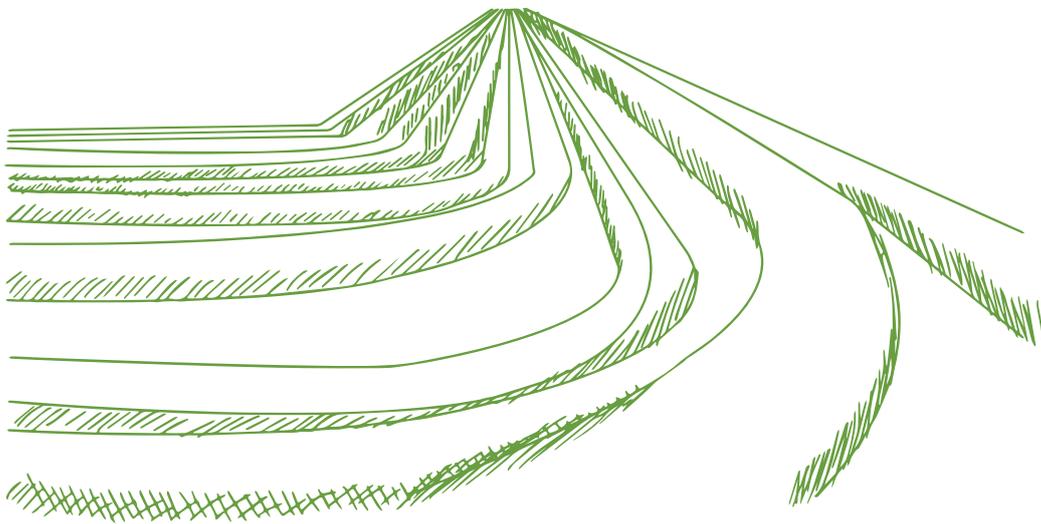


Ukraine

Annual Implementation Report

1 November 2023





Ukraine

IMPLEMENTATION OVERVIEW

CLUSTER	IMPLEMENTATION STATUS	2023 HIGHLIGHTS AND NEXT STEPS
 Markets and integration	 69%	<p>The Law on REMIT was adopted in June 2023 and its implementation started. Ukraine certified its gas storage operator. Ukraine should accelerate transposition and implementation of the Electricity Integration Package as a precondition for the coupling of its short-term markets. Ukraine should re-establish the gas market fundamentals and further strengthen the unbundling status of GTSOU.</p>
 Decarbonising the energy sector	 44%	<p>Ukraine adopted a law which provides the legal framework for implementing a guarantees of origin registry, introduces a net billing scheme for self-consumption and provides directions for future renewable energy auctions. Ukraine should submit the draft NECP to the Secretariat.</p>
 Ensuring energy security	 61%	<p>The operation of the electricity system was preserved despite severe energy infrastructure damages caused by the Russian military aggression. Ukraine fulfilled the gas storage targets. Ukraine should improve the risk-preparedness planning starting with the transposition of the Regulation (EU) 2019/941 on Risk-preparedness in the Electricity Sector and the designation of a competent authority. Ukraine should adopt a risk assessment for the gas market and transpose the Security of Gas Supply Regulation.</p>
 Improving the environment	 52%	<p>In Ukraine, implementation of the environmental acquis is overshadowed by the ongoing military aggression. Nevertheless, compliance is still high.</p>
 Performance of authorities	 76%	<p>The regulator certified the gas storage system operator in line with the Energy Community gas regulation and adopted a set of secondary legislation acts enabling REMIT implementation. NEURC should adopt the remaining REMIT legislation and launch the relevant investigatory and enforcement actions.</p>

Overall number of cases: **2**

Procedures under Article **91** EnCT

ECS-1/18 Energy efficiency

ECS-4/18 Infrastructure



Ukraine

Markets and integration

ELECTRICITY

72%



UNBUNDLING

95%

The transmission system operator Ukrenergo has made progress in implementing the requirements from the regulator's final decision on the certification of Ukrenergo under the ISO model. However, further actions are needed to fully implement the requirements from the certification decision, including the completion of the supervisory board. Compliance with unbundling requirements is one of the preconditions for Ukrenergo's full membership in ENTSO-E.

