

The War in Ukraine: new environmental challenges



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Operational Headquarters at the State
Environmental Inspectorate of Ukraine



[Staff composition](#) [Provide information](#) [Founders](#) [Technical issues](#) [EN](#) ▾

Tasks of the Headquarters

Forming a list of all violations in the field of environmental protection and bringing Russia to justice.

[Learn more](#)



State environmental protection control system during martial law.

The role of the **Operational Headquarters** at the State Environmental Inspection of Ukraine.



The State Environmental Inspectorate of Ukraine

- Central executive body
- Coordinated by the Cabinet of Ministers of Ukraine through the Minister of Ecology and Natural Resources.
- Implements State policy on supervision (control) in the field of environmental protection, rational use, recovery and protection of natural resources.

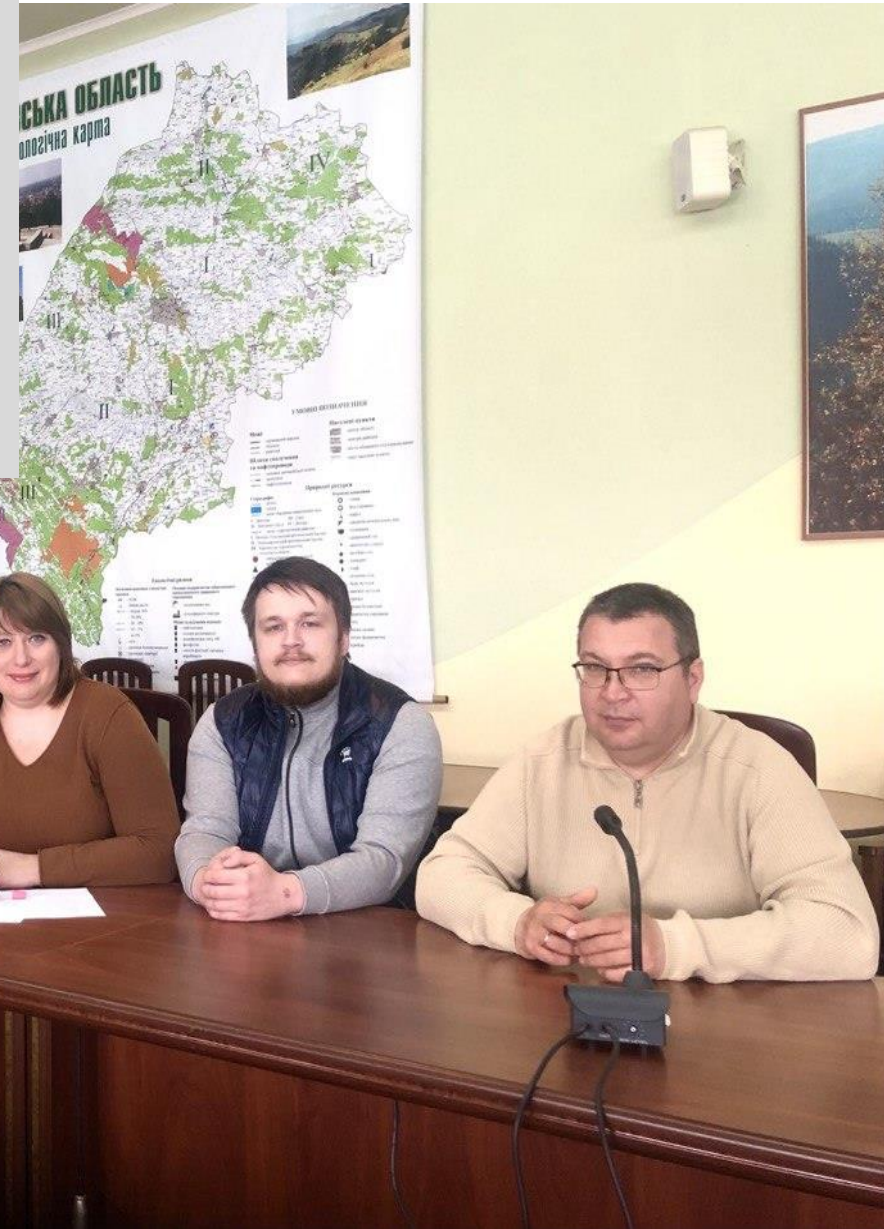


Operational Headquarters:

Activity Results as of December 31, 2022

- **1042** - accidents were recorded into the Unified Losses Register.
- **295** - working trips were made
- **854** - soil and **1138** water samples were taken

- **1,5 trillion UAH (~ € 38,5 billion)** - damages caused to the environment were calculated





ENVIRONMENTAL DAMAGE

in 8 months since the large-scale Russian invasion of Ukraine began



> **2239**

cases
of environmental
damage recorded



mln **2,9**

hectares of the
Emerald Network
sites under threat
of destruction

EUR bln

37.8

estimated losses,
including:

EUR bln

11.9

damage to soil

EUR bln

25.5

damage from air pollution



20%

of protected areas
in Ukraine are
under threat

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 FOR 214 DAYS OF THE WAR

thousand tons of CO₂eq

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**

23 424

TOTAL
EMISSIONS

THREATS TO NUCLEAR AND RADIATION

SAFETY OF UKRAINE AND EUROPE

35 days
The Chernobyl NPP and the Exclusion Zone
were under Russian occupation

>87 mln euro

damages from occupation
of the Exclusion Zone



OCCUPATION LOSSES:

344

automotive engineering
units

698

computers

864

office equipment
units

>1500

dosimeters



POLLUTION CAUSED

DIRECTLY BY HOSTILITIES

From 24 February

279 795

explosive devices, and

2,153

aircraft bombs

were neutralized in Ukraine

Russian troops regularly use
phosphorus shells banned by the international law

DAMAGE TO FORESTS

thousand hectares

450

of forests occupied
or in the hostilities zone

Under occupation:

63

forestries

15

forestry
enterprises

mln hectares

2,45

of forests

and

27

forestry enterprises

have been liberated from occupation and need to be restored

DAMAGE TO NATURAL RESERVES

AND PROTECTED ECOSYSTEMS

Under threat of destruction:

160 = 2,9

**Emerald
Network sites**

mln hectares

16 = 627,3

Ramsar sites

thousands of hectares

20%

**of protected areas
in Ukraine are
affected by the war**

812

**protected areas
under threat**

mln hectares

0,9

**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

750

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 animals
ejection

2

cases with indirect
signs of death
in fishing gear

DAMAGE TO WATER RESOURCES

EUR mln

7.8

estimated amount of losses

EUR bln

7.71

will be required for restoration of irrigation,
drainage and hydrotechnical structures*

500

water management facilities
have been damaged or destroyed

*according to the World Bank assessment in a 10-year perspective

IMPACT OF WAR ON RAW MATERIALS



Russia occupied

2,209

deposits of energy resources,
metals and minerals worth

12.7

EUR trillion

*“There is currently **no international standard for measuring ecological damage from conflict**. However, since the February 2022 invasion the Ukrainian environment ministry has been developing methodologies for determining damage and losses in the areas of land, water, air, forest, subsoil resources and nature reserves, and continues to refine them”*

Methodologies for measuring ecological damage from war:

Developed by the Operational headquarters & Approved by the Ministry of Environment



- **AIR:** Calculation of **unorganized emissions** of polluting substances (or a mixture of such substances) into **atmospheric air** as a result of emergency situations and / or during martial law and caused damage evaluation



- **LAND:** Determination of damage caused to **land and soil** as a result of emergency situations and / or armed aggression and hostilities during martial law



- **WATER:** Determination of damages caused by pollution and / or clogging / or unautrized use of **water** resources

Methodologies for measuring ecological damage from war

Under development:

- **SEA:** *Determination of damage caused to the natural environment within the territorial sea, exclusive maritime (economic) zone and internal **Azov and Black sea waters of Ukraine***
- **NATURE RESERVES:** *Determination of damage and losses caused to the territories and objects of the **nature reserve fund** as a result of the armed aggression*
- **FOREST:** *Determination of damage and losses caused to the **forest fund** as a result of the armed aggression of the Russian Federation*
- **MINERALS:** *Calculation the compensation amount for damages caused to the State as a result of unautrized use of the subsoil (mineral resources).*



What needs to be done:



To be Accepted in international courts indicators taken for damage calculations must:

- ✓ Ensure compliance of the **sampling program and selection test methods** with international standards
- More than a hundred international standards determine the test methods for selected samples of soil, water and air. They valid in EU & 149 countries.
- In Ukraine: some of them are accepted (DSTU). The rest **need to be accepted**.
- ✓ Test results will be accepted **if they are obtained and verified/confirmed by an accredited certification bodies**
- laboratories accredited according to *DSTU EN ISO/IEC 17025:2019 General requirements for the competence of testing and calibration laboratories* (or identical standards EN ISO/IEC 17025:2017 in the EU).

