

Daily Alert

**Russian War Against
Ukraine: Energy Dimension**

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#StopRussianAggression
#StandWithUkraine

Resume

- The power system operates stably. Due to the March 9 massive Russian attack, network restrictions remained in the Zhytomyr and Kharkiv regions. Due to equipment overload, emergency outages are possible in some areas in the city of Kyiv and the Kyiv region. The situation remained difficult in the border areas and areas along the front line, as the enemy was constantly shelling distribution networks.
- The government approved a draft law to increase budget expenditures by 537 billion UAH. The President Volodymyr Zelenskyi noted these funds will be used to finance the military, support the defense sector, and purchase defense equipment, including drones.
- Ukrenergo is implementing a record-breaking equipment replacement program in the company's history - so the CEO Volodymyr Kudrytskyi. In addition, the TSO is developing options for protecting facilities from missile attacks, including the latest technologies to make main substations compact and protect them by placing them underground or using shelters.
- The State Agency for Recovery and Infrastructure Development announced the launch of a training course on March 16 for Ukrainian communities.
- Meanwhile, the former Head of the State Agency for Energy Efficiency Valerii Bezus was appointed Advisor to the Vice Prime Minister for Reconstruction. He will work on including the use of energy-efficient tools, RES and alternative fuels in the process of recovery.
- In two years, Ukraine plans to build 10 biomethane production facilities - so the Chair of the Verkhovna Rada Committee on Agrarian and Land Policy Oleksandr Haydu. He also announced the European Investment Bank plans to allocate 50 million EUR to support agro-processing - in particular, biomethane and bioethanol production.

- On March 15, according to the media, the operators of Poland's electricity, gas, and oil transmission systems are to sign an agreement with the Ukrainian side to deepen cooperation.

Electricity Sector

Power system operation

[According](#) to the Minister of Energy Herman Halushchenko, on March 14, the generation has the necessary volumes of capacity to fully meet the demand of consumers throughout the country, so the power system will operate without restrictions. At the same time, restoration works at the facilities of high-voltage grids, which were damaged by the latest massive shelling, continued.

[According](#) to Ukrenergo, on March 14, electricity consumption was at the level of a working day. All types of power plants were in operation, electricity production was sufficient to cover consumption, and minor imports also continued. Due to the March 9 massive Russian attack, network restrictions remained in the Zhytomyr and Kharkiv regions. Due to equipment overload, emergency outages are possible in some areas in the city of Kyiv and the Kyiv region. The situation remained difficult in the border areas of the Chernihiv and Sumy regions and areas along the front line, as the enemy was constantly shelling distribution networks. In other regions, consumption restrictions were not applied, limits were not set.

[According](#) to ENTSO-E, as of March 14, minimal commercial imports of electricity were performed from Slovakia (1-7 MW) and Moldova (0-6 MW) (for different hours during the day). Access to the Slovakia->Ukraine cross-border capacity [was booked](#) by two companies: D.Trading (55 MW) and ERU Trading (10 MW), both on flat schedule; in the direction Moldova->Ukraine - by D.Trading (100 MW) and Artlex Group (2-3 MW). In both auctions, the marginal price was "zero". Capacity in other directions was not offered. At the same time, due to decline in electricity prices in the countries of Eastern Europe, the Base DAM indices in Poland, Hungary, Romania, and Slovakia [exceeded](#) the similar index of Ukraine 1.02-1.24 times only.

Disruption and resumption of supply

[According](#) to the President Volodymyr Zelenskyi, as of March 13, the situation in the energy sector has been normalized, and the demand of consumers is covered in accordance with generation capabilities throughout the free territory of Ukraine.

Large-scale power supply disruptions and, consequently, active recovery works were taking place:

- in the **Zhytomyr region**, [according](#) to the Ministry of Energy, on March 14, due to restoration works at network infrastructure, restrictions on the electricity supply of certain categories of consumers are possible;
- in the **Kharkiv region**, [according](#) to the Regional Military Administration, as the available capacity does not fully meet the needs of households, businesses and industry, outage schedules were applied again. On March 13, due to urgent restoration works performed at the facilities of Ukrenergo in Kharkiv, specialists addressed consumers with a request for [urgent reduction in power consumption](#). After the last Russia's massive missile attack, street lighting is not turned on [in Kharkiv](#), the city's electric transport is also not operating, but it is planned to be launched on March 15. As of March 13, about 170,000 consumers were reconnected to electricity supply in the [liberated territories](#). Due to the active

hostilities and large-scale mining of populated areas, repairs are significantly complicated. Despite the difficulties, specialists restore power supply for 250-300 consumers every day;