The majority of the distribution system operators (privately owned) are unbundled. The unbundling of the state-owned distribution system operators needs to be reconfirmed due to changes in the ownership structure.

Price caps applied on all organised market segments, (day-ahead, intraday and balancing), were increased by the regulator in June and November 2023.

The non-compliant Public Service Obligation (PSO) Act was prolonged until the end of 2023. A so-called "export PSO", obliging exporters to transfer 80% of their profit to the guaranteed buyer for covering the deficit of universal service suppliers under the PSO Act applies for the duration of martial law. The so-called "coal PSO", according to which Ukrenergo was obliged to finance electricity generation from coal for the heating season 2022 - 2023 was phased out as from 1 June 2023.

Losses are procured by the transmission system operator and distribution system operators on the market. The ancillary services, including balancing capacity are procured at regulated prices kept at the level of 2022.

ACCESS TO THE SYSTEM

73%

Access to the transmission and distribution systems is ensured through publicly available tariffs. For the period of martial law, a separate procedure for the temporary connection to the distribution networks is applied. This procedure suspends some provisions of the distribution grid code.

Connection network codes have not been transposed by a formal governmental or regulatory act. Yet, the requirements were partially implemented through transmission and distribution grid codes in 2018 by two resolutions of the regulator NEURC. The majority of requirements were properly transposed in the transmission grid code.

Publication of data in line with the Transparency Regulation remains on hold due to martial law. The transmission tariff for exporters, and the dispatch tariff for importers and for exporters will not be applied from 1 January 2024, according to the latest amendments to the transmission and dispatch tariff methodologies and transmission grid code. The costs will be covered under the inter-TSO compensation (ITC) mechanism once Ukrenergo joins.

The Law on REMIT was adopted in June 2023 with a number of secondary legal acts to be adopted by the regulator within three and nine months following its publication. The regulator has adopted the procedure for the registration of wholesale market participants, the investigation procedure and the methodology for the calculation of penalties. The registration of market participants has started in mid-October.

RETAIL MARKET

73%

All customers in the retail market are free to choose their supplier. Universal service suppliers are obliged to supply electricity to households, small customers and several other categories of customers entitled to regulated prices. During the reporting period, prices for households were brought closer to cost-reflectivity level. A block tariff, i.e. a different price for consumption up to/above 250 kWh per month, was phased out by 1 June 2023.

The company Ukrinterenergo was reappointed by the Government as a supplier of last resort until 30 June 2024. The operating costs are currently covered by Ukrenergo on the basis of the amendments to the Household PSO adopted in April 2023 by the Government. By a separate Ministry's Order, universal service suppliers must supply electricity to those consumers whose supplier is in default or lost the license. In practical terms, universal service suppliers in some cases substitute the supplier of last resort.

WHOLESALE MARKET

77%

All market segments – bilateral, day-ahead, intraday, balancing and ancillary services markets – remain operational, despite the continuation of the war and significant damages to the Ukrainian power system.

Special rules for load shedding, by limiting disconnection of consumers using imported electricity only to emergency situations, were applied for the autumn-winter season 2022 - 2023. The Government has adopted a new resolution for the autumn-winter season 2023 - 2024.

REGIONAL INTEGRATION

38%

The Law about Projects of National Interest in the Field of Energy was submitted to the Parliament in March 2023 with the aim of transposing TEN-E Regulation (EU) 347/2013. It has not been adopted.

Due to war conditions and extensive infrastructural damages in Ukraine, former PMI projects (750 kV OHL to Romania, Pivdennoukrainska – Isaccea, and 2x400 kV OHL to Slovakia, Mukacheve - V.Kapusany) are currently on hold.

