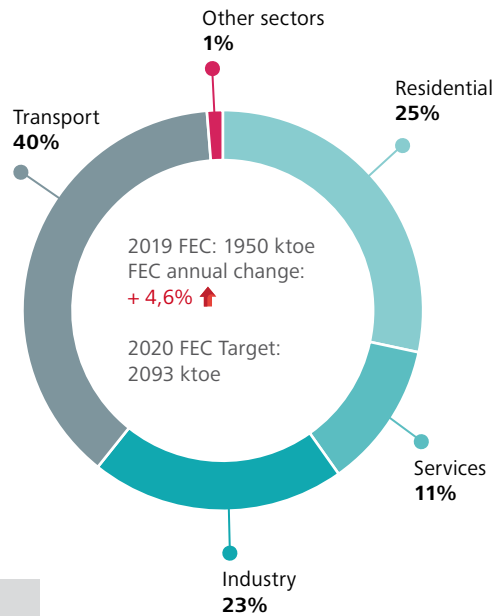
The lack of institutional capacity in the Ministry of Economy remains acute (with one single energy efficiency expert in the staff), but many donors are supporting the preparation of legal and regulatory acts. The preparation as well as the subsequent implementation of secondary legislation remain a big challenge despite the technical assistance available.

2019 Energy Efficiency Indicators and Trends

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2019 value and trends:
0,32 ktoe/mil EUR, +6,3% ↑

Source: EUROSTAT 2021 data and Contracting Party's Annual Reports under Directive 2012/27/EU

Energy Efficient Products – Overview of Implementation of Labelling Regulation

FRAMEWORK REGULATION*	Household dishwashers	Fridges and freezers*	Household washing machines	Televisions	Air conditioners and fans*	Household tumble driers	Electrical lamps and luminaires	Solid fuel boilers*	Space heaters*	Water heaters & storage tanks	Domestic ovens and range hoods
	●	●	●	●	●	●	●	●	●	●	●

● Adopted and implemented ● Compliance or implementation issues detected ● No progress with adoption/implementation

* The new labelling package adopted by the Ministerial Council in November 2018 was assessed, as the transposition deadline expired in January 2020.




Source: multiple sources of data (EECG reports, NEEAPs etc.), compiled by the Energy Community Secretariat



North Macedonia

Environment

Environment Implementation

Environment Indicators	Transposition Assessment	Implementation Status	Descriptions
Environmental impact assessment (EIA) and strategic environmental assessment (SEA)		<div style="width: 54%;"><div style="width: 54%;"></div></div> 54%	The Secretariat initiated a case against North Macedonia for not transposing the amendments (Directive 2014/52/EU) to the EIA Directive. The SEA Directive is transposed in the national legislation. The draft SEA report for the NECP should be improved and further aligned with SEA Directive.
Sulphur in fuels		<div style="width: 93%;"><div style="width: 93%;"></div></div> 93%	The national legislation is in line with the provisions of the Directive. There is no domestic production, and imported fuels covered by the scope of the Directive are subject to regular sampling and analysis.
Large combustions plants and industrial emissions		<div style="width: 47%;"><div style="width: 47%;"></div></div> 47%	The new Law on Industrial Emissions (addressing more sectors than large combustion plants) and the integrated permit of the largest combustion plant in the country (TPP Bitola) are still not adopted.
Nature protection		<div style="width: 47%;"><div style="width: 47%;"></div></div> 47%	One protected area under national legislation, a category II national park, and one protected area under the Ramsar Convention were designated. Implementation of effective and appropriate measures to secure the protection of the protected areas under the Emerald Network is not satisfactory.
Environmental liability		n/a	North Macedonia has partially transposed the Environmental Liability Directive by the relevant provisions of the Law on Environment.

North Macedonia has not transposed the amending Directive 2014/52/EU. The screening process of projects subject to Annex II of the EIA Directive and in particular the screening of small hydropower projects remains a challenge. The potential cumulative impact is not systematically considered in the screening procedures. In the reporting period, 14 hydropower projects were subject to EIA screening and in all cases it was concluded that an EIA is not needed.

The national provisions concerning the strategic environmental assessment (SEA) are compliant with the SEA Directive. The preparation of SEAs should be synchronized with the preparation of plans or programmes in order to ensure early integration of the environmental considerations into those documents when all options are open. The SEA report for the National Energy and Climate Plan should be further improved in order to reflect the environmental impacts of the RES development projects. Particular attention should be given to cumulative impact of the hydropower development.

