



# Russian War Against Ukraine: Energy Dimension

DiXi Group alert

(status as of 12:00, May 11)

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**Stop the atrocities!**

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#StandWithUkraine

## Summary

- **Almost 752,800 consumers did not have access to electricity supply, over 217,000 consumers did not have gas supply.**
- Along with the physical damage, **the aggressor continued to strike energy infrastructure with cyber attacks.**
- Due to the occupiers' interference in **the operation of the Novopskov compressor station, GTSOU reported that gas transit through the Sokhranivka interconnection point would be impossible** since May 11. Naftogaz sent a letter to Gazprom, informing about force majeure and offering to transfer respective volumes to the Sudzha interconnection point. As GTSOU General Director Serhii Makogon informed in the morning of May 11, **Gazprom has stopped transporting gas from the Russian territory to the Sokhranivka interconnection point.**
- According to the Prime Minister Denys Shmyhal, on May 10, the government approved draft laws **proposing the Verkhovna Rada to introduce a ban on raising utility tariffs** for a period of martial law and six months after its completion.
- The government decided to **transfer the Russian assets seized on the territory of Ukraine under management of the state enterprise "National Investment Fund"**. The NEURC

made a decision on May 10 about the identification of objects of property rights of the Russian Federation and its residents subject to forced removal for the reasons of public necessity, and about revocation/suspension of licenses for a number of companies controlled by the countries that carry out armed aggression against Ukraine.

- The State Environmental Inspectorate reported it has **suspended state supervision measures at Ukrainian gas stations**, including sampling of fuel, starting from March 13.

## Attacks:

The Russian troops continued to destroy residential facilities of Ukraine by launching missile strikes and artillery shelling of settlements and infrastructure, as the General Staff of the Armed Forces [reported](#). In addition, the aggressor continued to attack the infrastructure of energy sector, emergency services, communications and logistics with [cyber attacks](#). [According to](#) the State Service of Special Communications and Information Protection of Ukraine, on May 9, enemy's hackers carried out a large-scale DDoS attack on the sites of leading Ukrainian telecommunications companies.

[According to](#) the Main Intelligence Directorate of the Ministry of Defense of Ukraine, another common tactic of Russia was theft and exports of grain and other food from Ukraine. In the city of Polohy (Zaporizhzhia region) grains and sunflower seeds in storage were being prepared for transportation to Russia; a convoy of Russian trucks loaded with grains left Energodar for the Crimea under the protection of the military. In the village of Volokhiv Yar (Kharkiv region), the occupiers were exporting grains from storage to the Russian border. 1,500 tons of grains were exported from the village of Mala Lepetykha (Kherson region) to the occupied Crimea. In addition to grains, the occupiers exported large quantities of stolen vegetables. Much of the grains stolen from Ukraine is likely to be smuggled into the Middle East.

**Donetsk region** In the last 24 hours, 5 settlements of the Donetsk region, including Mariupol, Avdiivka, Siversk, Bakhmut and Kostiantynivka were shelled from aircraft, tanks and heavy artillery, with 6 civilians killed and 10 injured, as the National Police [reported](#). The shelling damaged at least 45 residential facilities, including residential and office buildings, and utilities.

In the blocked city of Mariupol, the enemy with the support of artillery and tanks was [attacking](#) the Ukrainian military in the area of the Azovstal Iron & Steel Works, launching missile and bomb strikes, as a result of which the number of [seriously injured](#) among the defenders was growing. [According to](#) the President of Ukraine Volodymyr Zelenskyi, Russia did not agree to any of the options offered by Ukraine to save the soldiers in Mariupol.

**Luhansk region** During the day, the Russian troops opened fire 15 times on residential facilities in the region, [reported](#) the Luhansk Regional Military Administration Head Serhii Haidai. There was no electricity, water or mobile communication in the free settlements, and on May 10, the Russian military [damaged](#) a main gas pipeline in Severodonetsk, leaving the city without gas supply. In the town of Vrubivka, 6 residential houses and a house of culture were destroyed; in the cities of Rubizhne and Lysychansk 5 multi-apartment buildings were destroyed; in the city of Hirske, a boarding school was destroyed.