Ukrenergo made progress towards the implementation of joint capacity allocation. The rules for long-term and daily allocation with Romanian transmission system operator Transelectrica were approved by both regulators, and daily auctions started on 2 November 2023 via Ukrenergo's allocation platform. The daily rules for joint allocation on the interconnectors with Hungary, Slovakia and Poland were consulted by JAO and approved by the regulator NEURC. Auctions are expected to start in January 2024. Rules for joint capacity allocation on the interconnection with Moldova, to be performed by Ukrenergo, are still being prepared by the transmission system operators.



UNBUNDLING

85%

The transmission system operator is unbundled and certified. A law adopted in summer 2023 and a new charter transfer it under the control of the Ministry of Energy and improve its corporate governance. The financial situation of GTSOU has been improved.

The storage system operator is certified in line with Regulation (EU) 2022/1032. The Government transferred rights to operate a significant number of distribution networks to Naftogaz subsidiaries. Compliance with Directive 2009/73/EC, in functional, information and other forms of unbundling, has to yet be established.

ACCESS TO THE SYSTEM

78%

Third party access to transmission, storage and distribution systems is in place based on regulated tariffs determined by the regulatory authority. The transmission tariffs were set in line with a methodology compliant with Regulation (EU) 2017/460. However, certain elements of the Tariff Network Code, are not implemented, such as cross-border cost allocation assessment or consultation and publication requirements. Full implementation of the balancing code is also missing. Some pending transparency requirements have been further postponed under martial law, but the information needed to access the network is available. GTSOU offers capacity at the interconnection with Poland at the GSA Platform, and for all other interconnectors at the RBP Capacity Platform, in line with the ENTSOG auction calendar. Full implementation of the Network Code for Capacity Allocation Mechanisms, such as offering bundled interconnection point capacity, depends on the adjacent transmission system operators, mainly from EU Member States. Virtual interconnection points (VIP) have been established with Poland and Hungary.

WHOLESALE MARKET

33%

The remarkable progress in wholesale gas market opening achieved in the past has been reversed since the start of the Russian aggression. Still, a few traders are active in the market, and very small quantities continue to be sold at the exchange while the majority of the gas volume has been supplied under the public service obligation regime and regulated prices.

REMIT Regulation (EU) 1227/2011 was transposed in June 2023. Ukraine continued to apply a ban on gas exports.

RETAIL MARKET

45%

Ukraine deregulated prices for all customers in 2021, but the PSO Act adopted after the start of the war and prolonged further requires Naftogaz to ensure the supply of gas to consumers, district heating companies and Naftogaz affiliated companies. It also regulates the prices all along the supply chain. Naftogaz is, beside being the main gas producer, wholesale trader and supplier of last resort, also the dominant retail supplier.

Gas consumption decreased by 30 - 40%. Despite the continuous damage, repairs and war operations, a small number of customers, some 1 million, have been without gas supply and disconnected from the network.

REGIONAL INTEGRATION

88%

The Law about Projects of National Interest in the Field of Energy was submitted to Parliament in March 2023 with the aim of transposing TEN-E Regulation (EU) 347/2013. It has not been adopted.

The transmission system is well interconnected with large capacity on all borders. The majority of interconnection points are covered by interconnection agreements aligned with the Network Code on Interoperability and Data Exchange, as well as the principles of the Capacity Allocation Code. As part of its efforts to increase firm capacity at interconnection points, the transmission system operator conducted two rounds of for incremental capacity procedure with the Polish transmission system operator, which showed significant demand. The transmission system operators plan to perform binding auctions in 2024.

GTSOU conducts pilot operations with the Hungarian transmission system operator, in order to provide firm capacity on the Bereg VIP towards Ukraine.

The transmission system operator still ensures the transit of gas towards its neighbours in the west in line with the transit contract, which is due to expire at the end of 2024. Currently no project from Ukraine is on the PECE/PMI lists.