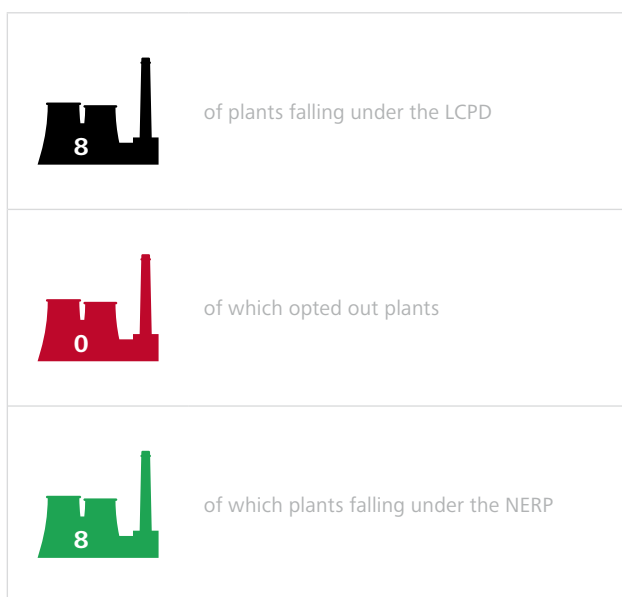
The Directive on the sulphur content of liquid fuels is transposed and properly implemented.

The overdue integrated permit for TPP Bitola, which would serve as the main implementation tool for the National Emission Reduction Plan (NERP) of the Contracting Party, is still not adopted. In July 2021, North Macedonia announced that it will close all of its coal-fired thermal power plants by the end of 2027, making it highly unlikely that investments into emissions abatement will be carried out. North Macedonia complied with its emission reporting obligations for the reporting year 2020. Emissions data still show significant non-compliance with the ceilings for sulphur dioxide and dust. The Secretariat opened dispute settlement procedures in March 2021. In terms of the absolute amount of emissions, a slight decrease was recorded compared to 2019 levels for dust, while sulphur dioxide and nitrogen oxides emissions decreased more significantly.

The country designated its fourth national park “Shar planina” as an International Union for Conservation of Nature (IUCN) category II protected area and the protected landscape “Oso-govo” as an IUCN category V protected area. Cross-border cooperation with Kosovo* concerning the Shar mountain to secure proper and effective measures in line with the Wild Birds Directive would be important. North Macedonia also designated

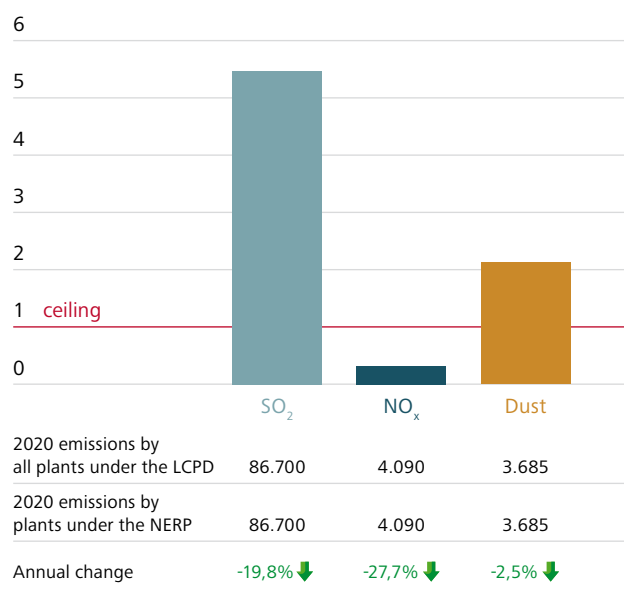
its third wetland of international importance under the Ramsar Convention (Lake Ohrid), but a proper management plan for the lake is still missing. In the reporting period, the Valley of Dlaboka River located in National Park Mavrovo was designated as a UNESCO natural heritage site. However, the protection of the rivers in the park is still not ensured given existing plans for hydropower development.

