

The environment is a silent victim of war. How long will this last?

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The wildlife and its habitat cannot speak, so we must and we will
Theodore Roosevelt

Introduction

People destroy the environment when waging wars and carrying out economic activities without taking proper responsibility for it. When there is a need to bring those responsible for environmental destruction to justice, both at the state and international levels, there are more questions than answers. The larger the damage to nature, the more likely it is to avoid punishment.

This is a strange pattern at a time when our planet is facing global challenges, such as climate change, which leads to weather disasters that cause environmental and economic damage. According to the UN, the world is heading for a warming by 3.2° C by 2100 [15]. In addition, wars are a separate challenge for the Earth. Currently, 183 regional armed conflicts are taking place on the planet – a record for the last 30 years [16]. The environment suffers from wars. For example, as of April 2024, an area of land equal to three areas of Croatia, six areas of Albania, or 1,088 areas of Liechtenstein has been mined in Ukraine [17]. Destruction of the environment affects people, causing more than 100 of the most dangerous diseases that kill 12.6 million people each year, accounting for 23% of all deaths in the world [18].

Despite this, history knows examples of catastrophic destruction of nature, such as the wars in Vietnam, Korea, Kuwait and Albania. These and other examples are discussed in this document in terms of environmental impact and the international community's response, including compensation for damage and accountability. This requires international legal mechanisms, so it examines the effectiveness of the latter in the context of armed conflicts and peace, existing problems in this area and suggestions for their solution. Special attention is paid to the Rome Statute of the International Criminal Court (hereinafter referred to as the Rome Statute), the main document for bringing criminals to international criminal responsibility. It is in its text that it is suggested to include ecocide as a separate crime. It is important to establish whether there is really enough support for the recognition of ecocide in the world, which states or groups of states most actively support its criminalization and why, who is the leader in these processes and what is the role of Ukraine in them.

It is important to establish whether there is sufficient support for the recognition of ecocide in the world, which states or groups of states actively support its criminalization, who is the leader in these processes, and what is the role of Ukraine. The Russian-Ukrainian war draws increasing attention to the issue of punishment for destroying the environment. In this regard, it is worth investigating the current state of possibilities for bringing the perpetrators to justice, identifying existing legal and non-legal problems, and suggesting possible ways to solve them, which we tried to do in this document.

1. Historical examples

1.1. Vietnam: did "ecocide" originate there? [1]

During the Vietnam War, US troops considered it normal practice to use chemical herbicides that were sprayed from aircrafts. They also used weather-changing technologies, such as seeding clouds to create rain streams to create unfavorable conditions for the enemy. As a result, unique Vietnamese jungles were burned out with herbicides, animals were destroyed, and cases of serious diseases in humans were recorded. The consequences of herbicide contamination have not yet been overcome, because they retain their properties and show their harmfulness for a long time. **Nature was used as a means of conducting military operations, was involved in the war and, naturally, died in it.**

Such circumstances led to an active discourse about a separate crime – ecocide, an act aimed at destroying the habitat of people and plant and animal species. At that time, the main ideas and vision of ecocide as an international crime were laid down, but ecocide was not formalized or recognized as an international crime, no punishment was imposed for it, as, for example, during the war in North Korea. Although such actions on the part of some countries towards the other ones continued, they could not not be stopped or punished in full.

1.2. Kuwait and Iraq: the environmental disaster of war [2]

The next victim of a large-scale war was the nature of Kuwait. In 1991, the Iraqi military blew up oil wells in Kuwait. This led to fires that had no analogues in history: they were being extinguished for 8 months. Every day, tens of tons of sulfur dioxide, soot and carbon dioxide were released into the atmosphere, which caused black rain to fall within a radius of thousands of kilometers. This made conducting agricultural work impossible, caused mass diseases of people, and the death of animals. More than ten million barrels of oil were deliberately dumped by the Iraqi military in the Persian Gulf. This resulted in pollution of about 600 kilometers of the coastline of Saudi Arabia, which is similar to the distance from Berlin to Amsterdam, or from Lviv to Kyiv. Groundwater and desert ecosystems were polluted. Tons of drinking water were lost due to the conflict and the involvement of the environment in it.