**Kharkiv region** The Russian occupiers continued to fire on peaceful neighborhoods of the region, [reported](#) the Kharkiv Regional Military Administration Head Oleh Syniehubov. As a result of the shelling of the Kharkiv, Lozova, Izyum and

Kupyansk districts, 10 civilians were injured and 1 was killed. Thanks to successful offensive actions, the Ukrainian Armed Forces regained control of the settlements of Cherkaski Tyshky, Ruski Tyshky, Rubizhne, and Bayrak, reducing the enemy's ability to fire on Kharkiv and its suburbs. In the Izyum direction, the enemy was preparing a new offensive operation.

### **Chernihiv region**

In the evening of May 10, the Russian military twice fired mortars at the territory of the Horodnya district, as the State Border Guard Service of Ukraine [reported](#). The attacks were carried out from the Russian village of Novye Yurkovichi, the consequences were being clarified. Due to the shelling in some border areas of the region, it [was forbidden](#) to approach the border at a distance of 1 km and closer, as well as to be outdoors at night.

### **Sumy region**

Around 19:00 on May 10, the Russian aircraft twice launched unguided missiles at the border areas of the Shostka district, and the consequences were being clarified, as the State Border Guard Service of Ukraine [reported](#).

### **Odesa region**

On May 10, the Russian troops launched a fourth missile strike on the bridge across the Dniester estuary in the town of Zatoka, as the Operational Command "South" [reported](#). The [information](#) about the probable blockade of the region due to the Dniester bridge destruction, as well as the high readiness of the armed groups in unrecognized Transnistria, was spreading among the residents. The threat of missile strikes from the annexed Crimea, from the air and from the sea remained high.

### **Mykolaiv region**

On the night of May 10, suburbs of the city of Mykolaiv were under fire from multiple rocket launch systems "Uragan" and cluster munitions of indiscriminate action, as the Operational Command "South" [reported](#). The shelling was carried out from the temporarily occupied territory of the Kherson region, with damage recorded to private buildings and agricultural facilities, and to power supply system of one of the settlements.

### **Kherson region**

In the Kherson region, the situation in the settlements bordering the Mykolaiv and Dnipropetrovsk regions, where fighting and shelling continued, remained the most difficult. There were [forest fires](#) in the region, in particular, the Kinburn Spit Reserve was being destroyed by fire. Dozens of settlements [remained without](#) electricity and water supply.

### **Zaporizhzhia region**

[According to](#) the Zaporizhzhia Regional Military Administration, as of May 11, 819 households in the region were completely destroyed or partially damaged. The situation with the energy supply of the territories where active hostilities continued was difficult. In particular, over 1,300 consumers in the Orikhiv networks service area were disconnected due to the shelling of civilian infrastructure; in the city of Huliaipole, shelling damaged a medium-pressure distribution gas pipeline - 2,000 consumers were left without gas supply; in the city of Orikhiv, a low-pressure distribution gas pipeline was damaged. On May 11, air defense forces shot down a missile over the city of Zaporizhzhia, but the wreckage has severely [damaged](#) an infrastructural facility.

# Nuclear and Radiation Safety:

As of 08:00 on May 11, all operating NPPs of Ukraine continued to operate normally; radiation, fire and environmental conditions at station sites and adjacent areas were within standards.

## **Chornobyl NPP Exclusion Zone**

In the Exclusion Zone and at the ChNPP site, reconstruction works were underway to normalize the functioning of facilities. In particular, on May 9, the Chornobyl NPP completely [restored](#) control over the chemical indicators of the water-chemical regime of the spent nuclear fuel storage facility No.1, which ensures the removal of residual heat, indirect control of fuel status and protection of personnel from radiation.

