

# MONITORING OF UKRAINE'S NATIONAL ENERGY AND CLIMATE PLAN (NECP)

| Q4 2024

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# SUMMARY

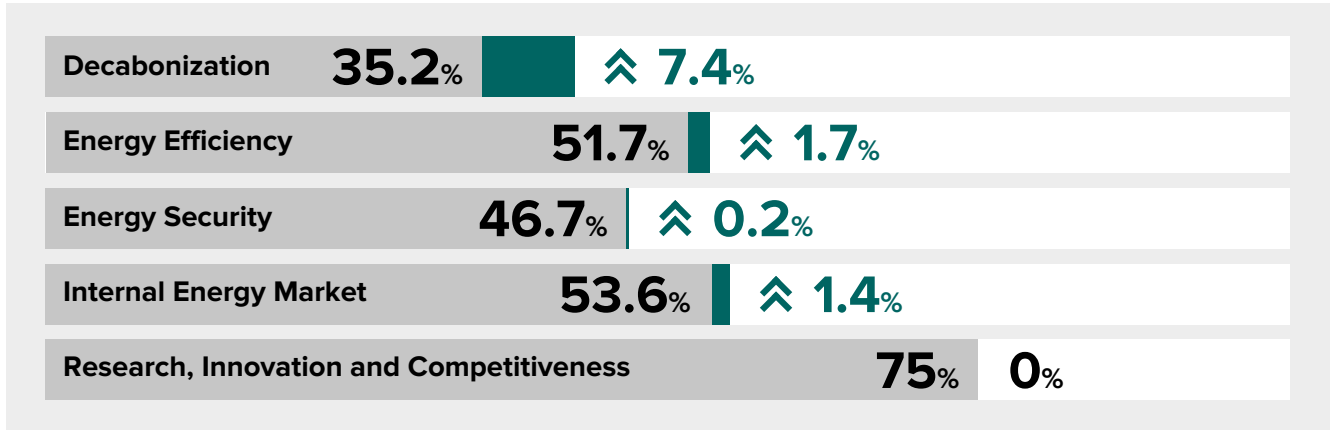
The assessment of the NECP implementation is performed on the basis of 205 indicators for all 145 policies and measures, both existing and planned as defined by Regulation (EU) 2018/1999. Existing policies and measures include those implemented and adopted as of NECP approval in June 2024.

## NECP IMPLEMENTATION

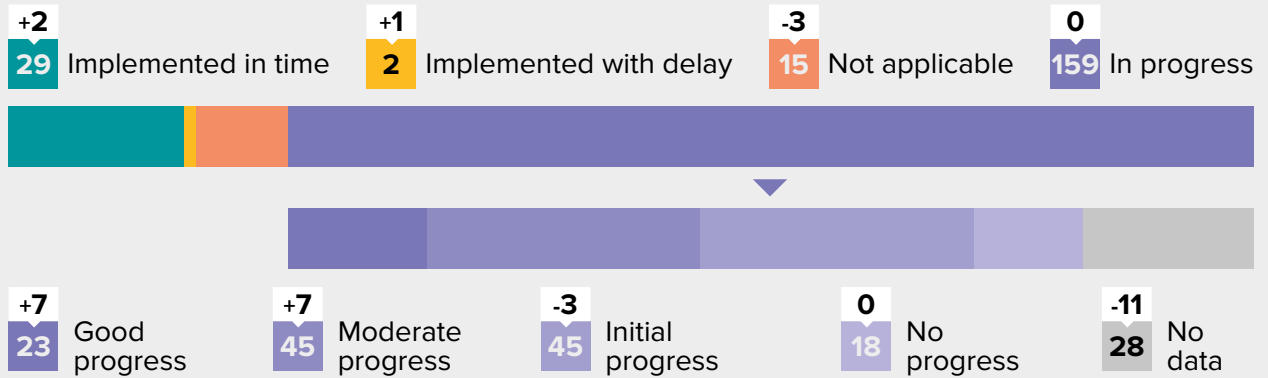
Integrated score and change vs Q3 2024

50.6%

⬆️ 2.6%



## 205 INDICATORS (status and change vs Q3 2024)



## 205 INDICATORS



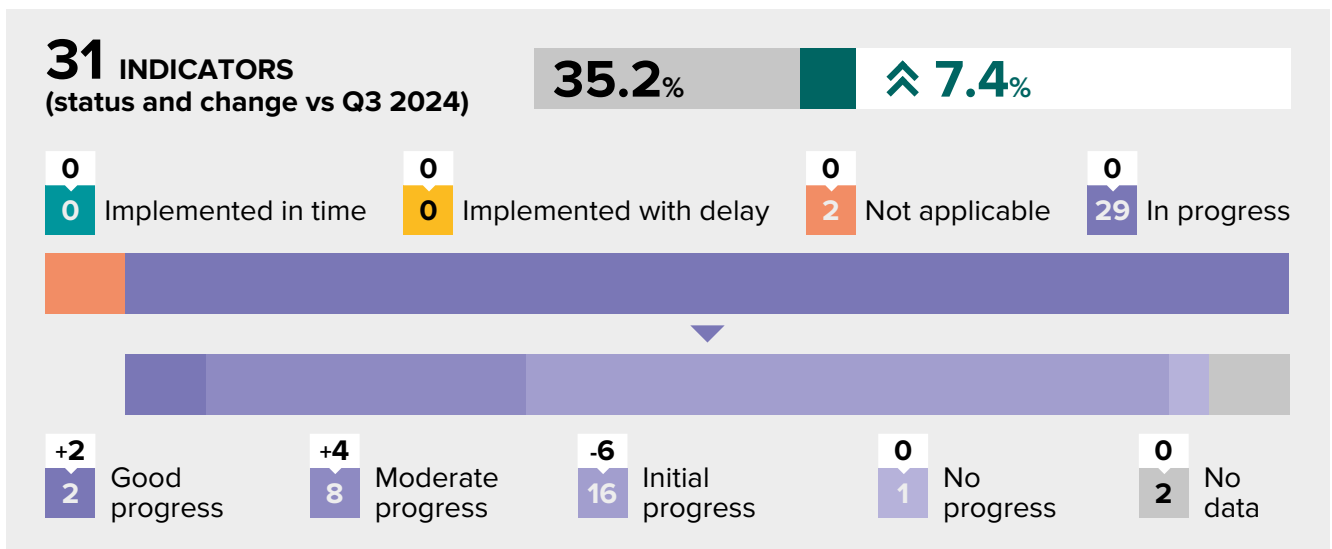
In the fourth quarter of 2024, the implementation of the National Energy and Climate Plan (NECP) showed progress, particularly under the dimensions of decarbonization, energy efficiency, and internal energy market. Key areas in the reporting period were the update of the climate policy framework and the transport strategy, testing new mechanisms to support renewable energy sources (RES), expanding financing for energy efficiency measures, and tools to increase the resilience of the energy system.

#### **KEY DECISIONS AND EVENTS:**

- Adoption of the framework Law “On the Basic Principles of State Climate Policy”, which has set a long-term goal for achieving climate neutrality by 2050, thus ensuring alignment with the EU-wide climate goal.
- Approval of a new version of the 2030 National Transport Strategy, which broadly outlines the direction of policies and measures necessary to ensure the decarbonization of the transport sector. For a detailed overview, see the “Special Topic” section.
- Approval of the Action Plan for Just Transformation of the Lviv Coal Microregion with the estimated funding needs at 10.1 billion UAH.
- The first auctions for guarantees of origin for electricity from RES and pilot auctions for the allocation of support quotas. Despite the fact that the latter auctions showed limited effectiveness, the government determined annual support quotas for electricity producers from RES for 2025 and subsequent years.
- The government has determined the procedure for filling the National Database of Energy and Performance Characteristics of Buildings with information, and has also approved the Procedure for monitoring the achievement of energy saving target in public buildings (renovation to meet at least the minimum energy performance requirements).
- Start of concessional lending through the State Fund for Decarbonization and Energy Efficient Transformation – by the end of 2024, 10 projects (159.8 million UAH) were financed.
- Entry into force of the Law “On Minimum Stocks of Oil and Petroleum Products” and adoption of a significant part of the by-laws. Start of market participants’ accreditation in the reporting system.
- Continuation of the successful practice of long-term auctions for ancillary services, which will contribute to increasing the Unified Power System flexibility and the development of distributed generation.
- New mechanisms to support biomethane, in particular, the National Energy and Utilities Regulatory Commission (NEURC) simplification of the procedure for connecting biomethane facilities to gas networks.
- A significant (app. 25%) increase in funding for the National Research Foundation of Ukraine. Approval of the 2030 Digital Innovation Development Strategy (WinWin), which includes tasks and measures in the field of green transition.

*Monitoring is performed on the basis of public sources of information, but may also include requests for information, consultations or other methods (as noted separately). The assessment of the NECP implementation is carried out on the basis of qualitative and quantitative indicators for all 145 policies and measures. All indicators are assessed in two aspects - the status of implementation and the status of progress (for policies and measures in the process of implementation). A detailed description of the scale, as well as the assessments by indicators with relevant comments, can be viewed in [the assessment table for Q4 2024](#). In addition to assessing the indicators, the experts also take into account decisions and events that directly relate to the NECP and/or may have a significant impact on its implementation.*

# DECARBONIZATION



During the fourth quarter of 2024, important strategic documents and regulatory acts in the areas of climate and transport policies, waste management, and agriculture sector development were approved, which allowed to fulfil four indicators in the Ukraine Plan. Important steps were also taken towards the practical implementation of the auction mechanism for the allocation of support quotas for RES and guarantees of origin of electricity from RES.