Before the war, the region's oil wealth attracted migrants from all over the world. By 1990, there were about 3 million people living in Iraq and Kuwait alone. Many of them worked in other countries of the Persian Gulf. But just 2 months after Iraq's invasion of Kuwait, more than 2 million workers left the region or returned home. Yemenis and Egyptians alone accounted for 750,000 and 1/2 million workers, respectively. There were also about 600,000 residents from Asian countries. After the conflict ended, only a very few Jordanians and Jordanians of Palestinian origin returned to Kuwait by the early 2000s [3]. The local population of Kuwait was also forced to emigrate, suffer significant material damage, and worst of all, people were injured and killed..

In trying to destroy its neighbor, Iraq also destroyed its people and the environment. After the invasion of Kuwait, the UN imposed severe economic sanctions on Iraq. This led to a shortage of medicines, food and fuel, and water poisoned with petroleum products became the "business card" of Iraq, demonstrating that using nature for military purposes is almost the worst idea.

After this conflict, the UN was able to create a body - the UN Compensation Commission, which for 30 years considered cases on compensation for damage to victims from Kuwait. However, Iraq's actions were not considered as ecocide. No one was punished for it, nor for war crimes.

1.3. Albania: legacy of war [4]

Humanity has been reaping the consequences of dragging the environment into war for years. After the Kosovo conflict, Albania is still struggling with polluted air and water. Nevertheless, the country, being one of the few countries that survived the war, managed to resolve the issue of demining in its territories. The Albanian armed forces identified more than 15 thousand km² of dangerous areas, which accounted for more than half of the total territory of modern Albania. This part of the territory contained everything: anti-tank and anti-personnel mines, unexploded ordnance, rocket artillery submunitions, and at least six NATO cluster munitions. The poorest and most agriculture-dependent part of the country, Kukës Prefecture, was most seriously affected. In most of its territories, it was dangerous to engage in agriculture. As a result, the land owners tried to gather a larger harvest from unpolluted lands. However, these lands were not fertile and could not compensate for the harvest from half the country, which could not be obtained due to mines. That is why, in some territories, farmers ignored the danger and carried out agricultural work despite the pollution. In just four years, from 1999 to 2003, 27 people were killed and 216 injured in mine explosions.

The risk of a food crisis and the loss of people contributed to the activation of the authorities to solve this problem. The National Mine Action Plan to Complete Demining was developed for the period 2007-2010 as part of the Completion Initiative. This plan was presented and received the support of many donors, including the United Nations Development Programme and DanChurchAid. The plan was successfully implemented by the Albanian government by 2010, despite the difficulties of managing the multi-level program, the remoteness and underdevelopment of the infrastructure of Kukës Prefecture. Since 2010, there have been no human casualties from landmines. However, the question of responsibility for the deaths of people and for the consequences for the environment of Albania remains open.

It is surprising that, despite numerous examples of the destruction of the environment as a result of military operations during the 20th century, the international community has not been able to develop effective criteria for defining the concept of ecocide and mechanisms for holding accountable for it. Wars continue to destroy the planet, and people, animals, and plants – all living things – suffer from

their consequences. How can we protect the environment, or at least make sure that the persons and states responsible for the damage are held accountable?

2. International legal mechanisms in the field of Environmental Protection

2.1. Protecting the environment during war

2.1.1. Convention on the prohibition of military or any other hostile use of means of environmental modification techniques (1976) - the right to veto obstacles

There are not many treaties or acts that can be applied in the context of accountability for damage to the environment during war. One of them is the Convention on the prohibition of military or any other hostile use of means of environmental modification techniques (1976). It prohibits the deliberate management of natural processes to change the dynamics of the Earth, which can cause hurricanes, tsunamis or earthquakes.

