



# Russian War Against Ukraine: Energy Dimension

DiXi Group alert

(status as of 12:00, May 13)

**Stop russian nuclear terrorism!**

**Stop the atrocities!**

**Introduce full embargo on russian oil and gas imports now!**

#StopRussianAggression

#StandWithUkraine

## Summary

- **Almost 722,100 consumers did not have access to electricity supply, over 215,000 consumers did not have gas supply.**
- According to expert estimates, **the total direct documented damage to the infrastructure exceeded 94.3 billion USD**, in particular 227 million USD due to the destruction of 27 fuel depots. According to the Ministry of Environment calculations, the Russian troops also committed 231 crimes against the environment on the territory of Ukraine and in the Black Sea.
- **The remote transmission of the monitoring system data was fully restored** on the Chornobyl NPP site.
- **Ukraine started electricity exports to Moldova** that will be performed in May by Ukrhydroenergo under the contract with Energocom.
- As the General Director of GTSOU Serhii Makogon informed, **Gazprom continued to submit nominations for gas transit via the Sokhranivka interconnection point (despite the de facto suspension of gas supply there), and decreased transit via the Sudzha interconnection point** (despite the technical capability to transfer volumes). Gas transit via

the Sokhranivka point became impossible starting from May 11 due to the occupiers' intervention into the operation of the Novopskov compressor station.

- The Deputy Head of the Presidential Office Rostyslav Shurma stated that **Ukraine would create a strategic fuel reserve enough for several months**, which will not be destroyed. The First Vice Prime Minister - Minister of Economy Yulia Svyrydenko informed that **Ukraine's market needs approximately 100,000 tonnes of petroleum, 250,000 tonnes of diesel and 70,000 tonnes of LPG** every month.
- **Market participants contracted 72,000 tonnes of petroleum and 253,000 tonnes of diesel on the European market**, according to Svyrydenko. It was also agreed to increase transit of fuel via Poland from 60,000 to 250,000 tonnes per month, and the first American petroleum appeared on the Ukrainian retail stations two days ago.

## Attacks:

The Russian hacker group was carrying out a new cyber attack on Ukraine, using the theme of occupied Kherson, as the State Service of Special Communications and Information Protection of Ukraine [reported](#). Hackers send dangerous letters with the subject "On holding a revenge action in Kherson!", which contained attachments in the form of a file "Plan Kherson.htm". If the specified attachment was opened, a .rar file would be created on the victim's computer with the label "Plan of approach and planting of explosives on the critical infrastructure facilities of Kherson.Ink". As a result, the malware would be uploaded.

**Donetsk region** In the last 24 hours, 22 settlements of the Donetsk region, including Mariupol, Avdiivka and Toretsk, were shelled from aircraft, missiles, multiple rocket launch systems "Grad", tanks and heavy artillery, with 4 civilians killed and 5 injured, as the National Police [reported](#). The shelling damaged at least 49 residential facilities, including homes, schools and medical facilities, industrial enterprises and utilities. For the second day in a row, the Russians [attacked](#) at the Avdiivka Coke Plant, damaged part of the equipment, and the city was disconnected from electricity supply.

The Russian occupiers had not given up trying to [capture](#) the positions of the defenders on the territory of the Azovstal Iron & Steel Works in the blocked city of Mariupol, for which, in particular, they were launching artillery and air strikes and tried to break into the facility. The Minister for Reintegration of the Temporarily Occupied Territories Iryna Vereshchuk [reported](#) that negotiations were underway with the mediation of Turkey on the evacuation of seriously wounded soldiers from the Azovstal Iron & Steel Works. The humanitarian situation in Mariupol remained difficult, with the enemy trying to create the illusion of "improvements" by [launching](#) a dilapidated water supply system without sewerage, which could threaten the city with a humanitarian disaster.