- in the **Kyiv region** and the **city of Kyiv**, according to DTEK [\[1,2\]](#), on March 13, in parts of the Holosiivskyi, Sviatoshynskyi, Shevchenkivskyi, and Solomyanskyi districts of Kyiv, as well as in the Bucha district of the Kyiv region, outages were applied under stabilization schedules. The reason was the repeated damage to energy facilities, which currently cannot transmit 100% of electricity to all residents of the mentioned areas. As of 22:00 of the same day, stabilization outages in the entire territory of the Kyiv region [were lifted](#). On the morning of February 14, in part of the Holosiivskyi, Sviatoshynskyi, Shevchenkivskyi, Solomyanskyi districts of the capital and Bucha, Obukhiv, Fastiv districts of the region, outages were applied according to [stabilization schedules](#);
- in the **Odesa region**, [according](#) to Ukrenergo, on March 6-12, specialists restored networks and facilities that supply electricity to 9,000 households, which were damaged by shelling. Currently, there are no consumption limits set and network restrictions present in the region, so there is no need to apply outages;
- in the **Dnipropetrovsk region**, [according](#) to the local DSO, on March 6-12, specialists restored electricity supply to 42,870 households in 10 settlements;
- in the **Zaporizhzhia region**, [according](#) to the local DSO, as of March 14, 23,949 consumers in 70 settlements remained without electricity supply (excluding the temporarily uncontrolled territory). During the day, specialists reconnected 513 consumers of the Orikhiv, 311 of the Vilniansk, and 1 of the Zaporizhzhia power grids, which offline to enemy's shelling and technological violations;
- in the **Kherson region**, [according](#) to the Regional Military Administration, as of March 12, 12 crews (58 specialists and 19 units of equipment) were working to restore electricity supply. Specialists performed works on the damaged lines supplying the villages and towns of Trudoliubivka, Myroliubivka, Vysokopillia, Bilozerka, Kirove, and Nova Zoria. In the Daryivka community, during [emergency recovery works](#), the Russians attacked a crew, one of the workers was injured;
- in the **Mykolaiv region**, [according](#) to the Regional Military Administration, as of March 14, 1,093 electricity supply facilities were partially or completely damaged (+10 during the day), while 10 legal entities-consumers (-42) still remained without electricity supply in the Bashtanka district;
- in the **Chernihiv region**, [according](#) to the Regional Military Administration, on March 13, due to the Russia's artillery fire on the Novhorod-Siverskyi district, a 10 kV overhead line was damaged in the village of Mykhalchyna Sloboda and 465 consumers were disconnected;
- in the **Donetsk region**, [according](#) to DTEK, on March 6-12, specialists managed to reach a number of sites with damaged networks and equipment and repair them, which enabled restoration of electricity supply to 42,000 households;
- there was no up-to-date consolidated information on power supply in the **Luhansk region** at the time of the review preparation.