Ukraine

Decarbonising the energy sector



GOVERNANCE / CLIMATE IMPLEMENTATION

22%

NATIONAL ENERGY AND CLIMATE PLANS

29%

Work on an updated draft National Energy and Climate Plan (NECP) is ongoing.

GREENHOUSE GAS 2030 TARGET

0%

Ukraine has not defined the 2030 climate target in its national legislation, nor in the draft NECP. It should align with the 2030 targets set by the Energy Community.

NATIONAL SYSTEMS FOR CLIMATE REPORTING

48%

There is a legal basis for a national inventory system. Ukraine has not nominated a lead reporter and no report was submitted on the national system on policies and measures and projections.

NATIONAL GREENHOUSE GAS EMISSIONS POLICIES AND MEASURES / ADAPTATION

0%

Reporting obligations have not been transposed in legislation. Ukraine has not nominated lead reporters for the Governance Regulation reporting activities, and no reporting activity was initiated.

LONG-TERM STRATEGY AND CLIMATE NEUTRALITY

31%

The legal basis for a long-term strategy has not been adopted. Nonetheless, Ukraine has submitted a long-term strategy already in 2018, which does not contain a 2050 climate neutrality objective. Ukraine should revise and update the strategy.



2030 RENEWABLE ENERGY TARGETS 0%

The overall target of achieving a 27% share of renewable energy in the gross final energy consumption, in line with the 2030 target set by the Energy Community, has not yet been incorporated in the national legislation of Ukraine. The draft NECP is also pending. The National Economic Strategy of Ukraine sets a strategic goal of increasing the share of generation from renewable energy sources in total electricity production to 25% by 2030, while an implementation concept of state policy in the field of heat supply sets the target for renewable energy in the heating and cooling sector to 40% by 2035.

QUALITY OF SUPPORT SCHEME 50%

Support to renewable schemes continues to operate under an administratively determined feed-in tariff. The adoption of the so-called Green Transformation Law in July 2023 paves the way for market-based support through a feed-in-premium model.

SELF-CONSUMPTION AND ENERGY COMMUNITIES 75%

Ukraine continues to provide self-consumers with feed-in tariffs that are determined administratively. The Green Transformation Law provides the legal basis for a shift to net-billing mechanism, while the feed-in tariff will apply only for households until the end of 2029. The Law provides the legal basis for establishing renewable energy communities in accordance with Renewable Energy Directive (REDII) while the implementation is still pending.

GUARANTEES OF ORIGIN 50%

The Green Transformation Law also establishes a system of guarantees of origin (GOs). It designates NEURC as the issuing body for guarantees of origin from renewable electricity, and the State Agency on Energy Efficiency and Energy Saving (SAEE) as issuing body for GOs from renewable gases. Both institutions are currently exploring registry options and are in the process of drafting secondary legislation.

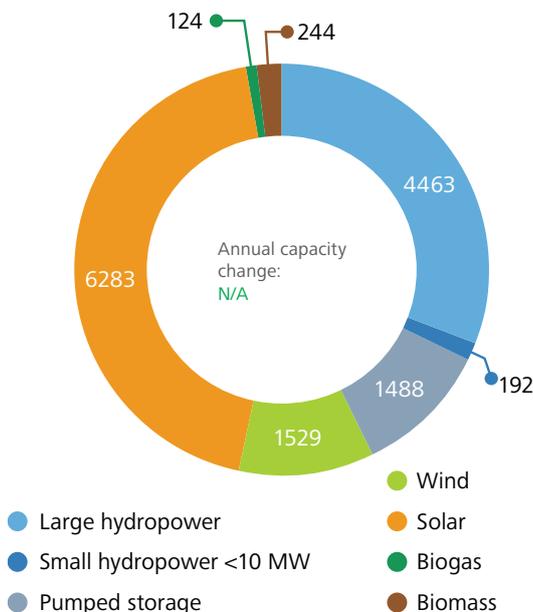
SUSTAINABILITY CRITERIA FOR BIOFUELS, BIOLIQUIDS/BIOMASS FUELS 0%

Provisions related to 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.