### Luhansk region

During the day, the Russian troops opened fire 31 times on residential facilities of the region, [reported](#) the Luhansk Regional Military Administration Head Serhii Haidai. As a result of the shelling, about 60 residential buildings were destroyed, including 15 in the town of Vrubivka, 12 in the city of Zolote, 11 in the town of Komyshevakh, 7 in the city of Severodonetsk, and 6 in the town of Toshkivka. In addition, the bridge connecting the cities of Severodonetsk and Rubizhne was [destroyed](#). There was [no electricity](#) or water supply in any of the free settlements of the Luhansk region, drinking

water was delivered with humanitarian supplies. Due to the shelling, there was no possibility to carry out repair works.

**Kharkiv region** On May 12, the Russian occupiers fired missiles on the Kharkiv airport and one of the neighborhoods of Kharkiv, injuring three people, [reported](#) the Kharkiv Regional Military Administration Head Oleh Syniehubov. The city of Derhachi was hit the hardest, with humanitarian headquarters, an administrative building and medical facilities damaged. In the village of Shebelynka, the Russian shell hit a hangar building, there was a fire in the hangar and 10 trucks. The hostilities in the region killed 5 civilians and injured 14 during the day.

**Chernihiv region** [According to](#) the General Staff of the Armed Forces of Ukraine, Russia was sending additional artillery units to the border areas of the Bryansk region (Russian Federation) to increase provocative shelling of border settlements in the Chernihiv region.

**Sumy region** [According to](#) the Operational Command "North", on the night of May 13, the Russian occupiers launched two missile strikes from the territory of Russia on the border village of Ochkyne, with no casualties.

**Poltava region** On May 12, the Russian military carried out the largest shelling of the Poltava region during the full-scale war, [reported](#) the Poltava Regional Military Administration Head Dmytro Lunin. 12 Russian missiles hit the infrastructure of the city of Kremenchuk, mostly on the oil refinery, and the fire caused by the shelling [was extinguished](#) only in the morning of May 13.

**Odesa region** [According to](#) the Institute for the Study of War (USA), the Russian troops strengthened their positions on the Zmiinyi Island, trying to block Ukrainian maritime communications and opportunities in the northwestern part of the Black Sea close to the city of Odesa.

**Mykolaiv region** During the day, the enemy continued shelling the territory of the region with artillery and multiple launch rocket systems that caused 5 [fires](#), as the Operational Command "South" [reported](#). Affecting industrial, urban and suburban infrastructure, the enemy also pressed civilians psychologically, trying to force them to accept the "Russian world".

[According to](#) the Mykolaiv Regional Military Administration, as of May 13, since the beginning of the Russian invasion, 3,295 residential facilities were partially or completely damaged in the region, in particular 2,316 facilities of housing stock, 273 electricity, 137 gas, 53 heat and 12 water supply facilities.

**Kherson region** On May 12, the Russian troops fired artillery at a convoy of refugees leaving the Kherson region, [reported](#) the Kryvyi Rih Military Administration Head Oleksandr Vilkul. At the time of the shelling, the convoy was in the territory controlled by Ukraine near the village of Bila Krynytsia, and 2 civilians were injured. [According to](#) the Operational Command "South", the occupiers in the Kherson region had realized they had fallen into a legislative trap with the so-called "referendum" and were looking for other ways to legalize the annexation of the region to Russia.

The situation with forest fires was becoming worse - fire covered more than 1,500 hectares of forest in the region, [reported](#) the State Forestry Agency of Ukraine Head Yuri Bolokhovets. The Russian military began to allow forest protection specialists to fire sites, having previously confiscated almost all the equipment.

### Zaporizhzhia region

[According to](#) the Zaporizhzhia Regional Military Administration, as of May 13, 884 households in the region were completely destroyed or partially damaged. On May 12, the Russian troops [fired on](#) the city of Huliaipole with multiple rocket launch systems "Grad"; on the same day, a missile strike was launched on the historically protected part of the Khortytsia Island in the city of Zaporizhzhia. The shelling caused damage to the Tokmak power grids, leaving 290 consumers in the villages of Novopokrovka and Chystopillia without electricity.

