

**Damage to the environment of Ukraine
caused by armed conflict:
methodologies of assessing damage to
environmental components, further steps.**

Kyiv, 2022



Environmental damage

- more than **2268** cases of environmental damage recorded;
- **2,9 mln** hectares of the Emerald Network sites under threat of destruction;
- **20%** protected areas in Ukraine under the threat;
- **37,8 EUR bln** estimated losses including damage from air pollution and damage to soil;

Greenhouse gas emissions caused by war

- ▶ at least **33 million tons of CO₂eq** the total estimate of greenhouse gas emissions directly related to Russia's armed aggression against Ukraine;
- ▶ **49 million tons of CO₂eq** potential emissions of greenhouse gases due to the reconstruction of infrastructure and buildings destroyed or damaged during war

* The aggressor country must bear responsibility for greenhouse gas emissions generated by its actions

Emissions of greenhouse gases from fires

23424 thousand tons of CO₂eq total emissions:

- **16 340** emissions from forest fires;
- **2 632** emissions from fires in artificial;
- **4 098** emissions from agricultural fires;
- **354** emissions from fires of other natural components.

Damage to natural reserves and protected ecosystems

- ▶ Under threat of destruction:
 - 160** Emerald Network Sites = 2,9 mln hectares;
 - 16** Ramsar sites = 627,3 thousands of hectares;
- ▶ **20%** of protected areas in Ukraine are affected by the war;
- ▶ **812** protected areas under threat;
- ▶ **0,9** mln hectares of protected areas suffer from the effects of war;
- ▶ **10 national parks, 8 nature reserves, 2 biosphere reserves are under occupation**


Damage to biodiversity under the threat are:

- approximately 600 animal species;
- approximately 700 species of plants and fungi including included in the Red Book;
- since February 24, documented: 120 deaths of representatives of the dolphin family in the Ukrainian part of the Black Sea;
- at least 15 cases of animal ejections;
- 2 cases with indirect signs of death in fishing gear.

* criminal proceedings have been opened for the fact of mass destruction of objects of the animal world

UKRAINE COMPREHENSIVELY ASSESSES WAR DAMAGE:

- 7 methodologies of assessing damage to environmental components have been developed:
- damage to the forest fund;
- damage to the boundaries of the sea;
- damage for water pollution, arbitrary use of water resources;
- damages for arbitrary use of subsoil;
- damages caused to the territories and objects of the nature reserve fund;
- damage caused to land, soils;
- damages for emissions of pollutants;
- collection and access to information on environmental damage is ensured via 'EcoZagroza' app



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