RENEWABLE ENERGY IN HEATING AND COOLING 45%

Ukraine is working on the development of the solid biofuel market, by establishing an electronic platform for biofuel trading. A program to support households and condominiums to install solar panels and heat pumps is under development, expected to be implemented in 2024. Transposition of Articles 23 and 24 of REDII, on the increase of renewable energy in the heating and cooling sector, including district heating, is needed.

Total Capacities of Renewable Energy 2021 (MW)



Total capacities of renewable energy (MW):

14305

Source: Ministry of Infrastructure and Energy

ENERGY EFFICIENCY IMPLEMENTATION

75%



2030 ENERGY EFFICIENCY TARGETS AND POLICY MEASURES

69%

In line with the Energy Efficiency Law, Ukraine's 2030 energy efficiency targets and National Energy Efficiency Action Plan (NEEAP) up to 2030 were adopted in December 2021. 3-year action plans for the implementation of the NEEAP is prepared in line with the current legislation. The adopted energy 2030 efficiency targets are aligned with the 2030 energy efficiency targets.

ENERGY EFFICIENCY IN BUILDINGS

90%

Ukraine adopted the majority of by-laws to implement the Energy Performance of Buildings Law, including a national plan to increase the number of near-zero energy buildings. Furthermore, the Parliament passed a law fostering a conducive environment to comprehensive thermal modernization of buildings in 2023.

The long-term building renovation strategy was drafted and published in 2022. Revisions will be necessary to factor in the building stock damaged by the Russian war against Ukraine and the increased climate ambitions.

ENERGY EFFICIENCY SCHEME AND FINANCING

64%

Adopted in 2021, the energy efficiency obligation scheme was never fully implemented and suffered from the lack of adoption of adequate procedures and creation of an adequate monitoring, control, and verification system. The Energy Efficiency Fund provides grants for renovation of multi-apartment buildings.

A Decarbonization and Energy Efficient Transformation Fund. was established in 2023. It will play a crucial role in financing a spectrum of energy efficiency programs and initiatives, with operations set to commence in 2024.

ENERGY EFFICIENT PRODUCTS – LABELLING

97%

All energy labelling regulations related to the Labelling Directive were adopted. Five new regulations completing the implementation of the Framework Labelling Regulation (EU) 2017/1369 were also adopted. Ukraine transposed the Eco-design Directive 2009/125/EC, as well as 28 product regulations on a voluntary basis.