Although the State Target Program for the Just Transition of Coal Regions of Ukraine until 2030 is still being developed, during the reporting period the Action Plan for the Just Transformation of the Coal Microregion of Lviv Oblast for the period until 2030 was approved, and several other regional plans are being developed.

Thus, the status of implementation of a number of indicators has changed in a positive direction. As of December 31, 2024, 2 indicators were assessed as “good progress”, 8 as “moderate progress”, 16 as “initial progress”, there is no progress for one indicator, no data to assess two, and two more indicators are currently with the status “not applied” since they could be fulfilled only after the end of the full-scale war of the Russian Federation against Ukraine.

## CLIMATE CHANGE MITIGATION AND ADAPTATION

- On October 7, the Ministry of Environmental Protection and Natural Resources of Ukraine (MEPNR) published for discussion [the draft](#) Operational Plan for the implementation of the Strategy for Environmental Security and Adaptation to Climate Change for the period until 2030 in 2025-2027.
- On October 8, the Verkhovna Rada adopted Law No. 3991-IX “On the Basic Principles of State Climate Policy”, which regulates the development and implementation of state climate policy and is aimed at ensuring the achievement of climate neutrality, mitigating the effects of climate change and adapting to it, ensuring low-carbon and sustainable development, and defines:
  - basic principles of the state climate policy;
  - particularities of development and achievement of state climate policy goals;
  - principles for ensuring climate planning at the national, regional and local levels;

- reporting in line with the requirements of the UN Framework Convention on Climate Change and data collection for these purposes;
- basic principles of the national system for tracking the implementation of policies, measures and forecasting in the field of climate change.

The law was developed to fulfill a number of international obligations of Ukraine, it is aimed at implementing EU legislation in the field of climate change, in particular Regulation (EU) 2018/1999 and Regulation (EU) 2021/1119. The law established a long-term climate neutrality goal of Ukraine by 2050, which ensured alignment with the EU goal.

- On October 14, the Lviv Regional Military Administrative [approved](#) the Action Plan for the Just Transformation of the Coal Microregion of the Lviv Region for the period until 2030. The plan incorporated 47 project ideas (with a total budget of UAH 10.1 billion), implementation of which will serve attainment of three strategic goals:
  - energy transition and clean environment of the microregion for the livelihoods of different generations and social groups (14 projects worth UAH 3.1 billion);
  - new competitive economy of the coal microregion (14 projects; UAH 6.3 billion);
  - Adaptation of the coal microregion to the new social needs of its inhabitants (19 projects; over UAH 617 million).
- On October 28, the MEPNR published for discussion [a draft order](#) “On Amendments to the Order of the Ministry of Environmental Protection and Natural Resources of Ukraine dated February 15, 2021 No. 113”, which was developed to improve standard forms of documents in the field of monitoring, reporting and verification of greenhouse gas emissions and requirements for filling them out.
- On November 8, the MEPNR [published for discussion](#) a draft List of measures to reduce the consumption of controlled substances, developed in accordance with Part Three of Article 3 of the Law "On Regulation of Economic Activities with Ozone-Depleting Substances and Fluorinated Greenhouse Gases."
- By Order No. 1163-r of November 15, 2024, the Cabinet of Ministers [approved](#) the Strategy for the Agriculture and Rural Development in Ukraine for the period until 2030 and approved the operational plan of measures for its implementation in 2025-2027. The fifth goal of the Strategy covers climate-oriented agriculture (mitigation of and adaptation to the climate change impacts), however, the operational plan does not provide for specific measures to achieve this goal.
- On November 20, the MEPNR [published for discussion](#) a draft Action Plan for the establishment of a national greenhouse gas emissions trading system, which is aimed at implementing Directive 2003/87/EC.
- On November 21, the Verkhovna Rada [adopted](#) in the first reading the draft law “On Amendments to Certain Legislative Acts of Ukraine on the Restoration of Monitoring, Reporting and Verification of Greenhouse Gas Emissions” (Reg. No. 12131 dated October 16, 2024), which is important for the launch of the national emissions trading system.
- The Cabinet of Ministers [approved](#) the new National Transport Strategy of Ukraine for the period until 2030 by Resolution No. 1550 of December 27, 2024. The strategy covers decarbonization mostly under the third comprehensive strategic goal, although it is not a priority. For a detailed overview, see the “Special Topic” section.
- The Cabinet of Ministers [approved](#) the National Waste Management Plan until 2033 (hereinafter

referred to as the National Plan) and the action plan for its implementation by Order No. 1353-r of December 27, 2024. The purpose of the National Plan is to ensure the transition to modern waste management practices to ensure effective use of waste as resources and to sustainable development by preventing waste formation, as well as implementing safe waste management practices to prevent the damage to human health and the environment. The approval of the National Plan ensured the fulfilment of one indicator of the Ukraine Plan and [the recommendations](#) of the European Commission. The National Plan includes measures covered by 5 NECP policies under the “Decarbonization” dimension, in particular:

- PM\_D\_WAM\_08 Disseminating the practice of household waste components reuse
  - PM\_D\_WAM\_09 Disseminating the practice of household waste recycling
  - PM\_D\_WAM\_10 Disseminating the practice of household waste organic components composting
  - PM\_D\_WAM\_11 Disseminating the practice of thermal treatment of household waste (with obtaining useful energy)
  - PM\_D\_WAM\_12 Increasing the amount of disposal (recovery and flaring) of biogas at landfills
- The Cabinet of Ministers [approved](#) the Ukrainian part of the Ukrainian-Japanese Joint Committee on the implementation of the Joint Crediting Mechanism (JCM) by Resolution No. 1540 of December 31, 2024. Participation in this mechanism will allow attracting investments from Japanese organizations for the decarbonization of various sectors of the economy by means of leading technologies. The greenhouse gas emissions reduction obtained from the implementation of such projects will be counted partly as a contribution to achieving Japan's goals and partly towards fulfilling Ukraine's greenhouse gas emissions reduction commitments.

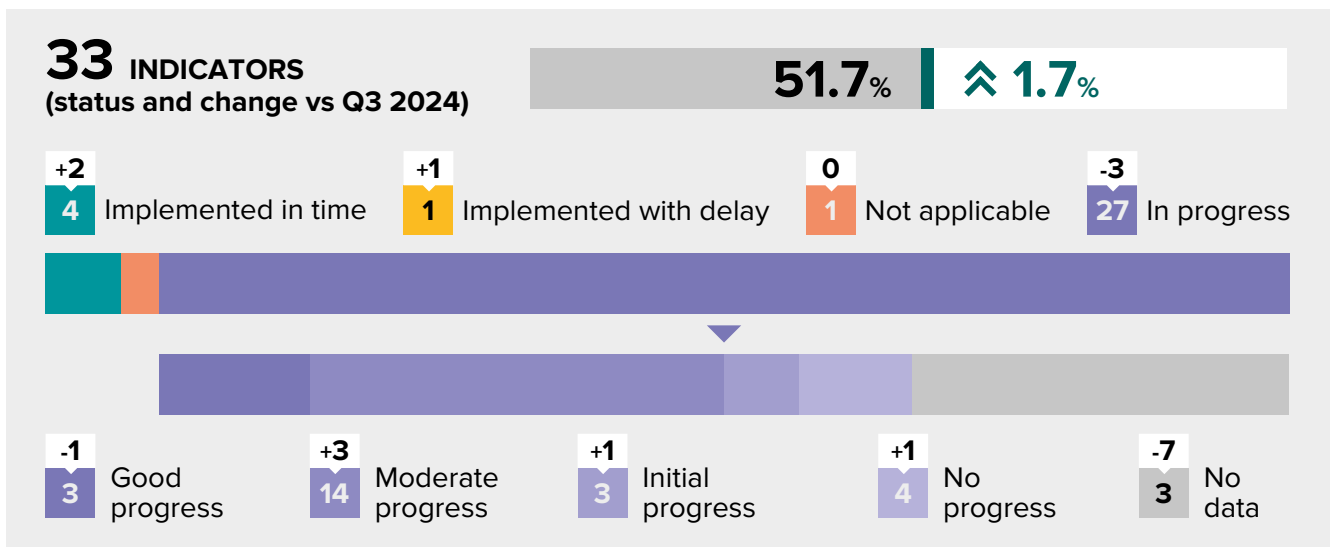
## RENEWABLE ENERGY SOURCES

- On October 4, the National Energy and Utilities Regulatory Commission issued [the first guarantees of origin for](#) electricity generated from renewable energy sources for PJSC Ukrhydroenergo (for 96,441 MWh).
- On October 21, the Supervisory Board of the Energy Efficiency Fund approved a number of [important changes](#) to the GreenDIM program, in particular, the maximum grant amount and the maximum cost for basic equipment were increased, the requirement for the mandatory use of an individual heat point was canceled, etc. These changes made the program more accessible and profitable for condominiums and housing associations.
- In October-November, pilot auctions for the allocation of support quotas for RES were held, but their effectiveness was limited: out of the 110 MW available quota only 0.9 MW was assigned for support, quotas auctions for solar power plants and wind power plants failed due to the lack of bids. The winner of the auction for other types of RES was [Waterstrum LLC](#) with an offer of 900 kW of hydropower at a price of 11.1 euro cents/kWh. Market participants believe [the main reasons for](#) the limited effectiveness of the pilot auctions are the non-payment crisis and financial risks, regulatory barriers, low level of investment attractiveness and systemic problems in the electricity market.
- On November 18, the Energy Efficiency Fund received [the hundredth application](#) for participation in the GreenDIM Program. As a result of the implementation of these projects, solar power panels with a total capacity of 2.8 MW will be installed, which will reduce electricity consumption and save UAH 13.07 million. By the end of 2024, 107 applications were [approved](#) with an expected

grant amount of about UAH 191 million. At the same time, 19 projects have already been fully implemented.