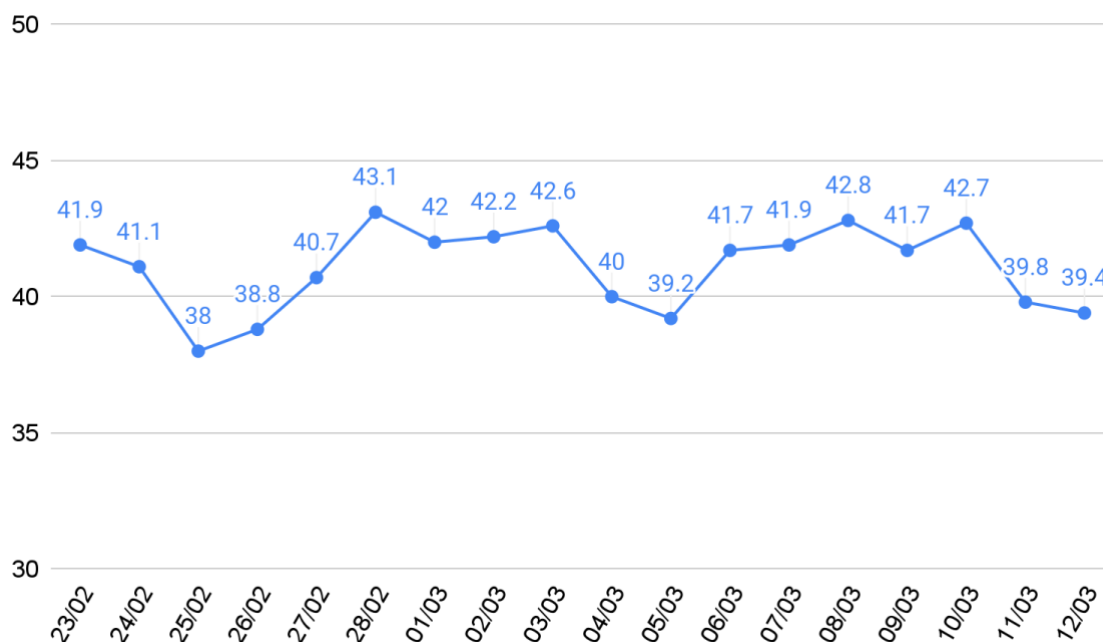
Oil & Gas Sector

Gas system performance

On March 12, the volume of gas transit through the territory of Ukraine amounted to 39.4 mcm (-0.4 mcm as compared to the previous day), i.e. only 36% of the capacity contracted by Gazprom (109 mcm per day). There were no transit flows via the Sokhranivka interconnection point.

The physical imports from EU countries were reported at 14.2 mcm and performed via the Bereghdaroc interconnection point (VIP Bereg) at 7.7 mcm, via the Hermanowice interconnection point (VIP Ukraine-Poland) at 2.5 mcm, via the Budince interconnection point at 3.4 mcm and via the Căușeni interconnection point (Ukraine-Moldova) at 0.6 mcm. On March 12, on Ukraine's gas system exit, except for transit flows, no gas was transmitted.

Transit of Russian gas through the territory of Ukraine, mcm



Source: [Gas Transmission System Operator of Ukraine LLC](#)

Functioning of the natural gas market

At a meeting of the Verkhovna Rada Committee on Agrarian and Land Policy with representatives of the Ministry of Agrarian Policy and Food, the Ministry of Energy, the Ministry of Economy, the State Customs Service, GTSOU and specialized business associations, the Chair of the Committee Oleksandr Haydu [announced](#) the European Investment Bank plans to allocate 50 million EUR to support agro-processing - in particular, the development of biomethane and bioethanol production. According to Haydu, in two years Ukraine plans to build 10 biomethane production facilities. He also expressed readiness to support farmers in the area of legislation.

Disruption and resumption of supply

The Ministry of Energy did not update information on the number of consumers without gas supply. The **Dnipropetrovsk, Donetsk, Luhansk, Zaporizhzhia, Kherson, Mykolaiv, and Kharkiv regions** had the most challenging situation.

In the **Donetsk region**, the local DSO [was preparing](#) the village of Rubtsi for gas flow launch. In the city of Lyman, crews inspected networks for leaks. Due to intense shelling, up to 1,500 consumers in the city of Kostyantynivka remained with no gas supply, as the consequences of the March 6 enemy's attack have already been eliminated; all boiler rooms are operating normally.

In the **Zaporizhzhia region**, the local DSO [replaced](#) 8 meters of an underground high-pressure gas pipeline that was damaged due to the Russian attack. During the works, gas supply to consumers was not interrupted; reconnection through another input was provided. In total, as of March 14, 14,560 households in 37 settlements [remained](#) without gas supply in the controlled territories of the region. On March 13, in the city of Zaporizhzhia, gas supply was restored to 16 households, which had been suspended earlier due to shelling.

In the **Kherson region**, the local DSO [reported](#) another attack on gas networks of several districts in the city of Kherson. Consequently, distribution gas pipelines of high-rise and individual buildings were significantly damaged. The DSO continued restoration works: on March 13, gas supply to 9,000 residents of the city was fully restored.

In the **Mykolaiv region**, according to the Regional Military Administration, as of March 14, 1,387 gas infrastructure facilities (+1 as compared to March 13) were damaged during the war, as a result, 5,213 consumers (no change) [remained with no gas supply](#).

In the **Kharkiv region**, the local DSO [continued](#) to lay gas networks "from scratch" to the restored buildings. In particular, specialists laid a new gas inlet pipeline along the entire facade of a building in the Shevchenkivskyi district of Kharkiv, which is being restored after destruction. A new indoor system is also being installed. With the return of residents, gas supply will be restored individually to each apartment.

Operational information on gas supply in other affected regions was not available at the time of the review preparation.

