

## Daily Alert

**Russian War Against  
Ukraine: Energy Dimension**

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**#StopRussianAggression**  
**#StandWithUkraine**

## Summary

- On the night of March 24, the Russian military attacked the city of Kryvyi Rih with drones, 5 of them impacted the city, yet all important infrastructure is working stably. Electricity supply was successfully restored. The Sumy region was shelled with guided aerial bombs, no damage was reported.
- According to Ukrenergo, only in the Zhytomyr region, due to significant damage to networks, consumption restrictions are applied. The situation remains difficult in the areas close to front line, as the enemy constantly damages grids with artillery fire.
- Attacks are a challenge for border regions as well. On March 23, during the planned restoration works in the city of Vovchansk, emergency crew came under artillery fire. Specialists have the task of restoring a 110 kV line.
- Unlike the previous period, when the electricity imports were insignificant (6-7 MW for different hours of the day), on March 24 noticeable fluctuations were reported - from 2-7 MW (00:00-11:00, 17:00-24:00) to 22-53 MW (11:00-17:00).
- The Prime Minister Denys Shmyhal noted that the World Bank's new Rapid Damage and Needs Assessment does not currently include the loss of infrastructure, housing, and business in the occupied territories. The Vice PM for Reconstruction Oleksandr Kubrakov noted the RDNA showed the priority of rebuilding critical infrastructure, housing, social and transport facilities; here, the government needs the support of international partners.

- Energy companies of the Mykolaiv region received over 680 tons of equipment and materials for repair and restoration works - so the Minister of Energy Herman Halushchenko. Another 4 million EUR from the Ukraine Energy Support Fund will be used soon for the region's needs.
- In 2024, Ukrhydroenergo plans to start construction of Europe's largest energy storage facility (212 MW) - the CEO Ihor Syrota. Given Russia's regular missile attacks on critical infrastructure, new facilities will be located underground.
- The Ministry of Agrarian Policy and Food and Ukrnafta signed a memorandum of cooperation to develop joint programs to support Ukrainian farmers, including fuel supply. The memorandum provides for the attraction and distribution of various types of support through the State Agrarian Registry.

## Attacks

On the night of March 24, the Russian military shelled the city of Kryvyi Rih and the Sumy region with Shahed-type drones and guided aerial bombs from the north-eastern direction, as the Air Force Command of the Armed Forces of Ukraine [reported](#). The Kryvyi Rih Military Administration Head Oleksandr Vilkul [reported](#) that 5 enemy's drones hit the territory of the city, while all important infrastructure is working stably. The Minister of Energy Herman Halushchenko [announced](#) the successful restoration of electricity supply in the Dnipropetrovsk region after the night drone attack. There was no information on damage to any facilities in the Sumy region.

## Electricity Sector

### *Power system operation*

[According](#) to the Minister of Energy Herman Halushchenko, on March 24, the generation has the necessary volumes of capacity reserve to fully meet the demand of electricity consumers throughout the country. At the same time, restoration of infrastructure facilities continued.

[According](#) to Ukrenergo, on March 24, due to significant warming, electricity consumption was significantly lower as compared to the same day previous week. All types of power plants are in operation, the active performance of hydropower plants is maintained throughout the day and additionally increases, covering the hours of consumption peak. Electricity production is sufficient to cover consumption, and minor imports also continued. The available generation capacity increases the operational safety of the power system and allows repairs to be carried out at some power plants. In the Zhytomyr region, due to significant damage to networks, consumption restrictions are applied. The situation remains difficult in the areas along the front line, as the enemy constantly damages grids with artillery fire. In other regions, consumer restrictions were not applied, limits were not set.

[According](#) to ENTSO-E, as of March 24, minimal commercial imports of electricity were performed from Slovakia only. Unlike the previous period, when the imports were insignificant (6-7 MW for different hours of the day), on March 24 noticeable fluctuations were reported - from 2-7 MW (00:00-11:00, 17:00-24:00) to 22-53 MW (11:00-17:00). Access to the Slovakia->Ukraine cross-border capacity [was booked by three companies](#) (125-135 MW): D.Trading (55 MW), ERU Trading (50 MW) and Nexttrade (20-30 MW); access to the Moldova->Ukraine capacity - by D.Trading (100 MW). The marginal price for both capacity auctions was "zero". Capacity in other directions was not offered. At the

same time, the Base DAM indices in the countries of Eastern Europe (Poland, Hungary, Romania, and Slovakia) [exceeded](#) the similar indicator of Ukraine 1.2-1.5 times.