### Dnipropetrovsk region

[According to](#) the Dnipropetrovsk Regional Prosecutor's Office, on May 12, the occupiers once again fired banned cluster munitions on the village of Velyka Kostromka, an energy infrastructure facility was destroyed, with 1 person killed and several injured. On the same day, the Russian military shelled the outskirts of the village of Ukrainka (Kryvyi Rih district), and the explosives service was working at the scene.

## Nuclear and Radiation Safety:

As of 08:00 on May 13, all operating NPPs of Ukraine were operating normally; radiation, fire and environmental conditions at station sites and adjacent areas were within current standards.

The State Nuclear Regulatory Inspectorate of Ukraine (SNRIU) has started the procedure of [denunciation](#) of interagency agreements with Russia on cooperation in the field of nuclear energy. In particular, the regulator asked the Ministry of Foreign Affairs and the Ministry of Environmental Protection and Natural Resources to denounce bilateral agreements between the State Nuclear Regulatory Committee of Ukraine and the Russian Federal Nuclear and Supervisory Authority on information exchange and cooperation on nuclear safety issues; on cooperation between the Ministry of Environmental Protection and Nuclear Safety of Ukraine and the Federal Supervision of Russia on nuclear and radiation safety.

### Chornobyl NPP Exclusion Zone

Reconstruction works are underway in the Exclusion Zone and at the Chornobyl NPP site to normalize the functioning of [facilities](#). To remind, the remote transmission of monitoring system data to the IAEA has been fully restored at the Chornobyl NPP. However, due to the occupation, some facilities were [unable](#) to function properly, the SNRIU [assesses](#) the ability of licensees to perform activities in the field of nuclear energy and radioactive waste management in the Exclusion zone in compliance with legislation, norms and rules on nuclear and radiation security, and license conditions.

### Zaporizhzhia NPP

For 71st day in a row, the Zaporizhzhia NPP and the satellite city of Energodar have been under the control of Russian terrorists, who are putting constant physical, psychological and informational pressure on the station's employees and residents. The ZNPP power units are

serviced by Ukrainian personnel with proper rotation, but the nuclear and radiation safety of the plant is under constant threat.

As of May 12, the radiation background on the territory of the ZNPP industrial site and the sanitary protection zone of the station (8-12  $\mu\text{R/h}$ ) remains [within the standards](#); gamma background in the Zaporizhzhia region is also [stable](#) (6-12  $\mu\text{R/h}$ ) and does not pose a threat to life and public health.

**The presence of Russian terrorists at nuclear facilities poses extremely high threats to nuclear and radiation safety on a global scale! Ukraine demands to recognize the actions of Russia and Rosatom as nuclear terrorism, which aims to intentionally violate the security of nuclear power plants, international law and basic human rights with the aim of genocide, ecocide and encroachment on the country's sovereignty.**

**We call on international partners to increase pressure on the IAEA, whose actions may prevent acts of nuclear terrorism by Russia. At the same time, it is critical to minimize Russia's influence on IAEA policies and activities, in particular by removing all Russians from key positions in the Agency's Secretariat and restricting their access to information about Ukraine's nuclear power plants.**

**We also emphasize the need to impose tough sanctions on the management, staff, products, international projects of Rosatom and, in general, the nuclear industry of the aggressor country!**

## Electricity Sector:

### ***Power system operation***

For almost 2 months, Ukraine's power system has been [stably](#) operating in trial synchronous mode with the Continental Europe network (ENTSO-E). Commercial exports of electricity to Poland via the Dobrotvirsk TPP - Zamosc transmission line [remained](#) at the stable schedule with maximum level of 210 MW during the day. Exports to Moldova, launched on May 12, [amounted](#) to 150 MW. In addition, there are unidirectional (with Romania) or bidirectional (with Hungary and Moldova) technical cross-border [flows](#) between the energy systems.