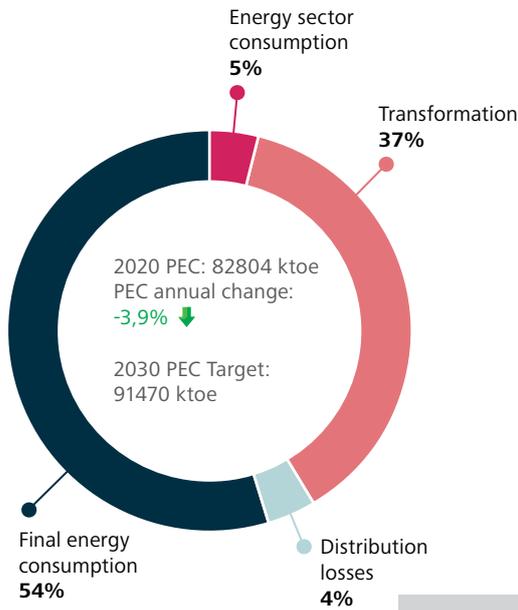
EFFICIENCY IN HEATING AND COOLING

56%

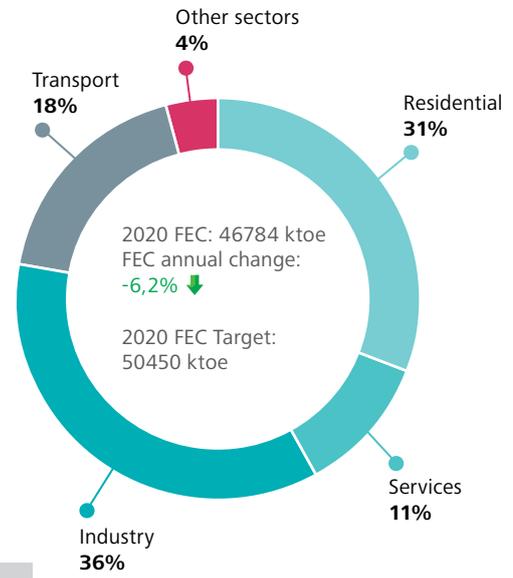
For the last two years, the focus in Ukraine has been on repairing damaged district heating infrastructure. Municipalities are also working on local heat supply schemes to provide sustainable and cost-effective heating solutions. In March 2023, Ukraine adopted amendments to the Law on Cogeneration and Waste Energy Potential, introducing qualified cogeneration installation and guarantees of origin of electricity produced by high-efficiency cogeneration plants.

2020 Energy Efficiency Indicators and Trends*

Primary Energy Consumption (PEC)



Final Energy Consumption (FEC)



Energy intensity,
2020 value and trends:
0,88 ktoe/mil EUR, +1,0% ↑

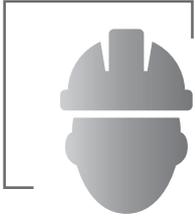
*Note: 2021 energy balance data were not available for Ukraine
Source: EUROSTAT 2023 data and 2022 Ministerial Council Decision

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



Ukraine

Ensuring energy security



ELECTRICITY SECURITY OF SUPPLY

80%

Directive 2005/89/EC is partially transposed through the Electricity Market Law and secondary legislation. Security of Supply Statements for electricity have not been regularly submitted to the Secretariat. Security of supply risks at the moment in Ukraine are caused by the unavailability of a large number of power transformers, transmission lines, generators and distribution facilities due to continuous military aggression. Out of pre-war 56 GW of installed production capacities in Ukraine, almost half of the installed generating capacity was lost following massive attacks. Further restrictions in the electricity supply were caused by extensive damage of the grid.

A comprehensive legislative framework, consisting of the Cybersecurity Law, Cybersecurity Strategy, Cybersecurity Requirements Resolution, and Critical Infrastructure Resolution, has prepared the country to be steeled for cyber attacks as part of the Russian military aggression. The Ukrainian cybersecurity development strategy has proven its efficiency, as there were no fatal incidents caused by cyberattacks.



GAS SECURITY OF SUPPLY

65%

Ukraine has not transposed Regulation (EU) 2017/1938 in its entirety. However, it has a well-established regulatory framework for the security of gas supply, such as risk assessment and preventive and emergency action plans, which still need to be aligned to the gas acquis. Ukraine transposed the majority of the requirements from Regulation (EU) 2022/1032, fulfilled the obligations concerning the storage system operator and the trajectory levels of gas in the storages.

Storage and transmission system operators performed a storage stress-test, based on a set of selected scenarios aiming to identify whether the gas stored by foreign traders under warehouse custom regime could be evacuated to the owners in a crisis. Ukraine fulfilled the storage targets.



OIL SECURITY OF SUPPLY

13%

Ukraine currently has no legal framework on emergency oil stocks. In the reporting period progress was made by drafting a new law. The draft Law on Minimum Reserves of Oil and Petro-

leum Products defines the legal, organisational, and economic basis for creating and managing the minimum reserves of oil and petroleum products in Ukraine.



Ukraine

Improving the environment

ENVIRONMENTAL ASSESSMENTS **33%**

The Ministry of Environmental Protection and Natural Resources has documented over 2.400 cases of Russian military aggression with direct environmental consequences. The destruction of Ukraine's largest dam, Kakhovka, will have lasting environmental and health repercussions. It led to extensive flooding, submerging thousands of hectares of land, resulting in numerous casualties and displacing thousands of people. It disrupted access to clean drinking water and irrigation systems.