- The Cabinet of Ministers of Ukraine's Order No. 1195-r of November 29, 2024 [established](#) an additional annual quota for supporting electricity producers from renewable energy sources for 2025 in the amount of 330 MW, of which 33 MW for solar power plants, 250 MW for wind power plants, and 47 MW for other types of renewable energy sources (biomass, biogas, small hydropower plants). The auctions are scheduled for March-July 2025, and the maximum price offers for solar power plants and wind power plants are set at 8 eurocents/kWh; for other types of renewable energy sources – 12 eurocents/kWh. The order also defines indicative forecast indicators of annual support quotas for 2026-2029. It is planned to increase the annual support quota from 340 MW in 2026 to 400 MW in 2029.
- In November-December 2024, the platform of Market Operator held auctions for the sale of guarantees of origin for electricity generated from renewable sources, initiated by PJSC Ukrhydroenergo and SE Guaranteed Buyer. In four auctions Ukrhydroenergo sold [101,767 guarantees of origin](#) at a price of 13 UAH/MWh. Guaranteed Buyer sold [15,000 guarantees of origin](#) (half of the declared volume) at a price of 14 UAH/MWh. [According to estimates by](#) Ukrainian Energy Exchange, the annual supply of guarantees of origin for electricity from renewable sources will be about 10 million MWh and could be increased up to 20-30 million MWh by 2030.

# ENERGY EFFICIENCY



Ukraine has made significant progress in improving the regulatory framework governing the improvement of energy efficiency in buildings. The adoption of the Cabinet of Ministers of Ukraine Resolution No. 1254 of November 1, 2024 was an important step, as its implementation ensures the formation of the National Building Database with detailed information on the energy performance characteristics of the national building stock. In addition, the Procedure for Monitoring the Achievement of the Energy Saving Target in Central Government Buildings, one of the key indicators of the Energy Efficiency dimension of the National Energy and Climate Plan, has been approved.

2024 was marked by increased implementation of energy efficiency projects and the use of new financial instruments. The Decarbonization Fund, which began its activities in September 2024, had already financed 10 projects by the end of December. The energy performance contracting market is rapidly growing: the number of announced tenders increased from 128 in 2023 to 346 in 2024, and the number of concluded contracts increased from 30 to 79. However, it is worth noting that the state budget does not provide funding for 2025 for another institution supporting energy efficiency measures in the housing sector - the Energy Efficiency Fund. This raises concerns, especially in the context of [the recommendations](#) of the European Commission.

In addition, the audit of the debt of heating companies allowed for the timely implementation of one of the key milestones of the IMF's Extended Fund Facility(EFF) program.

## KEY EVENTS

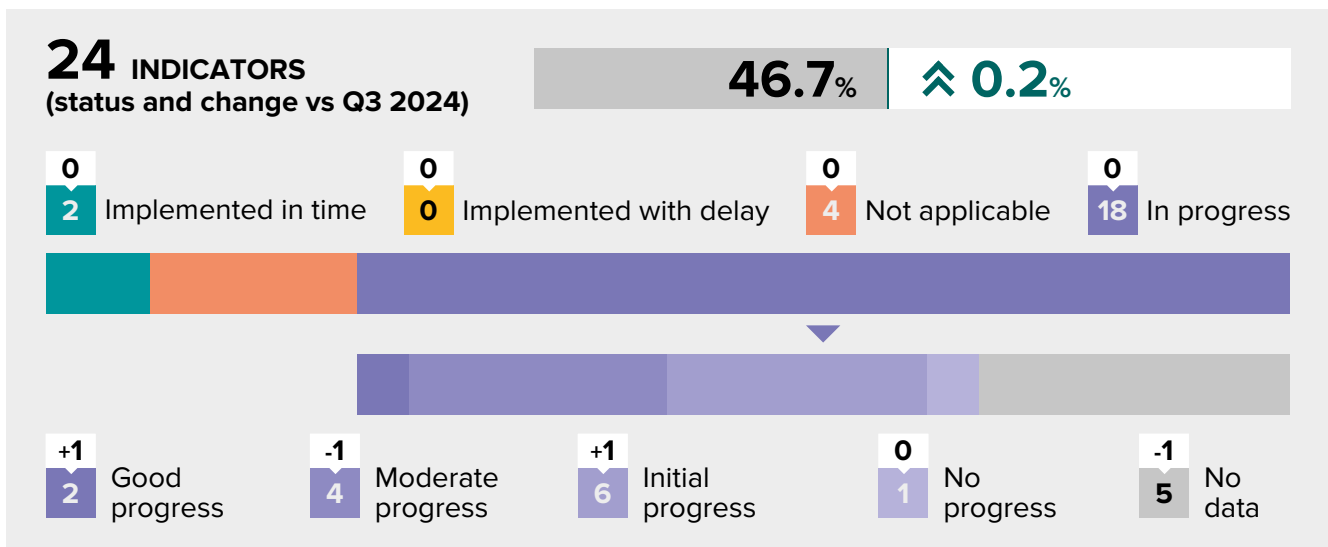
- On November 1, the Cabinet of Ministers of Ukraine adopted Resolution No. 1254 "[Certain Issues of Ensuring the Functioning of the National Database of Energy and Operational Characteristics of Buildings](#)", which defines the procedure for filling the national database of energy performance characteristics of buildings (hereinafter referred to as the building database). The building database will be a component of the Unified State Electronic System in the Field of Construction, freely accessible. The adoption of the resolution is an important step both for the formation of evidence-based policy-making and for tracking the implementation and effectiveness of policies in the field of increasing the energy efficiency of buildings. In particular, information from the building database will allow identifying priority buildings for the implementation of energy efficiency measures;

providing data for calculating the target energy saving indicator in the central government buildings and tracking its achievement; ensuring tracking the implementation of requirements for mandatory certification of buildings occupied by the state authorities and local governments.

- In addition, the Order of the Ministry of Community and Territorial Development of Ukraine dated October 28, 2024 No. 1196 approved [the Procedure for Monitoring the Achievement of the Energy Saving Target in Buildings of State Government Bodies](#) . This monitoring is carried out by the State Agency for Energy Efficiency and Energy Saving through determining the overall change in energy consumption in buildings of state government bodies in the reporting period and comparing it with the target indicator.
- The necessary preparatory steps are being taken to improve the financial condition of heat supply enterprises. The Ministry for Communities and Territories Development has ensured that an audit of the debt of heat supply enterprises is carried out. This step has enabled Ukraine to meet one of the milestones of the International Monetary Fund's Extended Fund Facility programme [on time](#).
- During 2024, [76 projects were completed under the “Energodim” program](#) of the Energy Efficiency Fund, aimed at supporting the energy efficient improvement of multi-apartment buildings. However, the volume of measures implemented does not yet allow achieving the annual end-use energy savings target set by the NECP. At the end of December, the Supervisory Board of the Fund approved [changes to this program](#) : the deadline for accepting applications was extended to December 31, 2025, and the conditions for receiving an advance payment were also changed.
- On December 6, the State Fund for Decarbonisation and Energy Efficient Transformation (Decarbonisation Fund) received licenses from the National Bank of Ukraine to introduce financial leasing and factoring, which will allow expanding the list of financial products offered. As of the end of 2024, the Decarbonization Fund [had financed 10 projects for a total of UAH 159.8 million](#) . Data on the reduction of energy consumption from the implementation of these projects is currently unavailable.
- [The state budget for 2025](#) provides for financing the Decarbonisation Fund in the amount of UAH 1.75 billion. At the same time, no state funding is provided for the implementation of the Energy Efficiency Fund programs.
- According to the State Agency for Energy Efficiency, as of December 2024, energy certificates were issued for:
  - 10,590 residential buildings;
  - 3282 public buildings;
  - 2971 educational institutions;
  - 2,176 healthcare facilities;
  - 1060 trade enterprises;
  - 1,154 preschool educational institutions;
  - 270 hotels.
- On December 2, the Ministry of Energy published [a draft order](#) “On Approval of the Methodology for Assessing the Energy Efficiency Potential of the Gas Transportation System, the Electricity Transmission System, the Gas Distribution System, and the Electricity Distribution System.” This methodology is an important tool for identifying energy efficiency measures and their subsequent inclusion in the investment programs of network operators.

