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## THE IMPACT OF RUSSIAN AGGRESSION ON THE AIR COMPONENT OF THE ENVIRONMENT

**Viacheslav Kharchenko<sup>1</sup>, Bohdan Rudyk<sup>2\*</sup>**

<sup>1</sup>*National University of Food Technologies, Kyiv, Ukraine*

<sup>2</sup>*The Air Assault Forces Command of the Armed Forces of Ukraine, Zhytomyr, Ukraine*

\*Speaker: [bodikrudik26@gmail.com](mailto:bodikrudik26@gmail.com)

Russia has been aggressive against Ukraine since the collapse of the Soviet Union. Already in 1993-1994, the Russian Federation made its first unsuccessful attempts to separate Crimea from Ukraine. The war was initiated by Russia in 2014. The Russian army first annexed Crimea, then attacked Donbas. The Ukrainian army stopped the enemy and liberated 2/3 of the occupied Donbas during 2014-2016. But the enemy's insidious shelling continued, killing and wounding thousands of Ukrainian soldiers and civilians. On February 24, 2022, Russia launched a full-scale invasion, and its war crimes expanded throughout our nation.

One of Russia's war crimes is the devastation of ecosystems. 8 379 facts of environmental harm and losses brought on by Russian armed action were recorded during the full-scale aggression (EcoZagroza, 2025). This is 3 635 more crimes than the year before.

Perhaps the greatest damage has been done to the most dynamic component of ecosystems - the air. The destructive impact of Russian aggression on the air is primarily carried out through the following ways that lead to pollution: 1) deliberate destruction of industrial and infrastructure facilities, including hazardous enterprises, chemical warehouses, oil depots; 2) massive use of explosives, rocket fuel, incendiary substances; 3) massive fuel consumption by military equipment and logistics; 4) forest burning, particularly in industrial regions and the Chernobyl zone.

Over 3.1 million tons of oil products were burned in Ukraine due to Russian attacks. This resulted in the release of almost 11 million tons of pollutants into the atmosphere. Additionally, woodland fires caused by Russian invaders discharged more than 62 million tons of pollutants into the atmosphere, as nearly 86 000 hectares of forests burned. Fires caused by Russian attacks destroyed more than 2.5 million  $m^2$  of other objects. Nearly 250,000 tons of pollutants were consequently discharged into the atmosphere. In addition to this, about 181 tons of poisonous substances were released into the air. The entire amount of harm resulting from air pollution topped EUR 16.5 billion (EcoZagroza, 2025).

As a result of the full-scale Russian aggression,  $CO_2$  emissions in Ukraine have increased significantly. And due to the destruction of forests and forest shelterbelts, the number and intensity of negative atmospheric phenomena have increased sharply: storms, dusts, dry winds, etc.

In conclusion, the damage caused to the air in Ukraine as a result of Russian war crimes currently exceeds EUR 16 billion. Air is the most dynamic component of ecosystems. Therefore, damage to it leads to rapid negative consequences for the ecosystem as a whole and for human health. Russia's war crimes continue. They need to be stopped and the damage caused must be fully compensated. For Ukraine to meet both of these goals, international support is essential.

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**CONTACTS OF THE ORGANIZING COMMITTEE:**

National University of Food Technologies, Volodymyrska Str. 68, 01033 Kyiv, Ukraine;  
Mobile: +38 098 958 2007; Email: [edsd@nuft.edu.ua](mailto:edsd@nuft.edu.ua)  
Secretary of the organizing committee: Oksana Skrotska, PhD