## **Zaporizhzhia NPP**

For the 69th 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 11, 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](#) (8-14  $\mu\text{R/h}$ ) 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 severe 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 8 weeks already, 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 Dobrotvirskaya TPP - Zamosc transmission line [remained](#) at the stable schedule (210 MW) during the day.

Ukrenergo continued to [rebuild](#) damaged energy infrastructure. In particular, the installation of a part of high-voltage equipment (disconnect switches) has started at a 750 kV substation in the northern region of Ukraine; other equipment was fully prepared for installation. Also, relay protection and automation system was being adjusted, and a switch was being installed at a 330 kV substation. The dismantling and replacing damaged supports was underway on 750 and 330 kV overhead lines. The inspection of networks was being conducted within the sappers in the liberated districts of the Kharkiv region.

## **Electricity market performance**

**Day-ahead market (DAM):** As of May 11, the DAM weighted average settlement price slightly [decreased](#) to 2,220.02 UAH/MWh (-1.5% vs the previous trading day). At the same time, dynamics of exchange prices in the Eastern European markets was [versatile](#), which was reflected in the magnitude of their gap with Ukraine. The simultaneous price increase in the markets of Hungary and Romania caused the increase in the difference with the Base DAM price index of Ukraine to 3.7 times. On the other hand, prices in Slovakia and Poland decreased slightly, and the spreads decreased to 2.7 and 1.7 times, respectively.

The total volume of trading on DAM continued to [increase](#) gradually and amounted to 19,926.1 MWh (+2.1% vs the previous day). At the same time, the clear trend of supply reduction continued; the volume of sale bids decreased to 72,591.3 MW (-11.1% vs the previous day). These opposite trends led to a further decrease of the market surplus - the gap with the volume of purchase bids lowered from 4.2 to 3.6 times. The [structure of electricity purchase](#) on DAM has changed slightly: 86.1% belonged to suppliers, 13.6% to system operators, 0.3% to traders and producers.

**Intraday market (IDM):** On May 10, the weighted average price of electricity on IDM [decreased](#) slightly and amounted to 2,575.96 UAH/MWh (-9.6% vs the previous day). At the same time, after dropping to the lowest level in IDM history, the total volume of trading for the second day in a row showed a rapid recovery and amounted to 438.7 MWh (+194.6% vs the previous day). At the same time, continuation of the opposite trend of reduction in supply - up to 31,709.1 MWh (-16.6%) led to further sharp decline in market surplus. In the last two days, the gap with the volume of purchase bids decreased from 1114 to 72 times. The structure of purchase on IDM has [not significantly](#) changed: 85.4% was occupied by suppliers, 14.6% by network operators.

## **Disruption and resumption of supply**

[According](#) to the Ministry of Energy, as of May 10, 817 settlements were disconnected from electricity, a total of almost 752,800 consumers. During the day, electricity supply was resumed to app. 33,000 consumers.