However, this convention is not applied in practice, since the methods of "geophysical warfare" are not common in modern conflicts. However, there are also procedural difficulties. For example, this convention is unlikely to be used to bring to justice for the explosion of the Kakhovka Hydroelectric Power Plant by Russian troops. Russia – as a permanent member of the UN Security Council with the right of veto – will not allow this. This will apply to all situations when the aggressor is one of the member states of the UN Security Council or a state that has secured the support of a member of the UN Security Council.

2.1.2. The Rome Statute and problems of its application

In this part, it is important to understand that the Rome Statute of the International Criminal Court of 1998 (hereinafter referred to as the Rome Statute) forms the basis of International Criminal Law. In turn, the Geneva Conventions of 1949 are the foundations of international humanitarian law. Despite the fact that in theory these acts belong to different "categories", in practice they should often be applied together.

Environment as an object of legal protection under the Rome Statute

One of the main acts that should be the basis for bringing to international criminal responsibility for such crimes is the Rome Statute. It contains three provisions in Article 8 that can be applied to a person who destroys the environment in the course of hostilities: intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated; intentionally directing attacks against civilian objects, that is, objects which are not military objectives; widespread destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war which is committed illegally and senselessly. However, these articles are difficult to apply in practice due to the lack of a unified position on assigning the environment to various objects of international legal protection: a civil object, property, an independent object of legal protection "environment". If we don't know what category the environment belongs to, then we don't know what provision to apply.

Evaluation concepts as a problem of applying the Rome Statute

Article 8(2)(b)(iv) of the Rome Statute of the International Criminal Court requires both broad, long-term and serious damage to the environment. In other words, these three elements must be present in a war crime against the environment. The difficulty in this part is that the Rome Statute does not explain what these evaluation terms mean. Nor is there a clear understanding of what should be understood as damage to the environment, which is "obviously incommensurable with the specific and directly expected overall military advantage." There is no interpretation of these terms by the International Criminal Court in The Hague.

The high threshold of proof is a separate problem of the Geneva Conventions of 1949

The high threshold of damage to the environment and the difficulty of proving it during military operations should be taken into account. For example, in accordance with Part 1 of art. 55 of the Protocol Additional to the Geneva Conventions (1949), relating to the Protection of Victims of International Armed Conflicts (hereinafter referred to as Protocol I), in order to establish the fact of violation of the duty of caring for the environment during the conduct of hostilities, inaction must be proved to show concern for the protection of the environment from the task of widespread, long-term and severe damage to the environment. There are no common criteria for defining these concepts, just as there is no clear understanding of acts related to caring for the environment.

A high threshold of evidence is also set for cases of destruction of critical objects, such as dams, dykes and nuclear electrical generating stations. According to Article 56, Paragraph 1, of the Protocol Additional to the Geneva Conventions (1949), these objects shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population. However, there is no clear definition of what exactly "release of dangerous forces" and "severe losses among the civilian population" mean. This creates difficulties in determining which actions of Russia can be considered an attack, as in the case of the destruction of the Kakhovka Hydroelectric Power Plant.

The principle of proportionality is a cross-cutting feature of the Rome Statute and the international humanitarian law

Both the provisions of the Rome Statute of the ICC and the norms of the international humanitarian law provide for compliance with the principle of proportionality. The essence of the principle of proportionality is that the military advantage gained as a result of an attack should outweigh the damage that is likely to be caused to civilian population and objects. However, in practice, it is very difficult to prove exactly the fact that military advantage (does not) outweigh the damage caused. This means that it is difficult to prove the guilt of the person who caused the damage.

2.2. Protecting the environment in peace

International legal regulation of Environmental Protection in peace can be divided into the following groups: nuclear safety, marine environment and biodiversity, industrial safety. A group of experts gathered by the International Charitable Organization "Environment-People-Law" (hereinafter referred to as EPL) analyzed these issues and suggested the following conclusions:

2.2.2. Nuclear safety and oil pollution

Currently, there are several international treaties in force, they are designed to protect either the environment as a whole or its individual components, but in practice they almost do not work, because they do not provide for compliance mechanisms.