## ***Disruption and resumption of supply***

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

- in the **Kharkiv region**, [according](#) to the Regional Military Administration, on March 23, the enemy continued shelling the border settlements' infrastructure, as a result power lines were damaged in the villages of Morozova Dolyna and Basove (Bohodukhiv district). On March 16-22, rescuers [examined 40.4 km of power lines](#), with the demining specialists were able to reconnect 524 consumers. In particular, on March 22, 9.1 km of power lines were demined and 52 consumers reconnected. On March 23, during the planned restoration works in the city of Vovchansk, emergency crew came under artillery fire. [According](#) to the head of the district power grids, the Russian troops aimed specifically at the crews, as the shelling began when they started work. Specialists face the task of restoring a 110 kV high-voltage line, which supplies part of the Vovchansk community, and the enemy is doing everything to prevent this;
- in the **Zaporizhzhia region**, [according](#) to the local DSO, as of March 24, 23,950 consumers in 70 settlements remained offline (excluding the temporarily uncontrolled territory). During the day, the specialists eliminated failures and restored electricity supply to 707 consumers in the city of Zaporizhzhia and 470 - in the Vilnyansk district, which were disconnected due to technological disruptions;
- in the **Kherson region**, [according](#) to the Regional Military Administration, as of March 24, 40 crews (191 specialists and 73 units of equipment) were working to restore electricity supply. Specialists performed work on the damaged lines supplying the cities of Kherson and Beryslav, the villages and towns of Mala Seydemynukha, Kucherske, Zarichne, Sadok, Trudoliubivka, Novovoznesenske, Kalynivske, Pravdyne, Kirove, Kyselivka, Krutyi Yar, and Posad-Pokrovske. The military also inspected 3.9 km of power lines, on which explosive objects were discovered and destroyed. [On March 23](#), the President Volodymyr Zelenskyi visited the village of Posad-Pokrovske, where many houses and infrastructure facilities were damaged as a result of Russian aggression, and where the restoration of electricity supply is currently underway;
- in the **Dnipropetrovsk region**, [according](#) to the Ministry of Energy, after the night attack by drones, specialists restored electricity supply to more than 2,000 consumers;
- in the **Mykolaiv region**, [according](#) to the Regional Military Administration, as of March 22, 1,093 electricity facilities were partially or completely damaged, while supply to 7 legal entities-consumers in the Bashtanka district was suspended. [Power supply](#) has been restored in all settlements, except for two that are currently uninhabited;
- in the **Donetsk region**, [according](#) to the local DSO, on March 22, specialists managed to repair a number of damaged networks and equipment, which made it possible to restore electricity supply to 3,914 households of a settlement disconnected due to constant shelling. 110 settlements remained offline, as specialists did not have access to works there. On the night of March 24, the city of Hirnyk (Kurakhove community) came under [artillery shelling](#), as a result power

lines were damaged. [According](#) to the Ministry of Energy, on March 23, electricity supply was restored to about 5,500 consumers;

- in the **Zhytomyr region**, [according](#) to the Ministry of Energy, on March 24, due to restoration work on network infrastructure facilities, power outages are possible;
- there was no up-to-date consolidated information on power supply in the **Luhansk region** at the time of the review preparation.

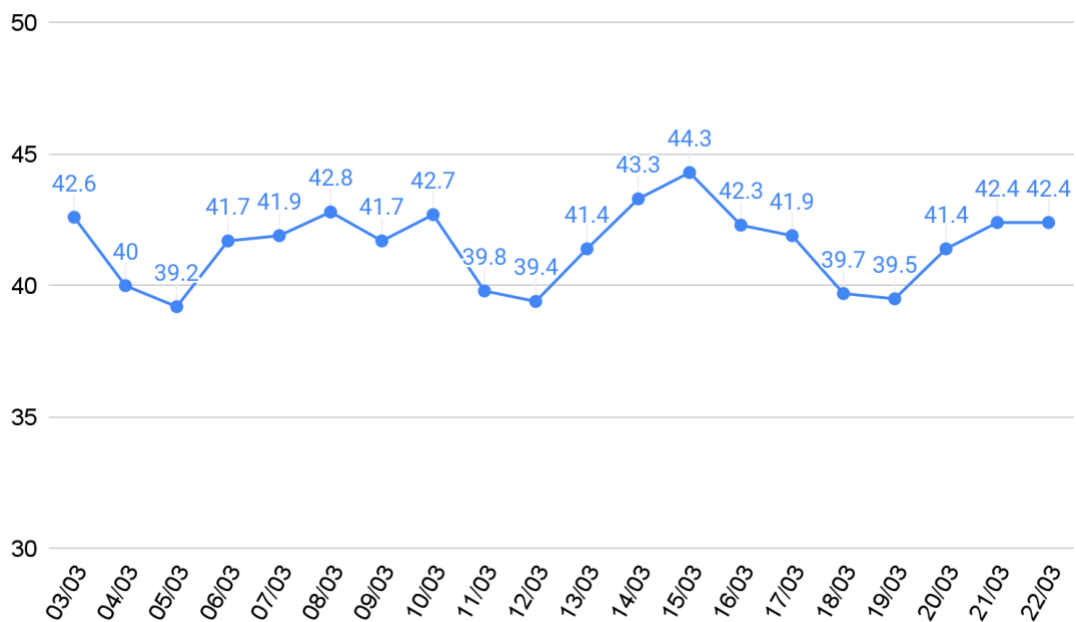
## Oil & Gas Sector

### Gas system performance

On March 22, the volume of gas transit through the territory of Ukraine amounted to 42.4 mcm (no change as compared to the previous day), i.e. only 39% 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 14.4 mcm and performed via the Beregdaroc interconnection point (VIP Bereg) at 7.5 mcm, via the Hermanowice interconnection point (VIP Ukraine-Poland) at 2.9 mcm, via the the Budince interconnection point at 3.4 mcm and via the Căușeni interconnection point (Ukraine-Moldova) at 0.6 mcm. On March 22, 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 oil and oil products market