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

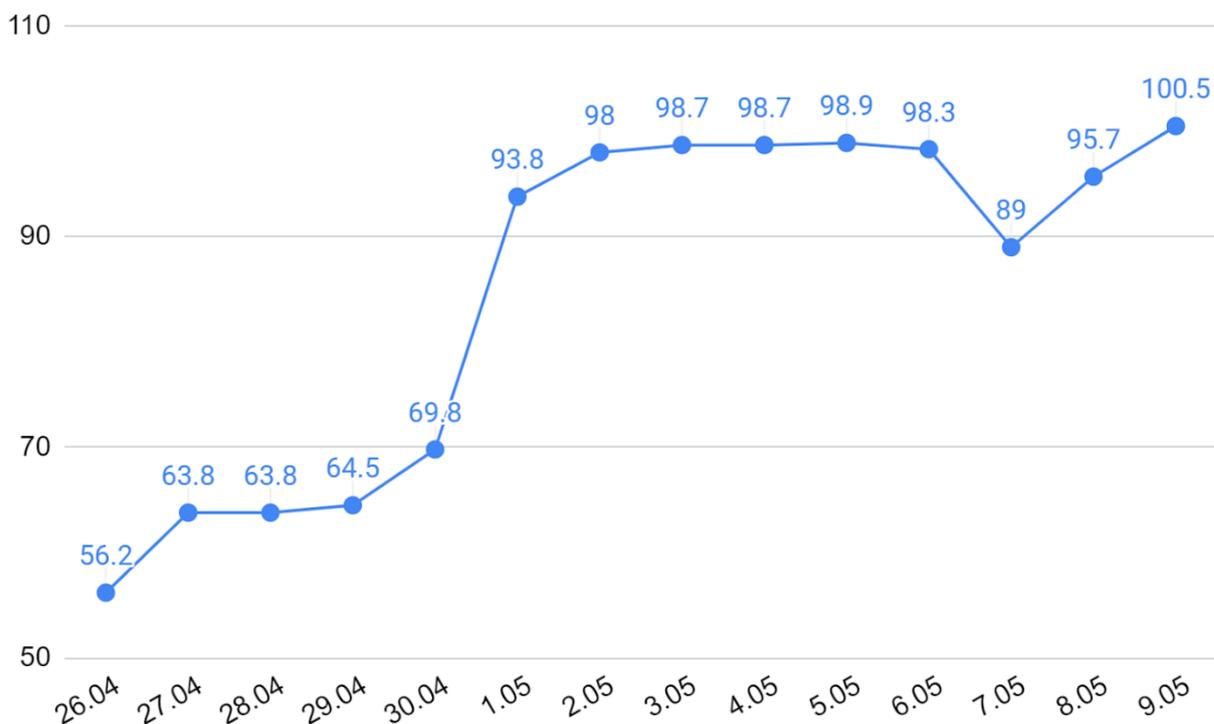
- in the **Donetsk region**, [according](#) to DTEK, 258 settlements remained without electricity ([according](#) to the Cabinet of Ministers, 354,000 consumers); supplies to 16,700 consumers in 32 settlements were resumed during the day;
- in the **Luhansk region**, [according](#) to the Cabinet of Ministers, 128,200 consumers were left without electricity supply;
- in the **Kharkiv region**, [according](#) to the Cabinet of Ministers, 167,000 consumers were still with no electricity supply; supplies to 6,500 consumers were resumed during the day;
- in the **Kyiv region**, [according](#) to DTEK, supply to 1,657 consumers was resumed; 5,500 consumers in 10 settlements remained without electricity supply;
- in the **Zaporizhzhia region**, as of 07:00 on [May 10](#), 23,039 consumers in 71 settlements were left without electricity supply; supplies to more than 1,300 consumers in 6 settlements were resumed during the day;
- in the **Mykolaiv region**, [according](#) to the Cabinet of Ministers, supply to 1,600 consumers was resumed during the day;
- in the **Dnipropetrovsk region**, [according](#) to the Cabinet of Ministers, supply to 300 consumers was resumed during the day;
- in the **Chernihiv region**, [according](#) to the Cabinet of Ministers, supply to 900 consumers was resumed during the day;

- in the **Sumy region**, [according](#) to the Cabinet of Ministers, supply to 900 consumers was resumed;
- there was no up-to-date information on power supply in the **Kherson and Odesa regions** at the time of the review preparation.

## Gas Sector:

As of May 9, the transit of Russian gas through the territory of Ukraine increased by 4.2 mcm as compared to the previous day and amounted to 100.2 mcm. These volumes slowly approach the capacity contracted by Gazprom (109 mcm per day). 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](#)

At the same time, GTSOU [reported](#) that gas transit through the Sokhranivka interconnection point would become impossible since May 11 due to the occupiers' interference in the operation of the Novopskov compressor station. The occupiers' control over the compressor station has already led to unauthorized interference in technological processes, changes in the modes of operation of gas system facilities, and unauthorized withdrawal of gas from the transit flow. According to GTSOU, this threatened the integrity of the Ukrainian gas system. As a result, it was decided to stop receiving gas through the Sokhranivka interconnection point.