The Convention on Early Notification of a Nuclear Accident (1986) – lack of safeguards for compliance. It is aimed at providing warning in the event of a nuclear accident. At all facilities in a member state where there are nuclear reactors, where nuclear fuel or radioactive waste is stored, in the event of emergencies related to or not related to military operations, the state is obliged to notify both the International Atomic Energy Agency (hereinafter referred to as the IAEA) and other member states that may or have already been negatively affected by radiation emissions. But if the state does not fulfill its duty, this convention is powerless.

The Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986) – as a guarantee of cooperation after the occurrence of an accident. It is aimed at joint actions of the IAEA and member states in the event of a nuclear accident or other radiation emergency. Countries may take advantage of the provisions of this convention in the event of such a situation and seek assistance from the IAEA and other parties to the convention to protect life, property and the environment from the effects of radioactive contamination.

The Convention on Nuclear Safety (1994) – peacetime mechanism. It is designed to ensure the nuclear safety of a nuclear installation operated in peacetime. However, during military operations, as in the case of the latter, it cannot ensure the implementation of its provisions. The convention does not offer any solution to this situation. The same applies to **The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1997)**

and The International Convention on Oil Pollution Preparedness, Response and Co-operation (1990).

The International Convention on Civil Liability for Oil Pollution Damage (1969) – untested mechanisms. It provides for the filing of claims for damages from oil spills in the courts of the states that signed the convention. Each of these states shall ensure the jurisdiction of its courts to hear such claims. The problem is that this mechanism has not yet been effectively applied in practice. Similar situation with the **International Convention for the Prevention of Pollution from Ships (1973).**

There are a number of conventions that are designed to protect humanity and the environment from nuclear accidents and oil spills. However, most of them do not have a enforcement mechanism, and therefore function as “gentlemen's agreements”, relying on the good faith of member states. Unfortunately, states do not always behave in good faith.

2.2.3 Marine environment

As of 2024, there are a number of international conventions designed to protect the marine environment, such as the cleanliness of the seas and the conservation of marine biota. Their application faces a number of practical problems, in particular the abuse of the right of Veto on the application of their prescriptions.

UN Convention on the Law of the Sea of 1982 – norms without application. A certain mechanism of responsibility for (not specific individuals) states for damage to the environment is provided for by the UN Convention on the Law of the Sea of 1970. Thus, if we consider its application on the example of Ukraine, then in accordance with the procedure determined on the basis of Annex VII of this Convention, Ukraine should prepare and file an international claim against the Russian Federation for non-compliance with the provisions of the Convention that cause significant damage to the marine ecosystem, on the basis of which an arbitration tribunal will be established that will have jurisdiction to consider relevant claims between Ukraine and the Russian Federation. So far, this mechanism has not shown itself to be effective, because it has never been fully used. Russia's previously mentioned membership in the UN Security Council will also not contribute to the use of this Convention.

The Convention on the Protection of the Black Sea Against Pollution (1992): there is a procedure, no results. This convention provides for the prohibition of pollution of the Black Sea, guarantees the protection and preservation of the marine environment, as well as prevention of harm to life in the sea and living resources. In case of violation of its requirements, there is a mechanism under which a Meeting of the Contracting Parties can be convened or an affected party can apply to the Commission of the Protection of the Marine Environment of the Black Sea. The problem is the same – this mechanism has not shown itself to be effective enough to be considered as worth applying. The Black Sea Commission has not yet held anyone fully responsible for Black Sea pollution.

Of course, responding at least somehow to cases of serious damage to the environment, states have tried and are trying to use existing mechanisms and create new ones. But do they succeed? There are a number of international agreements designed to regulate the issues of preserving and protecting the environment, and prevent harm to it in various areas. An analysis of some of them shows that the biggest drawback of such conventions, oddly enough, is that they could not be applied or rarely were applied. The practice of applying international environmental agreements is sporadic, so there are not many specific examples of integrated law enforcement in this area.