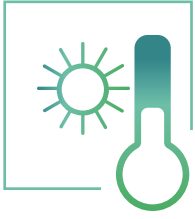
Installations under the Large Combustion Plants Directive



Source: compiled by the Energy Community Secretariat





2020 emissions versus NERP ceilings





North Macedonia

Climate

Climate Indicators	Transposition Assessment	Implementation Status	Descriptions
National greenhouse gas emissions monitoring and reporting systems		 80%	The Law on Climate Action, finalized during this reporting period, is expected to be adopted by the end of 2021. It will set the legal obligations for the institutionalization of a national GHG emissions inventory system and for policies, measures and projections. A long-term strategy on climate action has been adopted by the Government on 1 September 2021.
National Energy and Climate Plans (NECPs)		 73%	North Macedonia's NECP is still to be finalized and adopted.

North Macedonia submitted its revised National Determined Contribution (NDC2) to the UNFCCC Secretariat in April 2021. The document envisages a 51% reduction of GHG emissions by 2030 compared to 1990 levels. It is focused on mitigation and echoes the green scenario from the National Strategy for Energy Development up to 2040. Policies and measures on Agriculture, Forestry and Other Land Use (AFOLU) are also reflected. The third Biannual Update Report to the UNFCCC was submitted in June 2021. The fourth National Communication is expected to be finalized in the first half of 2022.

The long-term strategy was adopted by the Government, while the adoption of the Law on Climate Action is still pending. The preparation of the GHG inventory is still project based, a shortcoming the Law on Climate Action and related secondary legislation is expected to rectify. A rulebook for determining

the national inventory system, the system of policies, measures and projections, the manner and form of reporting information on policies and measures, determining the list of authorities, organizations and other entities that have data on activities for determining the GHG inventory as well as a list of preliminary data for activities has been drafted.

North Macedonia was the first Contracting Party to submit its draft NECP and receive the Secretariat's formal recommendations in 2020. Yet it still has not adopted the plan. The document was updated in summer 2021 taking into account impacts of the Covid-19 pandemic and put out for public consultation. North Macedonia was also the first Contracting Party to commit to a coal phase-out (by 2027) as a member of the Powering Past Coal Alliance.



North Macedonia Infrastructure

Infrastructure Implementation

Infrastructure Indicators	Transposition Assessment	Implementation Status	Descriptions
National competent authority		<div style="width: 30%;"><div style="width: 30%;"></div></div> 30%	The Law on Strategic Investments, adopted on 16 January 2020, is currently undergoing a revision to properly transpose Regulation (EU) 347/2013.
Manual of procedures		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The manual of procedures has not been defined yet.
National regulatory authority involvement		<div style="width: 0%;"><div style="width: 0%;"></div></div> 0%	The national regulatory authority did not publish the methodology and the relevant evaluation criteria for investments in electricity and gas infrastructure projects.

In the last reporting period, the Ministry of Economy had prepared amendments to the Law on Strategic Investments to transpose Regulation (EU) 347/2013. The Government should act as the national competent authority, supported by the special Commission for strategic investment projects.

North Macedonia must proceed with the Regulation's transpo-

sition immediately, followed by swift implementation. Transposition should facilitate the realization of PEI and PMI infrastructure projects. Beside the PEI 2018 project (line 400 kV Bitola – Elbasan), North Macedonia is developing important gas projects like interconnectors North Macedonia – Serbia, North Macedonia – Albania (PEI 2020) and North Macedonia – Greece (PMI 2020).

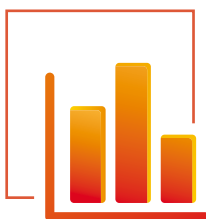
PEI/PMI projects (December 2020): **3**

Electricity: **0**

PEI: **0**

PEI: **2**
PMI: **1**

Gas: **3**



North Macedonia

Statistics

Statistics Implementation

Statistics Indicators	Transposition Assessment	Implementation Status	Descriptions
Annual statistics			The annual questionnaires for 2019 were transmitted to EUROSTAT but the questionnaire on final energy consumption of households is missing.
Monthly statistics			All monthly data are transmitted in accordance with the acquis; short-term monthly data are not provided on time.
Price statistics			Electricity price statistics for 2020 as well as prices of natural gas charged to households were compiled and transmitted in accordance with the acquis. The data on natural gas prices charged to industrial end-users are missing.

The high level of compliance with the acquis on statistics in North Macedonia has declined in 2021 due to the mobilisation of all human resources in preparation of the census 2021.