In addition, according to the General Director of GTSOU Serhii Makogon, the occupiers illegally [closed](#) the taps on the Shebelynka-Novopskov main pipeline, depriving residents of the Luhansk and Donetsk regions of the ability to receive gas.

As a [signatory](#) to the agreement on the transit organization, Naftogaz [sent](#) a letter to Gazprom about the implementation of force majeure and proposed transferring the relevant volumes of gas transit

to the Sudzha interconnection point. Such transfer is possible technologically and does not require any additional payments from the Russian side.

At the same time, the representative of Gazprom Sergei Kupriyanov [said](#) the company had not received confirmation of force majeure, so there was no reason to stop transporting gas through the Sokhranivka interconnection point. The Russian side also reported that the transfer of volumes to the Sudzha interconnection point was not technologically possible. [According](#) to the General Director of GTSOU Serhii Makogon, as of the morning on May 11, Gazprom has stopped transporting gas from the Russian territory to the Sokhranivka interconnection point.

### ***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 Ministry of Energy, as of May 10, gas supply was restored to more than 2,000 consumers; over 217,000 consumers were left with no gas supply.

In the **Donetsk region**, the local DSO [reported](#) that the occupiers destroyed gas distribution networks to 2,698 consumers in two recent days. At the same time, specialists repaired some networks and restored gas supply to 3,726 households.

In the **Luhansk region**, the enemy [damaged](#) the main gas pipeline in Severodonetsk. As a result, the whole city was left without gas supply.

The **Zaporizhzhia** Regional Military Administration [reported](#) that, as of May 11, 71,038 consumers in 87 settlements remained without gas supply. Last night, a medium-pressure gas distribution pipeline was damaged by shelling in the city of Huliaipole; 2,000 consumers were left without gas supply. In addition, in the city of Orikhiv, a low-pressure distribution gas pipeline was damaged.

In the **Kharkiv region**, the local DSO [reported](#) on the resumption of gas supply in 3 liberated villages of the Izyum district. Also, repair works [continued](#) in the regional center.

The **Kyiv** Regional Military Administration [reported](#) on restoring gas distribution service in 119 settlements (118 completely and 1 partially) to 138,604 consumer facilities. In the city of Irpin, gas supply was restored by 74%. At the same time, 15 consumer facilities in the village of Pochepyn (Bucha district), where demining work continued, remained without gas supply.

The **Mykolaiv** Regional Military Administration [reported](#) that, as of May 11, the number of damaged infrastructure facilities amounted to 135, and 3,858 consumers remained without gas supply. Restoration works were underway.

In the **Kherson region**, as of May 10, 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**, in the village of Monastyryshche (Ichnia community), works were [carried out](#) to eliminate gusts on a gas pipeline. Restoration of gas supply in Chernihiv was also [underway](#), - in particular, in the Bobrovytsia district, where gas distribution equipment was destroyed.

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

# Countermeasures of Ukrainian Companies and Public Authorities

The President of Ukraine Volodymyr Zelenskyi [in a video address](#) stressed that the International Working Group on Russian Sanctions ('Yermak-McFaul group') [presented the](#) Roadmap for Energy Sanctions. The document describes what has to be done to make it difficult for Russia to finance the war, but at the same time - measures to mitigate potential losses of the global economy due to limited consumption of Russian energy resources. Zelenskyi noted that Ukraine has already begun working on the roadmap implementation.

The Minister of Foreign Affairs Dmytro Kuleba [expressed hope](#) that the EU countries will succeed in convincing Hungary about the oil embargo in a new package of sanctions on Russia. According to him, the absence of embargo would be a too generous gift for the Kremlin - not only in terms of the fact that sanctions would not be applied, but also in terms of demonstrating a divide in the EU. In addition, in an interview for the [Financial Times](#), Kuleba stated that the lack of a decision to grant Ukraine the EU candidate status would mean that Europe is declarative about its own values, for which Ukrainians are now dying, and thus misleads Ukraine.