Countermeasures of Ukrainian Companies and Public Authorities

The President Volodymyr Zelenskyi [said](#) Ukraine continues preparation for the next heating season in terms of accumulating resources and new protection of energy facilities. The President also [thanked](#) Canada for expanding sanctions on imports of Russian aluminum and steel. "We must not only limit the ability of the terrorist state to circumvent the existing sanctions, but also introduce new ones to prevent Russia from adapting to the global pressure. The less Russia's ability to adapt to sanctions, the faster we will be able to restore territorial integrity and return peace to Ukraine", he emphasized.

At an extraordinary meeting on March 13, the Cabinet of Ministers [approved](#) a draft law to increase state budget expenditures by 537 billion UAH, and in the evening of that day, the relevant act was [submitted](#) to the Verkhovna Rada (reg. No. 9105). According to the Prime Minister Denys Shmyhal, the government proposes to allocate more than 518 billion UAH to the security and defense sector and to increase the reserve fund by another 19 billion UAH. The President Volodymyr Zelenskyi [noted](#) these funds will be used to

finance the military, support the defense sector, and purchase defense equipment, including drones.

This year, using the financial resources coming from abroad, Ukrenergo is implementing a record-breaking equipment replacement program in the company's history, [said](#) the CEO Volodymyr Kudrytskyi. According to him, this will be an unprecedented upgrade of the Ukrainian power system, as it has a significant amount of damage. In addition, the company is developing options for protecting facilities from missile attacks, including using the latest technologies to make main substations compact and protect them by placing them underground or using shelters.

The State Agency for Recovery and Infrastructure Development [announced](#) the launch of a training course on March 16 for Ukrainian municipalities on inclusive reconstruction. The program was developed by the European Commission together with Ukrainian experts for representatives of Ukrainian communities who will be involved in the reconstruction process.

Valerii Bezus, who was dismissed by the government last week as the Head of the State Agency for Energy Efficiency and Energy Saving, was [appointed](#) Advisor to the Vice Prime Minister for Reconstruction - the Minister of Communities, Territories and Infrastructure Development. As reported, in his new position, Bezus will work on the development and implementation of public policy in the field of ensuring energy transformation, including the use of energy-efficient tools, renewable energy sources and alternative fuels in the process of recovery.

The implementation of the UK-supported Winterization project for the restoration of damaged housing has [begun](#) in the Snihurivka community (Mykolaiv region). Under the project, the contractor shall carry out the agreed scope of repairs. In turn, Kremenchuk [received](#) a 4 MW boiler house from the Swedish Business Association. It will be installed in one of the city's neighborhoods, and in the event of a blackout, it would provide heat to up to 30 houses, two kindergartens, and a healthcare facility, said the Mayor Vitalii Maletskyi. The Mykolaiv region has received about 430 modular houses from international partners, which will be distributed among residents of the de-occupied territories and the most affected settlements, reported the Regional Military Administration Head Vitalii Kim. The distribution will take place through district state administrations and community heads of the respective district.

At its [meeting](#) on March 14, the NEURC announced the postponement of the following decisions:

- approval of the calculation of doubtful and/or uncollectible receivables from household consumers as of the end of 2020 to DSOs (15.4 billion UAH) for [write-off](#), as based on the audit reports of Creston Ukraine LLC;
- [approval](#) of the amount of excess of the gas distribution actual costs over the tariff revenues for 19 DSOs for the period before December 31, 2019 (more than 7.6 billion UAH);
- [approval](#) of the amount of excess of the DSOs' services actual costs for the period from January 1, 2020 to October 31, 2021, and from November 1, 2021 to February 28, 2022 (9.7 billion UAH).

According to the Polish media, the operators of Poland's electricity, gas, and oil transmission systems are [preparing](#) to sign an agreement with the Ukrainian side to deepen cooperation in the energy sector. The ceremony is scheduled for March 15 and will be attended by representatives of the Polish and Ukrainian governments. On the Polish side, the Memorandum of cooperation will be signed by Gaz-System, Polskie Sieci Elektroenergetyczne, PERN and Polskie Elektrownie Jądrowe.

For subscriptions, comments and other questions, please email to:
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Ukraine urgently needs emergency energy equipment to restore energy supply in the regions affected by war. More than 12,000 items are on the list of requested emergency energy equipment. If your company, association or country is ready to help, please [contact the Energy Community Secretariat's Ukraine Support Task Force](#).

[Energy Community Homepage \(energy-community.org\)](http://energy-community.org)

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To financially support the Armed Forces of Ukraine, please follow the [link](#) (the National Bank of Ukraine special account).