3. Law enforcement in environmental cases in international judicial bodies

3.1. Iraq-Kuwait case: The UN Compensation Commission

Despite the imperfect legal framework, the international community is looking for ways to punish those who have caused damage to the environment. In the case between Iraq and Kuwait, the UN condemned Iraq's actions as a violation of international peace and security and established the UN Compensation Commission to pay compensation to applicants in accordance with the Security Council Resolution No. 692 (1991). The Commission received a percentage of the proceeds from

the export sales of Iraqi oil and petroleum products. This money was used to compensate victims for about 30 years. The UN and the Iraqi government have agreed that the country has managed to recover all losses caused by the invasion of Kuwait. The development of the compensation procedure took a long time, but compensation was paid to all those who were entitled to it. This experience is useful for Ukraine, which is looking for mechanisms to hold Russia accountable and recover compensation. However, the notorious right of veto of the Russian Federation in the Security Council may prevent the creation of such a body for Ukraine.

3.2. Costa Rica - Nicaragua case: Case-law of the International Court of Justice

The International Court of Justice is the body to which you can apply for damages for environmental destruction. It was this court that resolved the case initiated by Costa Rica after the illegal invasion of its territory by the Nicaraguan military and the construction of a canal from the San Juan River to the Los Partillos Lagoon in the occupied territories. Costa Rica claimed that Nicaragua caused damage to the river and ecosystem due to dredging and construction. The court found that Nicaragua's actions violated Costa Rica's sovereignty and caused serious damage to the natural environment, including wetlands and national wildlife sanctuaries. Due to the difficulties of proper legal registration of evidence, Costa Rica was able to justify only 5% of the refunds that they initially claimed. This may be a useful experience for Ukraine, but the above mentioned right of veto of the Russian Federation may become an obstacle.

3.3. The case of the South Africa v. Israel: environmental aspects of the conflict

Considering that Israel is committing genocide against the Palestinian population, South Africa filed the case on compliance with the Convention on the Prevention and Punishment of the Crime of Genocide of 1948 in the ICJ. South Africa's statement of claim also mentions Israel's plan to flood tunnels in the Gaza Strip with seawater. This can lead to problems with water supply and sewerage, water and soil contamination. Experts warn of a possible environmental disaster that endangers water quality, which will eventually affect the living conditions of the population and the quality of agricultural products. Although the court's position has not yet been determined, the world expects a clear response in this part. The ICJ is expected to provide an advisory opinion on the (non -)legitimacy of Israel's presence in the territories claimed by Palestine. This conclusion may also contain recommendations on the impact of war on the environment.

Attempts to receive compensation damage to the environment as a result of military operations were, and some of them can be called successful. However, liability for damage to the environment was not fully compensated. Similarly, those responsible for this damage were not held accountable.

3.3. Case of Ukraine v. Russia: what is the future?

Ukraine actively supports the recognition of ecocide at the international level and is preparing to file such lawsuits in the International Court of Justice. The agreements on the compensation mechanism for Ukraine are reflected in the resolution of the Committee of Ministers of the Council of Europe CM/Res(2023)3. The Law of Ukraine "On Ukraine's accession to the Enlarged Partial Agreement on the Register of Damage Caused by the Aggression of the Russian Federation against Ukraine" provides for the creation of a register of damage caused by the war, a special fund for compensation of damage and a compensation commission. Work on collecting materials for the Register of Damage has already started. However, the launch of the Compensation Commission may be difficult due to the country that has caused and continues to cause damage to Ukraine. Now it is hard to imagine that Russia would not use its veto power to block the creation of such a Commission against itself.

Understanding the importance of a comprehensive approach to bringing Russia and the Russians to justice for the damage caused to Ukraine, the President of Ukraine Volodymyr Zelenskyi presented to the G20 Summit participants a 10-point Peace Formula, one of the points – point 8 – concerns countering ecocide. In 2023, the Office of the Prosecutor General of Ukraine held a conference "United for Justice", where the legislation on ecocide at the national and international levels was discussed. In the same year, Ukraine, together with Estonia and Romania, co-organized an additional event within the framework of the Assembly of State Parties to the Rome Statute dedicated to the impact of war on the environment.