The implementation and scope of the resolution that excludes restoration projects of power plants from environmental impact assessment (EIA) obligations, introduced due to martial law following the Russian invasion of Ukraine, was extended to include new and existing transmission line projects. The existing legislation does not provide for exemptions on a case-by-case basis, which is an obligation of Article 1(3) of the EIA Directive for projects having defence as their sole purpose.

The Aarhus Convention Compliance Committee (ACCC) issued recommendations addressing the constraints on access to information and limited public involvement in the decision-making processes related to recovery projects and plans, and the EIA and Strategic Environmental Assessment (SEA) for such projects and plans. The concerns and recommendations presented by the ACCC pertain to the definition of recovery projects and plans, their scope, limitations, and the establishment of clear timeframes for post-hostility measures. The use of electronic tools to disseminate environmental information and enhance public consultations for recovery plans and programs remains a challenge.

LARGE COMBUSTION PLANTS **57%**

Ukraine complied with its reporting obligations under the Large Combustion Plants Directive by the timely submission of its emissions data. Implementation of the National Emission Reduction Plan continues to be a priority. The emission ceilings for all three pollutants were met in the 2022 reporting year, with a further, significant decrease of the emissions of each of them. This is related to the unavailability of several plants that came under attack, and uncertainties regarding the data of plants located in occupied territories.

Certain units have reached the end of their lifetime available under the opt-out rules. However, the implementation of those provisions cannot be expected under the current circumstances. The Ministerial Council of the Energy Community is expected to take a decision to address this situation still in the course of 2023.

SULPHUR IN FUELS **87%**

The legislative framework in Ukraine, including the provisions on marine fuels, is compliant with the Directive's requirements. With the military aggression still ongoing, systematic compliance monitoring of the fuels concerned remains impossible.

NATURE PROTECTION **67%**

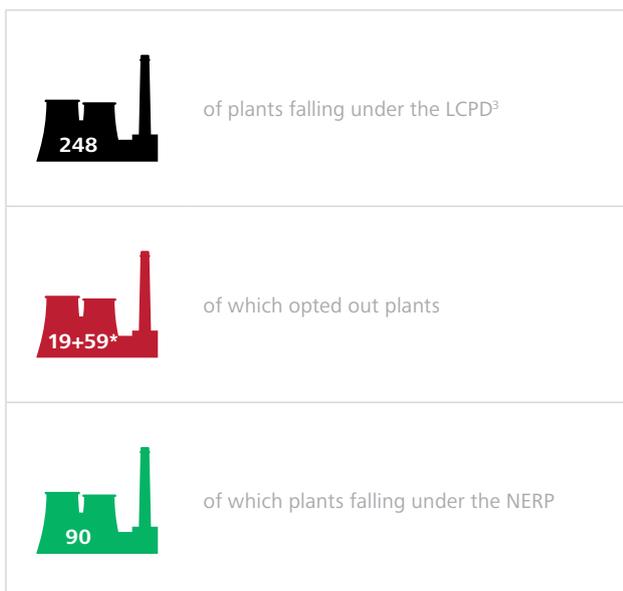
The Cabinet of Ministers of Ukraine has adopted a resolution outlining the establishment of protected areas dedicated to conserving the biodiversity of Ukraine, including the preservation of flora and fauna listed in the Red Book. This resolution also specifies the criteria for designating protected forest areas and includes regulations governing forestry and other economic activities within these regions. In addition, a series of presidential decrees have resulted in the creation of new protected areas, including the Kholodnyi Yar, Kuyalnytskyi, and Radzivil Forest National Nature Park.

Over 12.000 square kilometers of Ukraine's nature reserves have been transformed into war zones, resulting in significant losses for populations of rare endemic and migratory species. Birds have been compelled to abandon their nests and alter their traditional migration routes, causing extensive damage to the conservation efforts.