Ukrenergo continued to [rebuild](#) damaged energy infrastructure. After repairs, two 330 kV high-voltage lines were put into operation in the northern and eastern regions of Ukraine. 90% of the main infrastructure facilities damaged by shelling are already operating in the liberated territories. In the Kyiv and Sumy regions, the replacement of substation switchgear equipment was underway, readiness to turn on the installed equipment (switches), as well as repaired substation cells was being checked. On two overhead lines 750 kV and 330 kV, the dismantling and replacement of supports was being completed, the lightning rod repaired, and optical communication channels upgraded. In the Kharkiv region, switch on a 330 kV substation and all the demined areas of a 330 kV line have been repaired.

### ***Electricity market performance***

***Day-ahead market (DAM):*** As of May 13, the DAM weighted average settlement price slightly [decreased](#), for three days already, and amounted to 2,190.88 UAH/MWh (-1.1% vs the previous trading day). At the same time, on May 9-13, it remained stable and fluctuated in the range of 2191-2253 UAH/MWh. Meanwhile, as of May 13, dynamics of exchange prices in the Eastern European markets was diverse. The prices in the markets of Hungary, Romania and Slovakia became almost equal and exceeded the Base DAM price index of Ukraine app. 2.7 times, while the price spread with Poland slightly [increased](#) to 1.7 times.

The [total](#) volume of trading on DAM continued to decrease and amounted to 15,836.8 MWh (-17.6% vs the previous day), which was the lowest level during May. The tendency of supply reduction also resumed - the volume of sale bids decreased to 72,617 MWh (-6.9% vs the previous day). This led to a relative increase in market surplus - the gap with the volume of purchase bids increased from 4.1 to 4.7 times. The [structure](#) of electricity purchase on DAM has changed slightly: 82.8% belonged to suppliers, 17% to system operators, 0.2% to producers and traders.

**Intraday market (IDM):** On May 12, the weighted average price of electricity on IDM [increased slightly](#) and amounted to 2,804.25 UAH/MWh (+4.9% vs the previous day). At the same time, the total volume of trading increased significantly - to 373.9 MWh (+18.9% vs the previous day). At the same time, supply also continued to grow - up to 42,912.5 MWh (+28.8%), which led to an increase in market surplus - the gap with the volume of purchase bids increased from 107 to 115 times.

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

[Accordinging](#) to the Ministry of Energy, as of May 12, 798 settlements were disconnected from electricity, a total of almost 711,800 consumers. During the day, electricity supply was resumed to app. 19,000 consumers.

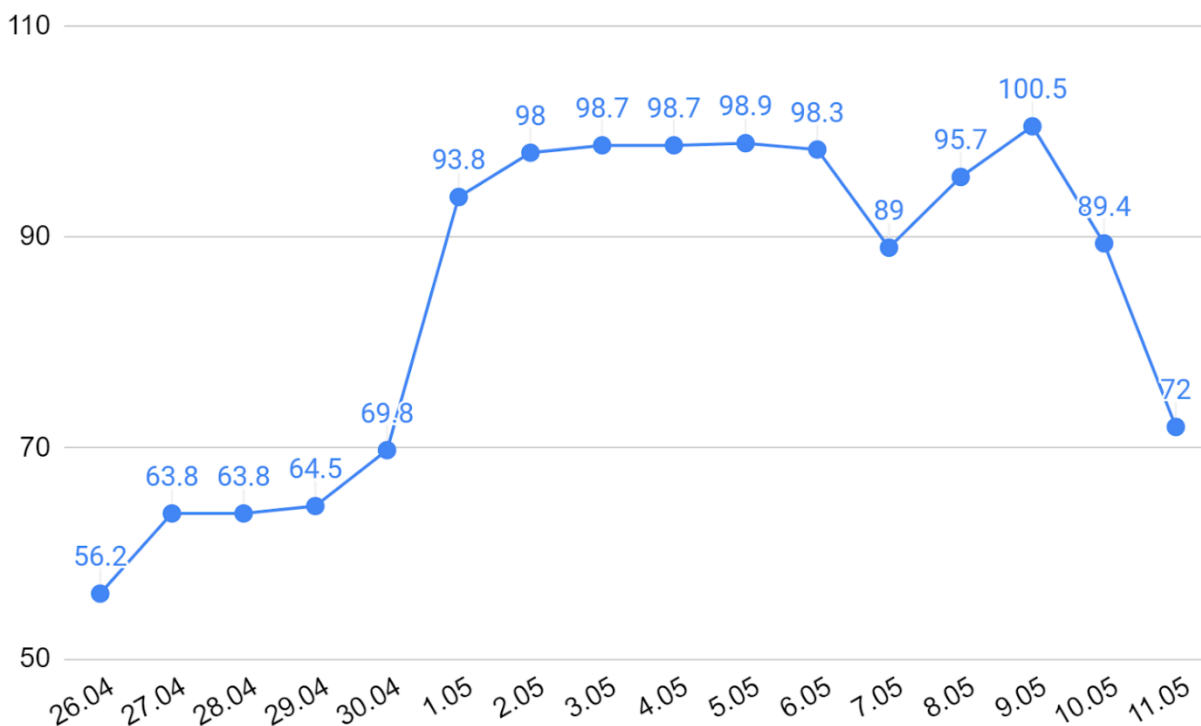
Large-scale power supply disruptions and, consequently, active recovery works were taking place:

- in the **Donetsk region**, [accordinging](#) to DTEK, 225 settlements remained without electricity ([accordinging](#) to the Cabinet of Ministers, 321,600 consumers); supplies to 20,000 consumers in 23 settlements were resumed during the day;
- in the **Luhansk region**, [accordinging](#) to the Cabinet of Ministers, over 128,000 consumers were left without electricity supply;
- in the **Kharkiv region**, [accordinging](#) to the Cabinet of Ministers, 164,000 consumers were still with no electricity supply; supplies to 1,500 consumers were resumed during the day;
- in the **Kyiv region**, [accordinging](#) to DTEK, supply to 800 consumers in 5 settlements was resumed; 3 consumers in 9 settlements remained without electricity supply;
- in the **Zaporizhzhia region**, as of 07:00 on May 13, 21,508 consumers in 75 settlements were left [without](#) electricity supply; supply to 3,500 consumers was resumed during the day;
- in the **Mykolaiv region**, [accordinging](#) to the Cabinet of Ministers, supply to 700 consumers was resumed during the day;
- in the **Odesa region**, [accordinging](#) to the Cabinet of Ministers, supply to 400 consumers was resumed during the day;
- in the **Dnipropetrovsk region**, [accordinging](#) to the Cabinet of Ministers, supply to 350 consumers was resumed during the day;
- in the **Chernihiv region**, as of 09:00 on May 13, due the bad weather conditions, 66,000 consumers were left [without](#) electricity supply; 943 consumers were still offline due to hostilities; in total, 292 settlements were left without electricity supply;
- there was no up-to-date information on power supply in the **Kherson and Sumy regions** at the time of the review preparation.

## Gas Sector:

As of May 11, the transit of Russian gas through the territory of Ukraine decreased by 17.4 mcm as compared to the previous day and amounted to 72.04 mcm. These volumes account for less than the capacity contracted by Gazprom (109 mcm per day). Transit flows suspended via the Sokhranivka interconnection point. Physical imports of gas from the EU were reported from the Hermanowice interconnection point (virtual interconnection point "Ukraine-Poland") at 0.22 mcm.

## Gas transit through Ukraine (at Sokhranivka and Sudzha interconnection points), mcm



Source: [GTSOU](#)

### Disruption and resumption of supply

The **Donetsk, Luhansk, Zaporizhzhia, Kharkiv, Kyiv, Kherson, and Mykolaiv regions** had the most challenging situation in gas supply. [According](#) to the Cabinet of Ministers, as of May 12, gas supply was restored to 900 consumers; over 219,000 consumers were left with no gas supply.