Does Ukraine have a chance to become the locomotive of ecocide recognition at the international level? Provided that the authorities take a proactive position, taking into account the colossal

destruction of Ukrainian nature by the Russians, all possible coverage of such impacts and such a position of the authorities – yes. Will the potentially recognized international crime of ecocide be applied in the "Ukrainian cases" that are already being prepared for filing? Probably not, because the criminal law has no retroactive effect in time. Does this mean that Ukraine, along with lobbying for the recognition of ecocide, has to elaborate on developing ways to "revive" the dead international law? Definitely.

Such circumstances lead to a search for new ways to protect the environment from destruction, in particular during military operations, as a result of disregard for environmental standards in the course of economic activity, and so on.

4. Advocacy for recognition of ecocide as a crime

The environment has no borders, its destruction in one country affects all countries. That is why states are trying to strengthen the ability of the international community to respond to environmental challenges.

4.1. Small island states: the first in the fight

Small island states are the most vulnerable to environmental disasters. They are the first to meet the consequences, because they have every chance to literally sink in the near future. Recognizing ecocide internationally and holding the offender accountable is vital for them to protect their living space. They are the ones who most support the movement for recognizing ecocide as an international crime during the annual Assemblies of State Parties to the Rome Statute of the ICC, and actively work to raise these issues at climate conferences and other international events.

Table 1

Initiatives of small island states towards recognition of ecocide [5]

Name of the state	Initiative	Place, event where such an initiative took place	Year of implementation of the initiative
Vanuatu, Tuvalu, Tonga, Fiji, Niue, Solomon Islands	They called for a gradual abandonment of the use of fossil fuels, support to the rapid and fair transition of the Pacific region to renewable energy, and strengthen related legal obligations, including "preventing ecocide".	Meeting of the leaders of these states	2023
New Zealand	The Minister of Foreign Affairs Nanaia Mahuta expressed support to "future discussions around the concept of ecocide as an international crime to combat environmental destruction at the global level"	The Assembly of State Parties to the Rome Statute	2022

Republic of Panama	The Vice President said that "the time has come for the world to have an international body that will hold accountable all those who make damage to the planet. When will ecocide stop?"	The UN General Assembly	2022
Vanuatu	The President of Vanuatu called on states to support the inclusion of the crime of ecocide into the Rome Statute of the International Criminal Court, stating to the Assembly that "it is necessary to act, being aware of severe and wide-spread or long-term damage to the environment that can no longer be tolerated"	The UN General Assembly	2022
Samoa	Supported the statement on ecocide in the ISS, organizing an official additional event and providing a statement of support on ecocide from the Prime Minister	The Assembly of State Parties to the Rome Statute	2022
Vanuatu	Called on the International Criminal Court to appeal to the consideration of ecocide as the fifth crime under the Rome Statute of the International Criminal Court	The Assembly of State Parties to the Rome Statute	2021
West Papua	The Green State program was launched, which directly included the criminalization of ecocide	COP26 Conference	2021
Vanuatu and Maldives	They called for serious consideration of the crime of ecocide	The Assembly of State Parties to the Rome Statute	2019

Although ecocide has not yet been criminalized at the international level, the efforts of these states are valuable, because they are the driving force to ensure that this issue does not leave the agenda of the international community.

4.2. Europe: leaders and examples [5]

Some European countries also support recognizing ecocide as an international crime. For example, in 2020, the Swedish Labour Movement called on the government to promote this idea internationally. A group of MPs appealed to the Stop Ecocide Foundation to develop a legal definition

of ecocide. Two suggestions for amendments to the legislation on ecocide were submitted to the parliament. However, none of them was adopted due to insufficient support in the Parliament for four years.