The Economic Security Bureau [exposed](#) a scheme of illegal production and sale of diesel and petroleum. It was discovered that the representatives of a company set up oil refining and production of low-quality fuel by adding various solvents. In the future, illegally manufactured products in the form of "gas condensate", i.e. not subject to excise tax, were sold to multiple enterprises for cash. As a result of such activity, in 2022-2023, the state budget did not receive over 12 million UAH in excise tax.

## ***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 **Kherson region**, the local DSO [inspected](#) damage in 6 settlements of the Vysokopillia community, which still have no gas supply due to the consequences of combat. In those areas where it was possible to inspect gas supply systems, 383 damages to above-ground and underground pipelines were discovered. The DSO's specialists carry out preparatory works to repair and restore gas distribution.

In the **Mykolaiv region**, according to the Regional Military Administration, as of March 24, 1,388 gas infrastructure facilities (no change as compared to March 23) were damaged during the war, as a result, 5,142 consumers (+3) [remained with no gas supply](#).

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 Prime Minister Denys Shmyhal, referring to the World Bank's new [Rapid Damage and Needs Assessment](#), [said](#) that Ukraine's economic recovery after the war will cost 411 billion USD, but that estimate does not currently include the loss of infrastructure, housing, and business in the occupied territories. "When the defense forces liberate them, we expect that the data will be updated, and the government will immediately begin restoration works in these territories", Shmyhal wrote. The Vice Prime Minister for Reconstruction Oleksandr Kubrakov [noted](#) that the assessment showed the priority of rebuilding critical infrastructure, housing, social and transport facilities; in this context, the government needs the support of international partners.

In a [meeting](#) with the heads of the Zaporizhzhia, Odesa, Mykolaiv and Kherson regional administrations, Shmyhal emphasized the need to accelerate the restoration of energy infrastructure and start preparing for the next heating season. The Prime Minister also reminded that communities should now actively fill in the registry of destroyed property.

Energy companies of the Mykolaiv region received more than 680 tons of equipment and materials for repair and restoration works, [said](#) the Minister of Energy Herman Halushchenko. According to him, another 4 million EUR from the Ukraine Energy Support Fund will be used soon to purchase equipment and materials for the region's needs.

In the Poltava region, Lubnyteploenergo [received](#) a second 700 kW mobile boiler house under the EU Civil Protection Mechanism, which will become a backup source of heat supply. As reported, the equipment was received also thanks to the support of the Ministry of Communities and Territories Development.

Energoatom [held](#) negotiations with the UK Export Finance (UKEF) on the possibility of allocating a loan to finance the supply of enriched uranium under a contract with Urenco. As reported, the UKEF Chief Executive Officer Tim Reid positively assessed the agreements reached by Energoatom to ensure the stability of nuclear fuel supplies.

The CEO of Ukrhydroenergo Ihor Syrota [said](#) that in 2024 the company plans to start construction of Europe's largest energy storage facility (212 MW) at hydroelectric power plant. Given Russia's regular missile attacks on critical infrastructure, new facilities will be located underground. He added that Ukrhydroenergo has agreed with the World Bank on an implementation plan: by the end of 2023, the feasibility study and construction design will be completed and the necessary procurement will be performed. The company also plans to build a 63.9 MW solar power plant as an additional source of energy for the hydropower's own needs and to charge storage systems.

The Ministry of Agrarian Policy and Food and Ukrnafta have [signed](#) a memorandum of cooperation to develop joint programs to support Ukrainian farmers, including fuel supply. The memorandum provides for the attraction and distribution of various types of support for agricultural producers through the State Agrarian Registry. The priority is to provide them with fuel. Ukrnafta and the Ministry have agreed to develop targeted programs on oil products supply in the near future.

The Donetsk Regional Military Administration Head Pavlo Kyrylenko [said](#) that the coalmine water treatment project is at an advanced stage, despite delays in the supply of equipment. According to him, the treatment facility for water from coal mines, as well as water from deep wells, will start operating this spring.

Ukraine [seeks](#) to cooperate with the Baltic states in the oil&gas and electricity sectors, in particular in implementing programs to decentralize the energy system, develop bioenergy and cogeneration projects. "We need to discuss the possibilities of building new energy corridors and distribution networks that will strengthen the export and import capabilities of our countries", the Deputy Minister of Energy Yaroslav Demchenkov emphasized.

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### **SUPPORT UKRAINIAN ENERGY SECTOR**



*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)*

### **SUPPORT UKRAINIAN ARMY**

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