- During 2024, small CHPs and cogeneration plants [were put into operation](#) : 14 plants with a total capacity of 32.8 MW, of which 8 plants up to 1 MW (with a total capacity of 3.9 MW) and 6 with a capacity of 1 to 20 MW (with a total capacity of 28.9 MW). Also, 3 small CHPs with a capacity of 20-25 MW with a total capacity of 71.4 MW were put into operation. Local governments put into operation 212.42 MW of gas-piston plants without connection to power grids to ensure the vital activity of critical infrastructure facilities (heating and power utilities and water utilities) in case of emergencies.
- The government is currently providing targeted support for high-efficiency cogeneration through a mechanism for qualification of installations. Qualified installations are exempt from paying excise tax on the electricity they produce. During 2024, 42 qualification certificates were issued, of which 9 were awarded to facilities put into operation for the first time.
- On December 24, the NEURC for the first time set tariffs for thermal energy production [according to a simplified procedure](#) for cogeneration plants with a thermal capacity of no more than 4.3 Gcal/h.
- In 2024, key indicators in the energy performance contracting market increased significantly: 346 tenders were announced (compared to 128 in 2023), resulting in 79 contracts worth UAH 591.3 million (compared to 30 contracts worth UAH 361 million in 2023). This represents a 163% increase in the number of concluded contracts and a 64% rise in financial commitments. Such sharp growth reflects rising demand for energy services and a greater willingness among market participants to finance projects. Notably, a significant number of projects focus not on energy efficiency measures but on ensuring a sustainable electricity supply—primarily through the construction of solar power plants, which offer shorter payback periods..
- There are 7 regional and city Decarbonisation and Energy Efficiency Offices operating in Ukraine (in Mykolaiv, Rivne, Kharkiv, Zhytomyr, Vinnytsia, Dnipro and Kropyvnytskyi). To date, these offices have provided over 500 consultations to stakeholders, organised around 50 events to promote energy efficiency and decarbonisation, and prepared and submitted approximately 25 project applications for soft loans to the Decarbonisation Fund.
- The State Targeted Economic Programme to Support the Thermal Modernisation of Buildings until 2030 and the State Targeted Economic Programme for the Energy Modernisation of State - or Municipally-Owned Thermal Energy Producers until 2030 remain unapproved by the government.

# ENERGY SECURITY



In the fourth quarter of 2024, significant achievements were recorded in the area of diversification of energy supply and the creation of minimum stocks of oil and petroleum products (MSOP). At the same time, a number of important measures, especially related to the development of domestic energy production, demonstrated slow progress.

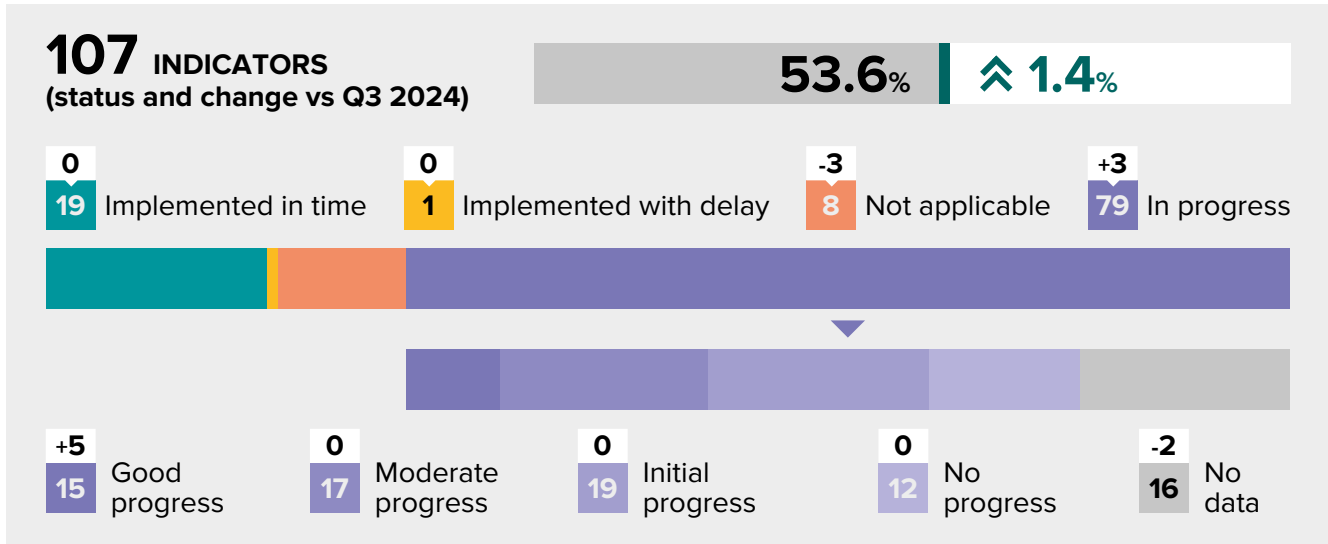
Particular attention was paid to the protection of critical infrastructure and ensuring its resilience. [According to the Ministry of Energy](#), the vast majority of critical infrastructure facilities (CIFs) were provided with backup power sources. However, it is of concern that none of the third-level physical protection facilities were completed by the end of 2024, and gas storage filling level did not reach the target of 13.2 bcm.

## KEY EVENTS

- Following the 2024/2025 heating season, a historically minimal level of gas reserves is expected. As of November 1, 12.9 bcm were accumulated, although the filling target was arbitrarily set at 13.2 bcm. Coal reserves at TPPs/CHPs warehouses remained at a record level of 3.1 million tons. Significant diversification of petroleum products supplies was maintained: in 11 months of 2024, the main suppliers of gasoline were Romania (35.33%), Poland (22.57%), and Lithuania (17.39%), of diesel fuel – Greece (24.64%), Poland (11.56%), and Turkey (10.69%).
- On December 24, the Law "On Minimum Stocks of Oil and Petroleum Products" (MSOP) came into force, which is a key step towards creating a security of supply system. In later December, the Cabinet of Ministers [approved](#) the procedures for monitoring the quality and safety of petroleum products, for monitoring volumes in the markets of oil, petroleum products and liquefied petroleum gas, as well as for the operation and maintenance of an electronic reporting system. Another resolution [approved](#) the Procedure for the creation, management and operation of the MSOP system in Ukraine. The Ministry of Energy also [published](#) a draft Cabinet of Ministers order on approving a contingency plan to deal with crisis situation in the oil and petroleum products market, which regulates measures to ensure market stability and security of supply.
- Accreditation of market participants in the reporting system has begun. At the same time, the creation of the MSOP has not started: the volumes and list will be calculated by the Ministry of Energy based on data for the full base year obtained from the mentioned reporting system.

- There is no progress in implementing most up-to-date EU acquis on security of electricity and gas supply, despite the development of drafts. At the same time, on November 28, the Ministry of Energy [amended](#) the Instructions on the preparation and application of hourly electricity outage schedules, which tasked the State Inspectorate on Energy Supervision with tasks of monitoring the security of supply and analyzing the documentary assessment of the situation with restrictions on consumers.
- The Ministry of Energy also [initiated amendments](#) to the Procedure for Ensuring the Supply of Electricity to Protected Consumers to simplify the qualification procedure for such consumers (in particular, the exclusion of a bank guarantee and advance payment), detail the safe disconnection procedure, and the payment assurance mechanism. No protected consumers have been identified so far under the applicable procedure.
- The Cabinet of Ministers adopted the [Resolution No. 1483](#) on the restoration of hydropower facilities, which significantly simplifies procedures. Within the framework of a pilot project, works can be carried out before the approval of project documentation based on technical solutions, while design, surveying and construction works can be performed simultaneously. Design and construction can be performed without obtaining urban planning conditions and restrictions on the development of the land plot, obtaining a report on the results of examination, obtaining the right to perform construction works, etc.
- It should be noted that, as of October 2024, Ukrhydroenergo [had concluded](#) contracts for over 12 billion UAH to protect its facilities (development of design and cost estimate documentation, purchase of materials, construction of protective structures and installation of anti-drone systems). For comparison, Energoatom concluded agreements for only 1.29 billion UAH.
- Since the beginning of the full-scale Russia's invasion, almost 5,000 generators of various capacities have been provided to enterprises in fuel and energy sectors. According to [the Ministry of Energy](#), this has provided backup power supply to the vast majority of critical infrastructure facilities (CIF).
- As of the end of 2024, construction of the second level of protection at the CIF was still [ongoing](#), as well as the search for funding for the third level. According to [a member of parliament](#), none of the facilities of third protection level were completed.
- [According to Ukrenergo](#), the development of "energy independence passports" for each region has begun, and they shall be completed by the end of 2024. These documents will determine the provision of households and CIF with own power sources. At the same time, it is not yet clear how this initiative correlates with public policy documents, in particular the 2035 Strategy for the Development of Distributed Generation.
- The government [approved](#) the draft Law on the National Program for Radioactive Waste Management with a total cost of 20 billion UAH, of which 9.65 billion UAH shall arrive from the state budget, and 10.33 billion UAH – from other sources. For 2025, the state budget provides for expenditures of 726.7 million UAH, including 670.5 million UAH for the target program from the special fund (for comparison, for 2024, the corresponding expenditures amounted to 632.15 million UAH). It is also planned to raise 668.5 million UAH from other sources, including the radioactive waste producer and international technical assistance. The draft [has been submitted](#) for consideration by the Verkhovna Rada.

# INTERNAL ENERGY MARKET



Good progress has been made in preparing the legislation necessary for further liberalisation of the electricity market, its transformation and integration with EU markets, and the development of new business models. It is expected that a significant number of related policies and measures of the NECP will be implemented following the adoption of a finalised and agreed version of the law transposing the Electricity Integration Package and the related secondary legislation. However, some important aspects of the market operation remain unharmonised with the EU acquis, in particular in terms of pricing in the wholesale and retail markets, the accompanying mechanisms of public service obligations (PSO), etc.

