

A WINTER AT WAR AWAITS UKRAINE

EMERGENCY ENERGY EQUIPMENT DONATIONS ARE URGENTLY NEEDED

For Ukraine to survive the winter, efforts must be stepped up to keep the country's energy infrastructure functional.

Since the beginning of the Russian invasion, Ukraine has suffered unprecedented damage. Russian attacks have wiped out critical infrastructure in many parts of Ukraine. The damage is especially critical following the start of the targeted campaign against energy infrastructure.



Ukrainian energy companies are working tirelessly to repair damaged infrastructure, often just hours after military activity has ceased. This work needs a tremendous amount of equipment, fuel, tools and materials, which Ukraine lacks. As a winter at war awaits Ukraine, 950.000 people are without electricity and 600.000 households are left without gas or district heating services, along with 250.000 households lacking proper water supply. Without our help, they will be forced to survive without heating, electricity or water.

Matching the scale of Ukraine's energy sector needs requires a collective effort and prioritized attention. Let us step up in solidarity and support the people of Ukraine in their hour of need. Donations of emergency energy equipment are needed now more than ever to help Ukraine prepare for winter.

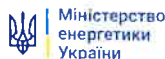
We call on private companies and associations, not only in the energy sector but also the manufacturing and automotive industries, and governments to intensify donations to ensure the continued functioning of the Ukrainian energy infrastructure.

If your country, company or association can help Ukraine by offering emergency energy equipment, materials, tools or fuels, please contact the Energy Community Secretariat's Ukraine Support Task Force (USTF) at UkraineEmergencySupport@energy-community.org for the current list of most urgent needs and assistance in the donation process.

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Director
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German Galushchenko
Minister of Energy of Ukraine

Kadri Simson
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European Commission



Help Ukraine now:

www.energy-community.org/regionalinitiatives/Ukraine.html

The top priority for replenishment is the autotransformers fleet. As of today, the need, including the replenishment of the emergency stock is the following:

- ☒ AT 750 kV - eleven phases;
- ☒ AT 330 kV - sixteen units;
- ☒ AT 220 kV - six units.

The amount of other damaged primary equipment (high voltage circuit breakers, disconnectors, surge arresters, measurement transformers, and shunt reactors) is tremendous as well.

Just a few figures for a clearer picture:

- ☒ current transformers 750 kV - 21 phases;
- ☒ circuit breakers 330 kV - 15 units in 3-phase set;
- ☒ circuit breakers 110 kV - 25 units in 3-phase set;
- ☒ disconnectors 110 kV with one earthing switch - 33 units in 3-phase set;
- ☒ voltage transformers 220 kV - 15 phases, etc.

Another priority is the relay protection and automation devices. The current demand constitutes at least of:

- ☒ 13 sets of distance and overcurrent protection;
- ☒ 20 sets of circuit breaker control automatics;
- ☒ 6 sets of differential busbar protection;
- ☒ 10 sets of command transmission equipment.

As for thermal power plants, the needs are also substantial. In particular:

- ☒ circuit breakers 110 kV - 6 units in 3-phase set;
- ☒ circuit breakers 330 kV - 3 units in 3-phase set;
- ☒ disconnectors 110 kV with one earthing switch - 9 units in 3-phase set;
- ☒ current transformers 110 kV - 6 phases;
- ☒ voltage transformers 110 kV - 3 phases, etc.

The hydropower system is at risk as well and JSC Ukrhydroenergo needs the replenishment of its emergency stock of autotransformers 330 kV (7 units) and power transformers 330 kV (4 units) and 110 kV (7 units).

In accordance with Ukrenergo's projection, the full replenishment of the damaged equipment might take up to several years

Please see below the priority civil protection needs, which were compiled by the State Emergency Service of Ukraine:

1. modular houses - 6500 units (for 20 people with an internal lighting system);
2. residential modules - 820 units;
3. sanitary modules - 164 units;
4. bedroom sets - 130,000 units;
5. electric generators - 6,828 units (with the capacity >10 kW - 6500 units, >100 kW - 164 units, >400 kW - 164 units);

6. heat guns of indirect heating on liquid fuel or on electricity, with a thermostat and air distribution sleeves -

13,000 units;

7. mobile drinking water purification stations - 164 units. (at least 1.5 cubic meters per hour);

8. tank trucks for the delivery of drinking water - 164 pcs. (at least 8 cubic meters).