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

Environmental damage

- more then 2239 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

Global Platform for the Assessment of Damage to the Environment from Military Actions

UKRAINE COMPREHENSIVELY ASSESSES WAR DAMAGE:

- 7 methodologies of assessing damage to environmental components have been developed
- collection and access to information on environmental damage Is ensured via 'EcoZagroza' app

GOALS OF THE PLATFORM:

- To unify international approaches to determining damage and assessing damage to the environment and climate
- Deepen international partnership to redress environmental and climate damage from armed conflicts
- Track the scale of the negative global impact of armed conflicts on the environment and climate change
- Strengthen international cooperation to restore the environment affected by armed conflicts

Maryna Shymkus head of EIA Department Ministry of Environmental Protection and Nature Resources of Ukraine

email: shymkus.m@mepr.gov.ua