The production of official statistics in North Macedonia is by law entrusted to the State Statistical Office (SSO). SSO is also responsible for the coordination of all statistical activities in the country.

Annual data are compiled and disseminated including the five questionnaires for coal, oil, natural gas, electricity, heat and renewable energy for 2019. The annual questionnaires are communicated to EUROSTAT timely and in compliance with the acquis. Preliminary questionnaires for 2020 were prepared and transmitted on time. However, unlike in previous years, the disaggregated data on residential consumption of energy for 2019 have not been transmitted yet. SSO also prepares and transmits to EUROSTAT the questionnaire on renewables shares. SSO has already established a quality system for producing qual-

ity reporting as required under the Treaty and a corresponding quality report was submitted to EUROSTAT.

SSO releases monthly energy statistics on electricity, natural gas, oil and petroleum products and solid fuels, which are subsequently published by EUROSTAT, in compliance with Annex C of Regulation (EC) 1099/2008. The short-term monthly data pursuant to Annex D of Regulation (EC) 1099/2008 are still not available on time. Natural gas and monthly oil data are also reported to the JODI database.

Prices of electricity charged to industrial end-users and households are compiled and submitted to EUROSTAT, as well as the breakdown of prices per component, pursuant to the acquis. Prices of natural gas charged to households are compiled and transmitted, however, the prices of natural gas charged to industrial end-users in second semester 2020 and the breakdown of natural gas price components for 2020 have not been released yet.



North Macedonia Cybersecurity

Cybersecurity Implementation

Cybersecurity indicators	Transposition Assessment	Implementation Status	Descriptions
Institutions and legislation			A Cybersecurity Strategy is in place. The adoption of a compliant cybersecurity law is pending. Corresponding amendments to the Energy Law are in preparation. There is no criteria for identification of critical energy infrastructures. MKD-CIRT is operational and responsible for the energy sector.
Requirements for operators and energy regulatory authority			Cybersecurity risk assessment and obligations for energy operators are not directly included in the law. The Energy Regulatory Commission has taken initiative to provide acts on risk management, obligations and other cybersecurity mechanisms in the electricity domain.

The Cybersecurity Strategy 2018 - 2022 developed by the Ministry of Information Society and Administration aims to provide resilient information and communication technology (ICT) infrastructures, and boost cybersecurity capacity and culture, cyber defence, international cooperation and exchange of information. Specific targets include the transposition of Directive (EU) 2016/1148 (NIS Directive), legal enforcement for critical infrastructures in sectoral laws and establishment of a National Cybersecurity Council.

The Strategy for Information Society of 2005 and the Law on Electronic Communications, as amended in 2021, provide the basic legal framework for security management of ICT infrastructures, applicable also to energy. There is no compliant cybersecurity law in force. The draft Law on Security of Network and Information Systems that transposes the NIS Directive, developed in 2019 and updated in 2021, is not adopted.

The protection of critical infrastructure lacks clear criteria for identification and designation applicable to the energy sector. The draft Law on Security of Network and Information Systems contains provisions addressing the criteria for critical ICT infrastructures.

Based on the Law on Electronic Communications, the responsible authority is the Agency for Electronic Communications, hosting the MKD-CIRT. The CIRT acts as the point of contact for reporting and coordination in dealing with security incidents in

ICT systems, providing a coordinated response, education and risk analysis, including for the operators of critical infrastructure and large enterprises in the energy sector.

The methodology for cybersecurity risk assessment and rules on reporting obligations addressing the energy sector are not applied. MKD-CIRT performs assessments of threats in the ICT domain and communicates with stakeholders. The CIRT has established an incident reporting mechanism, which is mandatory for all public bodies and utilities. Security risk management and operators' obligations related to the supply chain for critical ICT components are enforced by the law.

Amendments to the Energy Law addressing cybersecurity mechanisms in the energy sector, enforcing identification and designation of critical energy infrastructures and providing cybersecurity competences to the energy regulatory authority, are in preparation. The establishment of a specific energy CIRT is foreseen in a draft Cybersecurity Law.

The Energy Regulatory Commission (ERC) has adopted Recommendations including criteria for identification of critical energy infrastructures in the electricity sector in cooperation with MKD-CIRT and the Ministry of Economy. ERC is drafting a cybersecurity strategy of the energy sector including requirements and obligations for public and private operators, application of ISO 27001 standards and methodologies for risk assessment and critical asset management.