Noticeable progress has been recorded in improving the resource adequacy and flexibility of the power system, launching mechanisms for the development of distributed generation, in particular through long-term auctions for procurement of ancillary services, a tender for the construction of generating capacity, etc. However, in wartime conditions, the implementation of capital-intensive projects, in particular the development of interconnectors, network infrastructure, the rollout of smart grid technologies, etc., is slow or suspended due to high military risks, as well as a shortage of material, technical, financial and human resources.

In the context of gas market development, good progress should be noted in terms of developing a system of technical regulations, which started in the previous quarter with legislative changes regarding the State Energy Supervision Agency, as well as with regard to promoting biomethane production. At the same time, draft acts published for public discussion in the previous quarter were not adopted; this applies, in particular, to the Technical Regulations for Natural Gas. There are also no other important decisions regarding discrete elements of the natural gas market (for example, the deadline for equipping consumers with meters). In general, progress, albeit at different rates, is present in a significant part of the policies and measures of the NECP, which is positive, especially considering that their term of validity begins mainly in 2025.

## ELECTRICITY MARKET

- In October 2024, two draft laws ([No. 12087](#) and [No. 12087-1](#)) were submitted to the Verkhovna Rada, which provide for the **transposition of the EU acquis within the framework of the Electricity Integration Package** and relate to the implementation of many policies and measures of the NECP in the Internal Energy Market dimension:
  - The draft laws lay the foundations for the future **coupling of day-ahead and intraday markets** and the integration of the Ukrainian balancing market into relevant EU platforms.
  - The draft laws provide **clarifications regarding the operation of new business models** (aggregation, energy storage, active consumers with self-generation (net billing), demand-side management, provision of flexibility services, etc.) and their integration into the electricity market. However, despite the previously adopted legislation, there is a significant gap between the development of the legal framework and the real practice of evolving and integrating new business models into the market. In particular, in the 4th quarter of 2024, the Regulator [issued](#) one new license for each of the aggregation and energy storage business models. Accordingly, as of December 31, there are two active licenses in each of these areas.
  - The draft laws provide for a **capacity mechanism** acceptable in EU countries (Article 19-1), which should replace the current mechanism, which stipulates competitive procedures for the construction of generating capacity and the implementation of demand-side management measures (Article 29 of the Law "On the Electricity Market").
  - A new Article 44-1 (Redispatching) has been included, which clarifies the conditions for applying **redispatching to generating facilities using RES**.
- **In conditions of war, Ukraine does not comply with the “70% Rule” to ensure the availability of interconnector transmission capacity (ITC)** for cross-border electricity trade at a level of at least 70%. In accordance with ENTSO-E decisions, for the reporting period, the maximum allowed ITC for electricity imports to Ukraine from the power systems of ENTSO-E countries was 1,700 MW (in October-November) and 2,100 MW (in December), for exports – 550 MW. For October-December 2024, the average hourly ITC offered for allocation at daily auctions [was](#): for imports – 611.3 MW (ITC availability – 33.3%); for exports – 106.9 MW (ITC availability – 19.4%). The failure to comply with the “70% Rule” is primarily caused by the unstable situation in Ukraine's power system due to the impact of the war, which does not allow for properly guaranteeing to users the availability of ITC allocated at auctions.
- In October, the Regulator (NEURC) [initiated](#) a regulatory procedure to review the price caps on the electricity market. However, price caps on the DAM, IDM, and BM [did not change](#) in the 4th quarter. In October-December 2024, electricity prices on the DAM [were](#) precisely at the level of or close (with a deviation of up to 1%) to the upper price caps in 32.2% of settlement periods (hours). Legislative changes regarding the abolition of price caps and the introduction of technical price limits harmonized with the EU markets are stipulated in the draft laws on the transposition of the Electricity Integration Package. At the same time, there is no data on the process of developing a roadmap for the gradual liberalization of the gas and electricity markets, which should ensure the reform of pricing for households.
- **The evolution of the active consumers with self-generation (net billing) is still in its initial stage.** In order to improve the prerequisites for their development and intensification of market activity, the legal framework continued to be improved. In particular:

- The Regulator has [amended](#) the Procedure for the Sale, Metering, and Settlements for Electricity Generated by Active Consumers and the Retail Electricity Market Rules to clarify and expand consumers' opportunities for market participation.
- The Verkhovna Rada [adopted](#) in the first reading the draft law On Amendments to Certain Laws of Ukraine in the Field of Energy and Heating on Clarifying the Provisions Related to the Effect of Martial Law in Ukraine (Registration No. 9381). In particular, the act provides that active consumers will be able to purchase electricity generated by any third-party installations connected to the networks of such a consumer. It also provides for **the abolition of the requirement for licensing for active consumers** in cases where the electricity generation is carried out by active consumers, or third parties connected to the electricity networks of active consumers if the installed capacity of such power plants does not exceed 20 MW.
- **To improve the resource adequacy, flexibility, and resilience of Ukraine's power system, Ukrenergo [held](#) the third special auction for the procurement of ancillary services**, namely automatic frequency restoration reserve (aFRR) for a period of 5 years. Two types of products were procured (for each settlement period): from 472 to 555 MW - ramp-up reserve and from 201 to 252 MW - symmetrical reserve. According to preliminary results, the accepted bids are up to 5 MW for ramp-up reserves and up to 98 MW - symmetrical reserve for certain hours of the day. Eight potential aFRR service providers participated in the auction. After providing financial security the auction winners will be able to conclude a fixed contract in euros with Ukrenergo for 5 years, with a postponement of the aFRR service provision for 1 year. Accordingly, investors will have until mid-November 2025 to build new generation facilities, undergo their certification, and start providing services from January 1, 2026. Additional auctions for long-term procurement of ancillary services are expected in subsequent reporting periods.
- Within the framework of the ongoing **tender for the construction of generating capacity**, [the tender documentation](#) was approved, in particular, detailed technical requirements for new capacities, qualification requirements for participants, terms of payment for the service, and a sample contract for the provision of services to ensure the development of generating capacity. According to the target scenario, it is planned to hold a competition for the construction of highly flexible power plants with a quick ramp-up with a total capacity of 1,400 MW to provide Ukraine's power system with guaranteed secondary reserves (frequency restoration reserves). In the first stage of the competition, 700 MW is purchased, split into two lots: 500 MW of capacity with construction in the territory of priority regions; and 200 MW in other regions. Tender applications from participants are accepted until February 28, 2025.
- In terms of **distributed generation (DG)**, [according to](#) the Ministry of Energy, as of December 31, 2024, the total capacity of connected gas-fired DG facilities was 967 MW. Of these, 835 MW were commissioned in 2024. However, according to [operative information](#) from Ukrenergo, based on DSOs data, as of the end of 2024, the total installed capacity of commissioned gas-fired DG facilities (up to 20 MW), including small CHPs and cogeneration plants, is 167.51 MW, of which 14 facilities with a capacity of 32.8 MW were commissioned in 2024. In addition, 3 gas generation facilities from 20 to 25 MW with a total capacity of 71.4 MW were commissioned in 2024.<sup>1</sup> Considering the priority of building DG installations that ensure guaranteed electricity production, **keeping the current**

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1 Ukrenergo data does not include gas RG facilities that are connected directly to installations and internal networks of consumers exclusively to cover their own needs and that do not supply capacity to the Unified System of Electricity of Ukraine. Also, the TSO does not have data on constructed and connected, but not commissioned, generating capacities.

## **dynamics will not allow fulfilling the tasks of the 2035 Distributed Generation Development Strategy to create up to 4 GW of additional DG capacity by the end of 2026.**

- [According to the NBU](#), from June to December 2024, banks began financing projects to restore energy infrastructure, including the construction of DG, in the amount of UAH 10.5 billion, which approximately corresponds to an additional 400-500 MW. The largest amounts of funds were allocated for the purchase and installation of gas-fired cogeneration plants (208 MW), and the construction of solar power plants (141 MW). Projects are funded in 21 oblasts of Ukraine.
- Tenders for the purchase of gas engine (GE), cogeneration, gas turbine (GT) units, or supporting engineering and construction services were held by large state-owned companies: Ukrnafta (GE and cogeneration units with a total capacity of 126 MW); Naftogaz Group (construction of cogeneration GE for 5.7 MW, and cogeneration units for 5 MW); GTS Operator of Ukraine (GT for 50.5 MW); Ukrzaliznytsia (equipment for small-scale gas generation up to 270 MW and supporting works). State-owned companies are also developing DG facilities at the expense of grant funds (Naftogaz Group – 80 MW).
- In terms of battery energy storage systems (BESS), DTEK [plans](#) to build BESS with a total power capacity of 200 MW and an energy capacity of 400 MWh (6 BESS with a power capacity of 20-50 MW in different regions of Ukraine). The project is planned to be completed by October 2025. Also, the OKKO Group project to build BESS with a capacity of 20 MW is in the final stage of implementation.
- The Regulator [has published](#) a draft resolution approving the Transmission System Development Plan for 2025-2034 (for security reasons, the document remains [non-public](#)). The Regulator has also [approved](#) tariffs for distribution system operators for 2025, however, the DSO network development plans and their annual investment programs remain publicly unavailable.
- In order to **improve settlements in the electricity market, and reduce debt in the balancing market**, in particular on the part of **protected consumers**, the Ministry of Energy [has published](#) an updated draft of amendments to the Procedure for Ensuring the Supply of Electricity to Protected Consumers (PCs). The draft provides for narrowing the list of PCs and includes only such categories as state-owned coal mining enterprises; centralized water supply and drainage utilities of all forms of ownership; and state and municipal heating utilities, with the exception of those that generate electricity. It is planned to consider proposals for granting the PC status by a special Interagency Commission, as well as approve the list of PCs by the Cabinet of Ministers. To guarantee payment for electricity, it is planned to use special PC accounts with an appropriate algorithm for their use. Also, a draft law on the application of the algorithm for distributing funds from a current account with a special use regime (Registration No. 11301-d) [has been prepared](#) for the second reading.