ENVIRONMENTAL LIABILITY **20%**

Administrative environmental liability is regulated by the Code of Ukraine on Administrative Offenses, which partially transposes the Directive's provisions. The current situation, however, impedes implementation in practice.

Installations under the Large Combustion Plants Directive



*Under Decision 2015/07/MC-EnC, certain plants in Ukraine are entitled to use 40.000 hours for opted out plants. 59 plants fall into that category.

Source: compiled by the Energy Community Secretariat

2022 emissions versus NERP ceilings



Amount of operational hours used from opt-out period²

Average of plants under Decision 2013/05/MC-EnC ³	Expected expiry of opt-out period:*	December 2023
	Remaining hours	9.986
	Operating hours consumed in 2018 - 2022	10.014
Average of plants under Decision 2015/07/MC-EnC ⁴	Expected expiry of opt-out period	December 2033
	Remaining hours	29.169
	Operating hours consumed in 2018 - 2022	10.830

*Calculations for the expected expiry of the opt-out period are based on 2018 - 2022 average load factor.

Source: compiled by the Energy Community Secretariat

- Due to the large number of plants under the opt-out regime in Ukraine, an average for both opt-out regimes is being provided. The expected expiry of the opt-out is also provided based on this average. It varies on a plant-by-plant basis.
- Under the regime of Decision 2013/05/MC-EnC, opted-out plants can remain in operation for a total of 20.000 operational hours until 31 December 2023.
- Under the regime of Decision 2015/07/MC-EnC, which amended Decision 2013/05/MC-EnC to reflect the special situation of Ukraine, certain opted-out plants can remain in operation for a total of 40.000 operational hours until 31 December 2033. The list of plants was adopted by Decision 2016/19/MC-EnC.



Ukraine

Performance of authorities



REGULATORY AUTHORITY

82%

The National Energy and Utilities Regulatory Commission of Ukraine (NEURC) is set up as a 'central executive body', established by the Cabinet of Ministers since 2019. This model was introduced as a temporary solution but has developed into a permanent state, which can only be changed by amending the constitution or, under martial law, by providing explicit exemptions for NEURC as for other independent bodies. The independence of NEURC, including decision-making, financial autonomy and staffing must be sustained in view of new and upcoming legislative changes and regulatory tasks.

such as increasing household end-user prices, approving the methodology for wholesale price caps and revising these caps. NEURC also approved a set of regulations addressing the wartime conditions on energy markets including on consumer connection procedures, restoration of damaged energy infrastructure and reliability of supply. The regulator certified the gas storage system operator. After the adoption of the REMIT Law in June 2023, NEURC adopted a set of secondary legislation acts related to the registration of market participants, investigation and determining penalties for REMIT breaches.

Under the conditions of martial law, NEURC continued to contribute to the electricity market reforms, implementing steps



COMPETITION AUTHORITY

95%

In the reporting period, amendments to the Law on Protection of Competition and the Law on the Antimonopoly Committee of Ukraine (AMCU) were adopted, in particular by introducing the possibility of settlements and leniency applications, and redefining concentrations subject to merger control. In terms of investigations of anti-competitive conduct, the AMCU started

investigations for abuse of dominance in the gas sector related to pricing and discriminatory conduct. The AMCU should ensure that its investigations adequately address any potential abusive behaviour in order to guarantee a level playing field.



STATE AID AUTHORITY

45%

Following the Russian invasion of Ukraine, the Law on State Aid for Business Entities was amended, providing that during

the application of martial law, State aid is compatible and the obligation to notify State aid is suspended.



STATISTICAL AUTHORITY

n.a.

Under martial law, natural persons, economic entities, institutions and public bodies are not obliged to report to the State Statistical Service of Ukraine (SSSU) from March 2022 until three

months after the abolition of martial law. Consequently, SSSU is not in a position to produce official statistics.