EcoThreat

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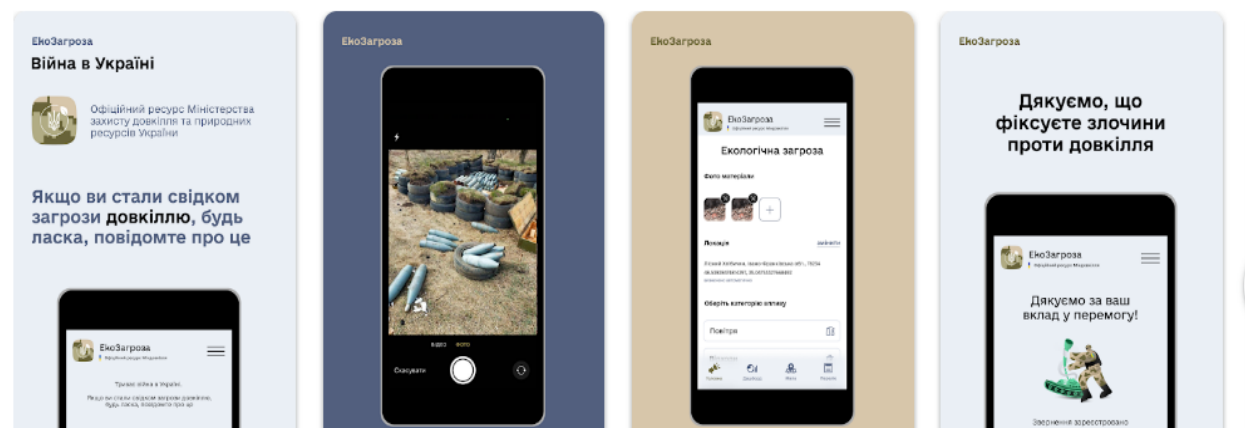
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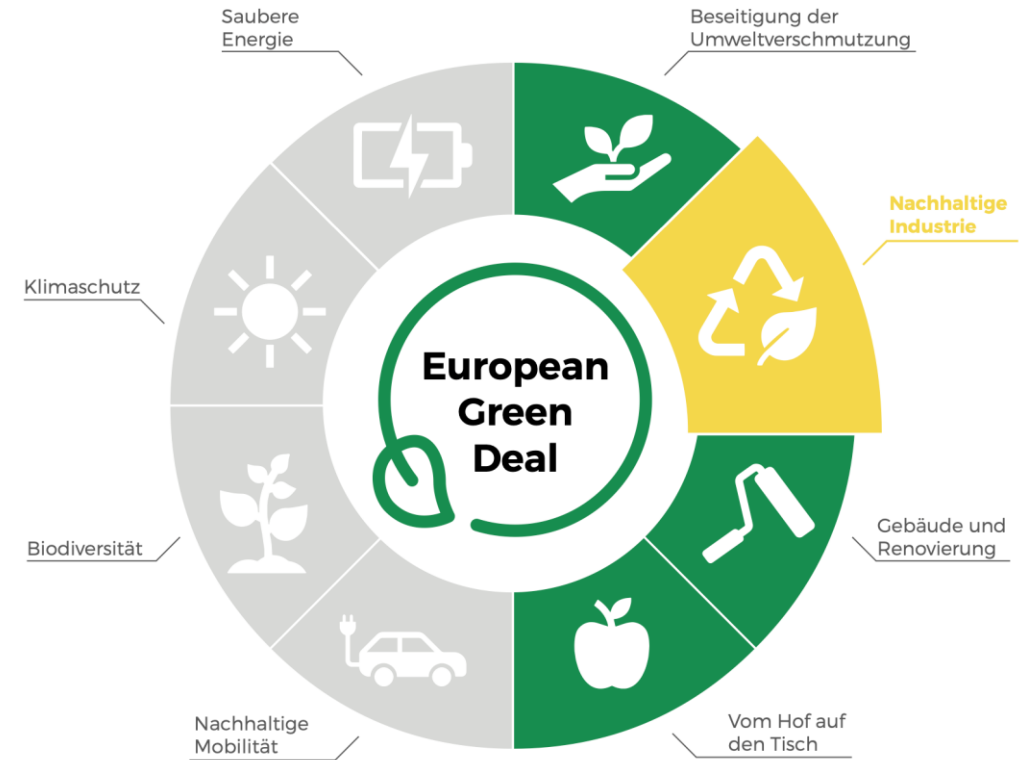
Everyone can share and get **reliable information** about the air, water, soil pollution and other environmental data **in a real time!**

- *Telegram channels scare you with radiation pollution? - just check if the radiation is now normal.*
- *Forests are burning nearby? – check current air quality data.*

Russia's War Is Impacting the Global Environmental Agenda!



Fulfilling the objectives of the Association Agreement with the EU and achieving the Goals of the European Green Deal





Ukraine Recovery Conference

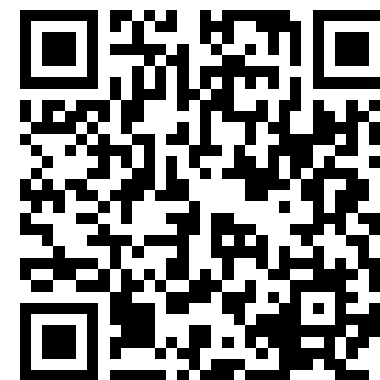
4-5 July 2022 – Lugano, Switzerland 



Conference

**On environmental safety,
green transition and
economic recovery
in the context of the**

Recovery Plan of Ukraine



Thank you!



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Все буде Україна!

#StandWithUkraine