In 2020, the Minister of Foreign Affairs of **Finland** supported the idea of discussing ecocide, and in 2021, then-President Sauli Niinistö and Minister of Foreign Affairs Pekka Haavisto called for recognition of ecocide as an international crime at the Assembly of State Parties to the Rome Statute of the ICC. In 2024, a group of MPs from the Green Union party filed an appeal to the government with a question of supporting the issue of ecocide through the International Criminal Court. Consideration of this appeal has not been completed yet.

In the **Netherlands**, in 2020, one of the parties submitted a draft law on ecocide to the parliament, but it was rejected due to insufficient support from MPs. In 2023, Lammert van Raan, a Member of Parliament from the Party for the Animals, submitted a new bill to criminalize ecocide, which is currently being discussed in the Parliament.

Three European countries, although selectively and not very actively, support the recognition of ecocide. Ahead of them is another European country – the Kingdom of Belgium – which criminalized ecocide at the national level, setting a precedent in the European Union. It is not known whether other UN member states will follow suit.

Belgium: the first step towards criminalizing ecocide in the EU

The Kingdom of Belgium was the first EU country to criminalize ecocide. On February 22, 2024, the Belgian Federal Parliament amended the country's Criminal Code, adding a new type of crime – ecocide.

From now on, ecocide is clearly defined in Belgian law. According to the new Article 94 of Book II of the Criminal Code, "ecocide" consists of: **“deliberately committing, by act or omission, an illegal act causing serious, widespread and long-term damage to the environment in the knowledge that this act is causing such damage, provided that this act constitutes an infringement of federal legislation or an international instrument that is binding on the federal authority or if the act cannot be located in Belgium.”**

This definition entails the following cumulative conditions:

1. an unlawful action or omission.
2. constituting an infringement of federal legislation or an international instrument that is binding on the federal authority or if the act cannot be located in Belgium.
3. causing serious, widespread and long-term damage to the environment.
4. committed with *mens rea*, meaning that the offender – who can be both natural or legal person – must have had the intention to knowingly engage in the conduct punishable by law, including in the knowledge that such action or omission would cause serious, widespread, and long-term damage to the environment (there is no need, however, to show that the offender wanted these consequences to take place (may at the same time be committed with direct or indirect intention)).

Now that the Act introducing (new) Book II of the Belgian Criminal Code has been formally adopted, it will enter into force two years after its publication in the Belgian Gazette (i.e., probably in Q1 or Q2 2026). Non-retroactivity is a fundamental principle of Belgian criminal law, and conduct occurring before this date will thus not be prosecuted as ecocide.

Penalty for ecocide in Belgium – how it will work

The new Belgian Criminal Code enshrines an eight-level scale of principal penalties, with the eighth level corresponding to the most severe offences. Ecocide will be punishable by a level 6 sentence. Thus, for natural persons, the penalty is provided in the form of Prison sentence of 15 to 20 years, or in cases of psychiatric condition, treatment under deprivation of liberty of 11 to 16 years. For legal entities, a fine of EUR 1.2 million to EUR 1.6 million.

Courts may, however, go above or below these thresholds by recognising the existence of aggravating elements or mitigating circumstances. As it is a level-6 offence, courts will also be able to order accessory penalties next to the principal penalties, such as fines, seizures, monetary penalties based on the profit expected or obtained from the offence, closing of the establishment, professional ban and/or prohibition on the exercise of an operation falling within the scope of the corporate purpose, etc.

The example of Belgium demonstrates the desire of EU member states to strengthen the environmental protection through criminal law. By harmonizing its legislation with the EU's law, Ukraine can adopt this experience to strengthen its National Environmental Policy and ensure more effective law enforcement in the field of environmental protection.

4.3. Position of states affected by military operations

Most war-affected countries are actively working to recognize ecocide. However, they face many challenges of post-war recovery – rebuilding the economy, bringing refugees back, and maintaining their independence, so they have less time and rather limited resources to lobby for the recognition of ecocide at the international level.