According to the **Luhansk** Regional Military Administration, only 21,375 consumers in 5 settlements [remained](#) with gas supply, sometimes partially. In particular, the city of Severodonetsk was left without gas.

In the **Donetsk region**, the local DSO [reported](#) on restoring gas supply to 1,696 consumers. During the day, the occupiers damaged the networks leading to 170 consumers.

In the **Kyiv region**, as of the morning on May 13, gas supply was [restored](#) in 120 settlements (119 completely and 1 partially) to 140,604 consumer facilities. The repairs continued only in the city of Irpin (gas supply was restored to 79% of consumers). The DSO specialists were starting to restore and connect gas supply to each residential building in each separate settlement.

In the **Zaporizhzhia** region, 69,973 consumers in 88 settlements [remained](#) without gas supply. Last night, in the town of Komyshevakh, the damage to a medium-pressure underground distribution gas pipeline, caused by shelling, was eliminated. As a result, gas supply to 150 consumers was restored. Also, in the cities of Huliaipole and Orikhiv, the damage caused to low-pressure gas distribution pipelines by shelling was eliminated.

The **Mykolaiv** Regional Military Administration [reported](#) that, as of May 13, the number of damaged infrastructure facilities amounted to 137, and 3,858 consumers remained without gas supply. Restoration works were underway. Mykolaivgaz also carried out [operational repairs](#) of pipelines damaged by enemy's shelling.

In the **Kherson region**, as of May 12, the Vysokopillia community [remained](#) without gas supply. The Velyka Oleksandrivka, Novovorontsovka and Stanislav communities partially remained without gas supply. Many communities had problems with LPG supply.

In the **Chernihiv region**, as of May 12, urgent work to restore damaged infrastructure [was performed](#). Emergency crews continued work in the Bobrovytsia district of Chernihiv, where 800 consumers were left without gas supply due to the destruction of a gas control point.

Operational information on gas supply in the **Sumy and Kharkiv regions** was not available at the time of the review preparation.

## Countermeasures of Ukrainian Companies and Public Authorities

The National Security and Defense Council of Ukraine [decided to](#) nationalize the corporate rights of Russia's Sberbank and VEB subsidiaries in Ukraine. This was mentioned in the accompanying documents to the decision by which the Verkhovna Rada [approved](#) the relevant President's decree. In particular, it means the nationalization of Ukraine-registered International Reserve Bank (100% of the authorized capital belongs to the Russian Sberbank) and Prominvestbank (99.772644% of the shares belong to the Russian state company VEB RF, i.e. Vnesheconombank). In addition to assets, the right to claim debts to Ukrainian companies is also nationalized.

The Verkhovna Rada also adopted a law (reg. [7169](#)), which allows confiscating the property of individuals or legal entities of Russia and Belarus that have posed a significant threat to Ukraine's national security, sovereignty or territorial integrity. Confiscation will be applied during martial law and only to persons who have previously been subject to asset blocking sanctions. In fact, the procedure of such confiscation was clarified taking into account the President's proposals.

A law (reg. [7249](#)) has also been adopted, which allows upstream companies to pay royalties in the period of martial law only for the volumes of natural gas sold (except for the volumes under public service obligations). At the same time, companies must keep records of produced and sold volumes of gas, and - after the end of martial law - within three months must pay royalties in full for the previous tax periods.

The Deputy Head of the Presidential Office Kyrylo Tymoshenko [stated](#) that 'catalogs of needs' are being developed for each region affected by the war, which will be divided into more than 14 clusters. These catalogs will be the basis for negotiations between the Ukrainian authorities and international partners on the reconstruction of the regions.

### **Sources:**

*The alerts are developed based on collected, verified, and analyzed information reports of over 100 official sources: ministries, state agencies, network operators, and energy companies. Information was collected only from official websites and official social media accounts.*

For subscriptions, comments and other questions, please email to: [author@dixigroup.org](mailto:author@dixigroup.org)



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