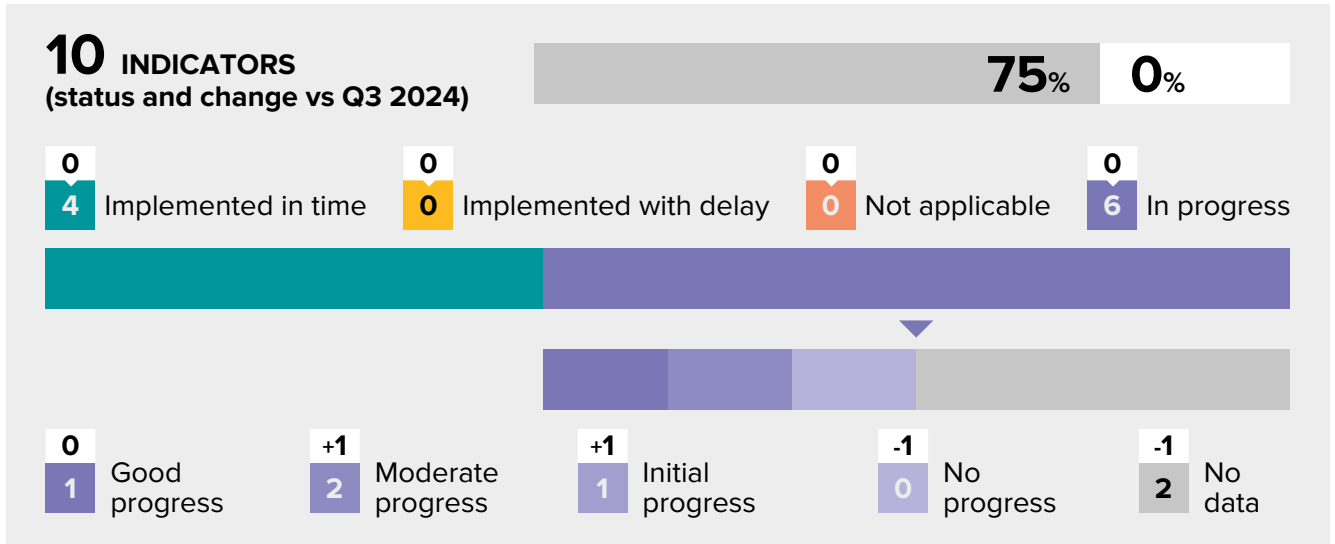
## **GAS MARKET**

- According to the results of 2024, natural gas production and biomethane production remain at levels lower than the expected targets set for 2030.
- In the context of natural gas production, [changes were made](#) to the rental rate, which is applied depending on the sale price, namely: the reduced rate for prices up to 150 USD/thousand cubic meters was excluded. In these circumstances, the meaning of the state guarantee regarding the invariability of the rental rate for new wells, which is fixed by paragraph 4 of subsection 9-1 of section XX of the Tax Code of Ukraine, becomes uncertain. At the same time, the deferral of payment of rent for volumes of extracted but not sold gas was maintained, as well as special rules for determining the actual sale price to which the rent rates are applied. In addition, some

proposals were made public to increase the transparency and predictability of the functioning of production sharing agreements, and [the National Program for the Development of the Mineral and Raw Materials Base of Ukraine for the period until 2030 was updated](#) .

- In the context of biomethane production, the NEURC took measures to simplify the procedure for connecting biomethane production facilities to gas networks (by approving the form of technical conditions for connection), and new initiatives have emerged to provide support to biomethane projects. At the same time, measures on other aspects of stimulating the biomethane market remain in the process of implementation. In particular, market participants emphasize the importance of resolving the issue of determining adequate physical and chemical characteristics of gas, including biomethane, for supply to the GTS, for which it is necessary to adopt a balanced Technical Regulation on Natural Gas.
- Work continues on establishing the function of state supervision in the natural gas market. Thus, the Ministry of Energy adopted one of the regulatory documents provided for in Article 8 of the Law “On the Natural Gas Market”, namely [the Rules for Technical Operation of Gas Supply Systems](#) .
- Some progress was made in strengthening the unbundling of DSOs. This issue is mentioned in [the State Property Policy](#) adopted to implement the Ukraine Plan and will be addressed as part of the implementation of this policy through corporate governance reform.
- Some policies on which there is no progress should be noted. In particular, these are amendments to the Law “On Ensuring Commercial Metering of Natural Gas” in order to fix an adequate deadline for completing full-scale equipment with consumer metering devices. The corresponding law was not adopted. There is also no progress yet in assessing the benefits and costs of large-scale equipment with intelligent gas meters, as required by Ukrainian and EU legislation. Moreover, there were no changes since the previous monitoring period in terms of developing a high-quality commercial metering system for natural gas.
- Separately, the measure to implement an electronic consumer account (eConsumer) should be noted. While the corresponding measure is provided for in the NECP, and was also recently duplicated in [the draft Action Plan for the Implementation of the Energy Strategy for the Period up to 2050](#) , there are no visible steps towards its implementation. In addition, similar initiatives are underway in parallel with this project - for example, “Housing and Utilities Space” under the leadership of the Ministry of Development and the Ministry of Digital Economy. There is a need to streamline the development processes of many digital solutions in order to balance the interests of the state, consumers and business, as well as to prevent the limitation of space for competition between suppliers as a result of the implementation of such solutions.
- Regarding certain policies, there continues to be a problem of information availability, in particular for the period of martial law. This concerns the status of submission and consideration of 10-year development plans of GTS and UGS operators, as well as investment programs of the operator of main oil pipelines.

# RESEARCH, INNOVATION AND COMPETITIVENESS



During the quarter, moderate progress was observed in the development of key areas, in particular in the financing of scientific research, training of professional personnel and improvement of the regulatory framework. An important achievement is a significant increase in funding for the National Research Foundation of Ukraine. In addition, the development of support programs from the Fund for Decarbonization and Energy Efficient Transformation continued.

At the same time, there is still a certain lack of data and less noticeable progress on some indicators, in particular, this concerns international cooperation in the development of vocational training and retraining programs. Increased international cooperation could significantly improve the situation and achieve more ambitious goals in the coming periods. Further progress will also be determined by the overall success of European integration reforms and the attraction of investments in green technologies, which can become an incentive for the development of relevant innovations and research.

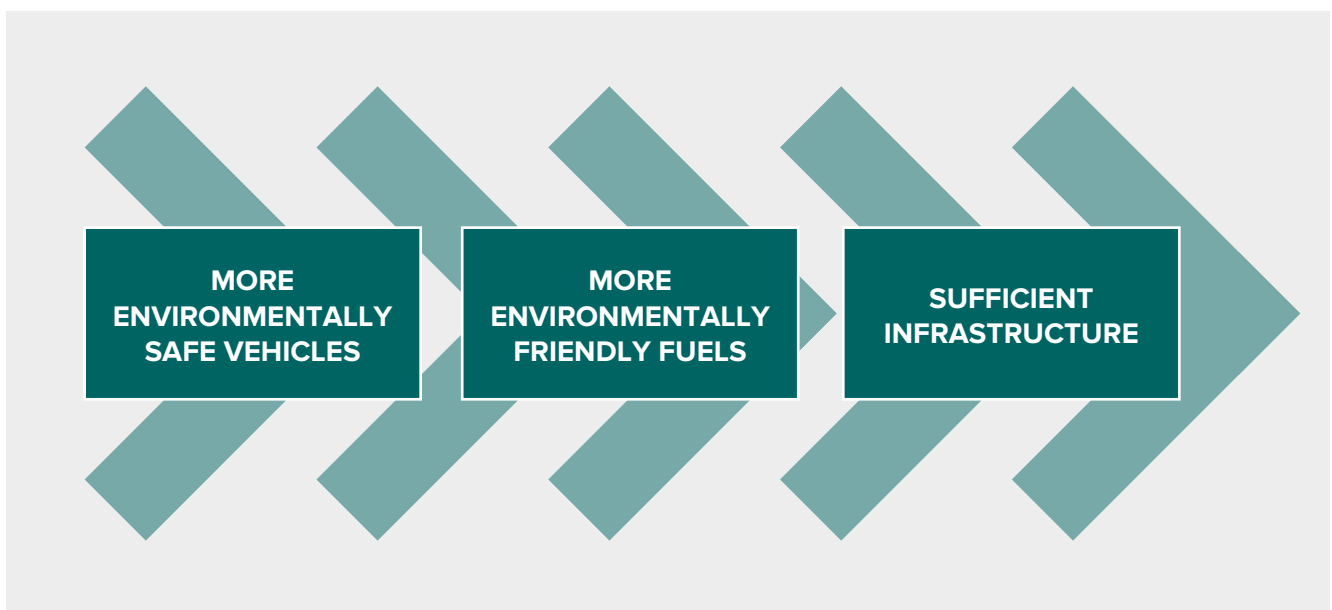
## KEY EVENTS

- The 2030 Digital Innovation Development Strategy (WinWin) was [approved](#), together with an operational plan of measures for its implementation. The strategy provides for the development of human capital and education necessary for strengthening innovation activity, the creation of inclusive innovation products and programs, the development of the necessary innovation infrastructure, deregulation of activities in this area and a number of other measures that will significantly improve the development of innovations and new technologies in Ukraine. The envisaged goal of developing domestic infrastructure for research, innovation and implementation of solutions in the field of artificial intelligence (strategic goal 16) also deserves special attention, the implementation of which will allow integrating Ukrainian research institutes in the development of artificial intelligence, ensuring the development of relevant technologies, ensuring partnership with state authorities in access to data and effective implementation of EU standards in this area.