The Deputy Head of the Presidential Office Kyrylo Tymoshenko [stated](#) that, in the process of preparing a plan for recovery and modernization, its developers have reached the final stage, collecting data on the needs of regions - from the smallest settlements to large cities. According to Tymoshenko, 1003 settlements liberated from Russian occupiers are currently being restored: gas supply has been restored in 650 settlements, electricity supply in 83% of them, water supply - in 60%, and filling stations are working in 49% of those settlements.

According to the Prime Minister Denys Shmyhal, at the meeting on May 10, the government [approved](#) draft laws proposing the Verkhovna Rada to introduce a ban on raising utility tariffs for a period of martial law and six months after its completion. The representative of the Cabinet of Ministers in the Verkhovna Rada Taras Melnychuk [clarified](#) that the government's initiative covers tariffs for district heating, gas distribution service and hot water supply for all categories of consumers. The price of gas for households will not be subject to increase from the levels applied as of February 24, 2022.

It was also proposed to ban natural gas suppliers from taking any action to coerce household consumers to repay debts. The document also proposed to establish a list and mechanisms for financing relevant guarantees and compensations for "ensuring the sustainable functioning of the natural gas market and heat supply during the martial law and postwar reconstruction". In addition, the Cabinet of Ministers approved the relevant legislative proposals on amendments to the 2022 State Budget of Ukraine.

The government also [decided](#) to transfer the Russian assets seized on the territory of Ukraine under management of the state enterprise "National Investment Fund". According to the [clarifications](#), the entity perform management functions over the confiscated property of the Russian Federation and its residents, in accordance with the Law "On Basic Principles of Mandatory Seizure of Property of Russia and its Residents in Ukraine".

The State Environmental Inspectorate reported it has [suspended](#) state supervision measures at Ukrainian gas stations, including sampling of fuel, starting from March 13. As noted, market surveillance measures had not been carried out since February 24 only in those areas where active hostilities took place, but since March 13 they have been suspended in Ukraine for the duration of the martial law.

At a meeting on May 10, the National Energy and Utilities Regulatory Commission [adopted](#) a number of decisions, including:

- procedures for identifying objects of property rights of the Russian Federation and its residents, which are subject to forced removal for reasons of public necessity (amendments to the [Resolution](#) No.350);

- revocation / suspension of licenses for a [number of companies](#) controlled by residents of states that carry out armed aggression against Ukraine;
- [taking into account](#) the projected change in the industrial prices index and the consumer price index when determining the planned costs (including depreciation) in the tariffs for centralized water supply / sewerage;
- restrictions on several gas DSOs due to the delay in the control readings of household consumers' meters;
- postponement of fines for a number of licensees in the field of electricity production and distribution until the end of martial law;
- standardization of investigations by the Regulator in electronic form with the use of a qualified electronic signature.

The Ministry of Territories and Communities Development and the USAID Energy Security Project will [work together](#) to restore the Okhtyrka CHP. The full restoration of the enterprise requires the development of a new heat supply scheme for the city and the project of the CHP reconstruction in preparation for the 2022/2023 heating season and the resumption of heat and hot water supply.

Ukrenergo [made](#) the first interest payment on "green" Eurobonds in the amount of 28.4 million USD. As reported, in November 2021, the company made the first issue of "green" bonds. The funds raised from the placement of securities were directed through the State Enterprise "Guaranteed Buyer" to repay debts to producers of electricity from renewable sources.

**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)

## **SUPPORT UKRAINIAN ENERGY SECTOR**

*Prior to transferring funds, please [email to the Energy Community Secretariat](#)*

## **SUPPORT UKRAINIAN ARMY**

*To financially support Heroic Ukrainian Army, please follow the [link](#) (The National Bank of Ukraine)*