- The Strategy's operational action plan also focuses on a number of steps by 2030 in the areas of cybersecurity technology development, innovative agriculture, semiconductor technology development, research infrastructure, etc.
- According to the data [According to the State Statistics Service](#) , the dynamics of exports in the category "Machinery, equipment and mechanisms; electrical equipment" showed an increase of 119.9% in 2024 compared to 2023, the volume amounted to 3.143 billion USD.
- The State Budget of Ukraine for 2025, [adopted](#) during the quarter, also provides for a significant increase in expenditures for the National Research Foundation of Ukraine - by approximately 25% compared to 2024.
- The Fund for Decarbonization and Energy Efficient Transformation continues [to operate](#). In particular, during Q4 2024, 16 projects were financed (in Q3, only one project) for the amount of over UAH 160 million. Most of the projects concerned energy service companies (ESCOs), as well as industry decarbonization and the transition to renewable energy.
- The Government of Ukraine has also [completed the development of a draft law on the introduction of the eco-industrial park model. The document was submitted to the Verkhovna Rada for consideration](#) in January 2025. The draft law provides for clarification of the terms “industrial park” and “eco-industrial park”, defines possible types of activities on the territory of these facilities, the procedure for their registration and criteria for determining industrial and eco-industrial parks, and the rights and obligations of their management companies.
- Progress is expected in individual indicators over the next periods, in particular, the development of a special program to support small and medium businesses, consistent with the EU Taxonomy, is expected by the end of 2027.

# SPECIAL TOPIC: DECARBONIZATION OF THE TRANSPORT SECTOR

The transport sector is responsible for about 34 million tons of CO<sub>2-eq.</sub>, which are mainly generated by the combustion of motor fuels. The sector accounts for 10%<sup>2</sup> of greenhouse gas (GHG) emissions in Ukraine. Decarbonization of the transport sector can be undertaken by implementing comprehensive measures to increase energy efficiency through electrification and renewal of the vehicle fleet, as well as optimizing logistics routes, switching to low-carbon (liquefied petroleum gas and compressed/liquefied natural gas) and alternative fuels (biofuels), as well as stimulating behavioral changes. In addition, important prerequisites for decarbonization of the transport sector are ensuring sufficient electricity and low-carbon/alternative fuels, as well as adequate infrastructure for their delivery to users of cleaner vehicles.



The issue of decarbonization of the transport sector is mentioned fragmentarily in a number of strategic documents adopted over the past 10 years, in particular [the National Economic Strategy for the period up to 2030](#), [the Energy Strategy for the period up to 2050](#) (hereinafter referred to as the ESU), [the National Renewable Energy Action Plan up to 2030](#) (hereinafter referred to as the NREAP), and [the previous version of the transport strategy](#).

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2 As of 2021, according to the Greenhouse Gas Emissions Inventory of Ukraine for 1990-2022, [https://unfccc.int/sites/default/files/resource/Ukraine\\_NIR\\_2024.pdf](https://unfccc.int/sites/default/files/resource/Ukraine_NIR_2024.pdf)

The NPEC, under the dimension “Decarbonization”, provides for 4 relevant policies that contribute to the reduction of greenhouse gas emissions in the transport sector:

- PM\_D\_WEM\_08 Tax benefits for vehicles equipped with electric motors;
- PM\_D\_WEM\_09 Stimulating the development of electric charging infrastructure;
- PM\_D\_WEM\_10 Stimulating the development of low-carbon municipal transport;
- PM\_D\_WAM\_15 Mandatory use of liquid biofuel (biocomponents) in the field of transport, which meets sustainability criteria.

In addition, there are considerable links between the dimension “Decarbonization” in terms of transport decarbonization with the dimension “Energy Efficiency”, but also with the dimension “Internal Energy Market” in the context of the functioning of gas and electricity markets. At least some of the NECP policies in this latter dimension address the issue of transport decarbonisation:

- PM\_IM\_WAM\_01 Mechanisms for the development of new interstate connections/intersections (in the context of the implementation of Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructure, including for transport needs);
- PM\_IM\_WAM\_02 Additional procedures for energy infrastructure development planning (which, in particular, provides for the need to take measures for mutual coordination of planning processes in the electricity, gas, oil, and hydrogen markets, as well as ensuring coordination of energy infrastructure development plans with development plans for territories and territorial communities, which include sustainable urban mobility plans);
- PM\_IMG\_WAM\_01 Creating a regulatory framework for shaping future markets and building their infrastructure (in the context of hydrogen as a fuel);
- PM\_IMG\_WEM\_01 Current measures to ensure the production of sufficient volumes of natural gas;
- PM\_IMG\_WAM\_04 Additional measures to ensure the production of sufficient volumes of natural gas;
- PM\_IMG\_WEM\_02 Creation of a technical safety system on the gas market (taking into account the powers of the Ministry of Energy to approve and the State Energy Supervision Agency to monitor compliance with regulatory legal acts on the technical operation of gas supply systems);
- PM\_IMG\_WEM\_05 Current measures to promote biomethane production (taking into account the extension of the norms of the Law “On Alternative Fuels” to compressed and liquefied biomethane), as well as, potentially, PM\_IMG\_WAM\_09 Additional measures to promote biomethane production.

The Cabinet of Ministers of Ukraine [approved](#) the new National Transport Strategy of Ukraine for the period until 2030 (hereinafter referred to as the NTSU or the Strategy) by Resolution No. 1550 of December 27, 2024. The Strategy directly mentions the issue of decarbonization, although this is not a priority.

The approval of the NTSU and the operational plan of measures for its implementation in 2025-2027 allowed to start implementation of the first reform in the transport sector - comprehensive planning of

the transport sector development, [provided for](#) in the Ukraine Plan. The goal of the Strategy *is to restore the transport system, which was affected by the armed aggression of the Russian Federation against Ukraine, at higher standards; its further development in accordance with EU policies and standards, in particular the requirements of sustainable, inclusive and crisis-resistant transport mobility; integration into the EU transport network and the global transport network; ensure an appropriate level of traffic safety; meet the needs of households and business in transport and mobility; contribute to the defense capability of the state, as well as the competitiveness and sustainability of the national economy.*

In addition, [the Law of October 8, 2024 No. 3991-IX](#) “On the Basic Principles of State Climate Policy” provides for the development and approval of sectoral program documents on reducing anthropogenic GHG emissions, including in the transport sector, by October 2026. According to the Law, such a program document should, among other things, include a sectoral goal for reducing greenhouse gas emissions, specific policies and measures, amounts and sources of funding, and mechanisms for assessment, monitoring, and reporting. In the event that it is inappropriate to develop a separate sectoral document on reducing emissions in the transport sector, these issues should have been included in the current NTSU.

The NTSU generally outlines the direction of policies and measures that are necessary to ensure the decarbonization of the transport sector. At the same time, a comprehensive and detailed vision of the low-carbon transformation of the transport sector is missing. The document relies too much on other strategies and regulations to achieve the goals of GHG emissions reduction and greening of the transport sector. In addition, the NTSU lacks vision on a number of issues, in particular, the validity period of existing tax incentives for environmentally cleaner transport, liquid biofuels and further steps to fulfill the obligation to achieve a mandatory share of bioethanol in annual gasoline sales.

In the context of the sufficiency of environmentally cleaner fuels, an important aspect is the increase in the use of electricity and/or gas (natural gas, biomethane) in the transport sector, which should be taken into account when formulating policies on the sufficiency of gas resources to meet demand in other documents, in particular the NECP. The NTSU does not specify expectations for such an increase, in particular regarding the prioritization between different categories of alternative fuels (i.e. between electricity, in particular from renewable sources, and gas). Such prioritization should underpin the appropriate fiscal and economic incentives, taking into account in particular the limited public resources.

In terms of ensuring an adequate infrastructure, special attention should be paid to the coordination of spatial planning of transport and energy, in particular at the local level. The NTSU envisions the development and approval of urban sustainable mobility plans by 2027, although several communities already have these documents. However, the NTSU does not contain information on the current status of the development and approval of these documents, as well as - mainly - their key provisions and local priorities, which should provide a basis for further analysis and decision-making on prioritizing alternative fuel categories at the state level.

At the same time, one aspect for improving the NECP in the future is to pay more attention to aspects of market regulation of gas and electricity specifically for the purposes of the transport sector.

## DECARBONIZATION GOALS FOR THE TRANSPORT SECTOR IN THE NTSU AND OTHER STRATEGIC DOCUMENTS

In the NTSU, the issue of decarbonization is most widely covered in the third comprehensive strategic goal - *safe, people-centered, environmentally friendly and energy-efficient transport with a focus on decarbonization*. Among the expected results of the Strategy implementation included a GHG emissions reduction from road, aviation, water transport and railways to 90% of the 2021 levels by 2030. However, the indicators table does not contain quantitative indicators for GHG emissions reduction and only states that by 2030 there should be a decrease in GHG emissions from road, aviation, water transport and railways from the base year of 2021.

The previous version of the transport strategy, approved in 2018, had quite ambitious targets for the electrification of transport by 2030 – increasing the share of electric transport in domestic traffic to 75%. The current NTSU also notes the important role of electrification as one of the main directions for ensuring the transition to a sustainable and “green” mobility and transport system. However, there are no clear targets, and the expected results only refer to an increase in the share of electric transport in cities and suburban areas.

Among the expected results of the NTSU is also *an increase in the level of use of alternative and renewable fuels and electricity in all modes of transport and transport infrastructure facilities to 50% by 2030*. The NECP and NREAP provide for a 7-fold increase in the share of energy from renewable sources in final energy consumption by the transport sector - from 2.5% in 2020 to 17.2% in 2030, which should be achieved through a rapid increase in the use of liquid biofuels (primarily bioethanol) and electricity generated from renewable sources.

According to [the Law of January 14, 2000 No. 1391-XIV](#) “On Alternative Fuels”, alternative fuels include solid, liquid and gaseous fuels that are an alternative to traditional fuels and are produced (extracted) from non-traditional sources and types of energy raw materials. This definition actually covers only biofuels and waste.

At the same time, Regulation (EU) 2023/1804 of 13 September 2023 on the deployment of alternative fuels infrastructure and repealing Directive 2014/94/EU (hereinafter referred to as Regulation 2023/1804), which Ukraine must implement, contains a broader definition that includes three categories of alternative fuels:

- alternative fuels for zero-emission transport (which include electricity, hydrogen and ammonia);
- fuels from renewable sources (which include, in particular, fuels from biomass);
- fuels from non-renewable sources or from transitional sources (which include, in particular, CNG, LNG, LPG).

## ELECTRIFICATION OF THE TRANSPORT SECTOR

The ESU assumed that the share of electric vehicles in the total number of cars will reach 15% in 2032 and 50% in 2050, and rail transport will be almost completely electrified by 2050. Achieving these indicators requires a set of measures both to stimulate changes in the structure of the vehicle fleet and to develop the respective infrastructure.

The first steps to stimulate the development of electric transport were taken in 2018 with the introduction of a number of tax benefits for the import of electric vehicles, the validity of which was extended several times. In particular, since 2018, no customs duty and VAT have been charged for the import of electric vehicles. These fiscal incentives have contributed to the growth of the electric vehicle market by more than 16 times - from [7.4 thousand](#) in 2018 to [about 120 thousand](#) in 2024. However, these tax benefits are valid until January 1, 2026, and the NTSU does not provide a vision for their extension.

**In addition, other tax preferences are available for electric vehicles, including:**

- the excise tax rate for electric vehicles is only 1 euro per 1 kWh of electric battery capacity – significantly lower than for cars with internal combustion engines or hybrids;
- from July 1, 2022, electric cars are exempt from paying the mandatory state pension insurance fee upon first registration;
- from January 1, 2022 to January 1, 2031, transactions for the import into the customs territory of goods used for the own production of vehicles with electric engines are exempt from import duty and VAT;
- From January 1, 2022 to December 31, 2035, the profits of manufacturers of electric motors, lithium-ion (lithium-polymer) batteries and chargers for electric vehicles, as well as vehicles with electric motors themselves, are exempt from taxation.

In March 2023, [the Law of February 24, 2023 No. 2956-IX](#) “On Some Issues of the Use of Vehicles Equipped with Electric Engines and Amendments to Certain Laws of Ukraine on Overcoming Fuel Dependence and Developing Electric Charging Infrastructure and Electric Vehicles” (hereinafter referred to as the Law on Electric Transport) came into force, which, in particular:

- introduced terminology related to electric transport;
- obliges state bodies and local governments to approve programs for the development of electric charging infrastructure by the end of 2023, which will provide facilities owned or managed by them with the necessary contractual capacity and electric vehicle charging stations;
- granted the right to condominiums to install charging stations on their premises and independently determine the procedure for using and paying for such stations;
- obliges developers, when developing projects for new high-rise buildings, to take into account the need to provide charging stations for at least 50% of parking spaces for electric vehicles.

The updated NTSU refers to the need to implement measures to accelerate the increase of the share of electric vehicles and electric buses, plug-in hybrid electric vehicles and, in the future, electric vehicles with hydrogen fuel cells in the structure of the vehicle fleet, as well as the development of related infrastructure for charging and refueling these vehicles, stimulating the development of public electric transport and electrification of the railway network. However, the NTSU operational implementation plan for 2025-2027 does not provide for additional measures to promote the electrification of transport, except for improving the legislation and regulatory framework taking into account EU transport policy and legislation, in particular Regulation 2023/1804.

## **TRANSITION TO LOW-CARBON AND ALTERNATIVE MOTOR FUELS**

In the NTSU, CNG, LNG and biomethane fueled vehicles are mentioned as being more environmentally cleaner, on a par with electric vehicles. To stimulate the production and use of these types of transport, the current legislation provides for a number of tax benefits - similar to those for electric vehicles.

Among the problems that need to be addressed, the NTSU mentions the insufficient development of the infrastructure of fueling stations with alternative types of motor fuels, in particular, compressed natural gas (CNG). To achieve the third strategic goal, among other things, it is envisaged to introduce economic and other measures to stimulate the use of environmentally cleaner types of transport in cities and restore the network of CNG car fueling stations. The operational plan for the implementation of the NTSU for the next three years envisions the implementation of Regulation 2023/1804.

According to the NREAP, almost 50% of the share of RES in the total final consumption of the transport sector by 2030 should be ensured by increasing the use of bioethanol by more than eight times by 2030 (up to 420 thousand toe). In order to stimulate the development of the liquid biofuels market, on June 4, 2024, the Verkhovna Rada adopted [Law](#) No. 3769-IX. The law established a requirement to achieve a mandatory share of bioethanol (5 percent by volume) in the total annual volume of gasoline sales from May 1, 2025. However, the NTSU does not mention the role of liquid biofuels in the decarbonization of the transport sector and does not provide any tasks and measures for the development of this area. The need to introduce incentives for the use of alternative fuels and RES for vehicles and transport infrastructure facilities is only mentioned in general terms.

## **DEVELOPMENT OF PUBLIC TRANSPORT AND MICROMOBILITY**

The development and greening of public transport is important both for achieving the decarbonisation goals in the transport sector and for reducing air pollution in cities. To encourage the replacement of the public transport fleet with environmentally cleaner options, the Law on Electric Transport prohibits the purchase buses with internal combustion engines as public transport (except for buses running on compressed or liquefied natural gas, biogas and/or hydrogen) from 1 January 2030. The law also requires that in cities with a population of over 250,000, the share of electric buses and/or buses running on compressed or liquefied natural gas, biogas and/or hydrogen must be at least 25% by 1 January 2030 and at least 50% by 1 January 2033. However, local governments have the right to postpone these requirements.

The NTSU outlines the problem of low quality of passenger transport services due to outdated fleet, lack of investment, mismatch of bus passenger capacity to passenger traffic volumes, and inefficient management of the interregional transport network development. The operational plan for the implementation of the NTSU for 2025-2027 provides for nine measures aimed at solving these problems, in particular, stimulating the implementation of quality standards for public passenger transport at the national and local levels, improving the procedure for providing passenger transport services by all types of public transport and the regional development system of road transport, as well as improving the organization of socially important passenger transport (PSO) by road and inland waterway transport, which is [a European integration obligation](#) of Ukraine (implementation of Regulation (EC) No. 1370/2007), the implementation of which should have been completed by 2022. In addition, the operational plan also provides that by 2027, sustainable urban mobility plans should be developed and approved in cities with a population of more than 50 thousand people, taking into account the urban planning of the trans-European transport network.

Regarding the bicycle transport and other means of micromobility (scooters, electric scooters, unicycles, etc.), the NTSU mentions the need to stimulate the use of bicycles and develop a network of bicycle paths, laid separately from public roads, to ensure bicycle connections between settlements, tourist and recreational bicycle trips. However, the operational plan for 2025-2027 does not provide for specific measures in this area.

## **DECARBONIZATION OF AIR TRANSPORT**

The airspace of Ukraine has been closed to civil aviation flights since the full-scale invasion of the Russian Federation on February 24, 2022. After the end of the war and the opening of the sky, airlines will have to not only restore the air transportation market from/to Ukraine, but also catch up in terms of reducing greenhouse gas emissions. Thus, the NTSU provides for bringing national legislation in the field of air transport in line with international requirements, in particular regarding environmental protection (implementation of a scheme for reducing CO<sub>2</sub> emissions from international aviation). The NTSU operational plan envisions the adoption of a legal act to regulate the issue of compensation obligations for CO<sub>2</sub> emissions from international aviation by 2027 and measures to promote the production of environmentally friendly aviation fuel (Sustainable Aviation Fuel, SAF) in 2026.