Ukraine, suffering from the merciless destruction of the environment during the war, has a deep and global mission – to change these trends at the international level. However, in parallel with lobbying at the international level, the task remains to put in order the system of bringing to justice for ecocide, war crimes and other criminal offenses against the environment at the national level.

5. Analysis of Ukrainian realities or why Ukraine should be the driving force in the cause of the world against crimes against the environment

5.1. Realities of the status of the Ukrainian environment

War destroys everything: air, water, land, plants and animals. Russian troops are firing at oil depots and large factories, causing harmful substances to enter the soil and water. Fires caused by military operations in forests and steppes destroy nature and threaten living organisms. Attacks on nuclear power plants and explosions of munitions cause a disaster that can make large areas uninhabitable.

5.1.1. Forest fires in de-occupied territories

According to the State Forest Resources Agency of Ukraine, the total area of the forest fund of Ukraine is 10.4 million hectares, of which 9.6 million hectares are covered with forest vegetation. The war unleashed by Russia in just six months ruined two million hectares of Ukrainian forest [6]. That is, already in the first six months of the war, Ukraine lost 20% of its entire forest fund. Both occupied and de-occupied territories that are close to the front line suffer from forest fires.

Currently, there is no information about the full picture in the occupied territories. Access to the territory is restricted due to mining. Munitions detonate at fire sites. According to preliminary information from the Ministry of Environmental Protection and Natural Resources of Ukraine (hereinafter referred to as Mindovkillia), since the beginning of 2024, 149 fires have been eliminated in forests on an area of 460 hectares. Among them, 115 fires on an area of 405 hectares occurred as a result of the Russian aggression. The area of forests burned by forest fires caused by war is the area of two Monaco states. The fire also destroyed more than 6.5 thousand hectares of forests of the Lyman Forestry Enterprise – this is like the distance from Amsterdam to the Hague, of which 100 hectares – in a week (the area of two Vatican Cities) [7]. As of the beginning of May 2024, the fire engulfed 1000 hectares of forest in Kharkiv region. As a result of constant enemy attacks, the fire spread to the territory of the Chervonyi Oskil and Studenok Forestries of the Izyum Forest Enterprise [7]. Now it looks like the destruction of forests will continue. Soon almost the entire territory of Ukraine's forests may be damaged or destroyed.

5.1.2. The problem of waste from destruction

While for forest enterprises the problem is how to preserve nature, another aspect is how to remove the consequences of destruction. In Ukraine, more than 600 thousand tons of destruction waste have already been formed [8]. This number is three times greater than the amount of plastic that Indonesia discharges into rivers and the ocean in a year [10]. As of the beginning of March, only in the territory of the Kharkiv region, about 50 thousand tons of waste were formed as a result of Russian hits [8]. Daily shelling of the frontline region only increases these volumes. While Indonesia has a strategy and practice for recycling and disposing of plastic that pollutes rivers and oceans, Ukraine does not yet have a plan on how to solve the problem of waste destruction caused by military operations.

5.1.3. Pollution of water resources

Ukraine doesn't have a water treatment plan either. The Russian armed aggression has already caused more than 83 billion UAH in damage to Ukrainian Water Resources [9]. With each attack, the damage increases. The Russians are attacking Ukrainian hydroelectric power plants (HPPs), including well-known damage at Kakhovka and Dnipro HPPs. As a result of a massive missile attack on the Dnipro HPP, environmental inspectors of the State Environmental Inspectorate (hereinafter referred to as the SEI) recorded soil contamination and a spot of petroleum products in the water. This can lead to contamination of drinking water, respectively, a threat to human health and the extinction of aquatic organisms. Soil contamination can lead to the destruction of vegetation and reduced fertility, which will negatively affect agricultural activity and human health due to food contamination.

Box 1: Kakhovka HPP explosion: environmental implications

In public space, the explosion of the Kakhovka HPP is often called an ecocide. According to the United Nations data, the destruction of the Kakhovka HPP dam caused damage to Ukraine in the amount of almost USD 14 billion.

The breakthrough of the Kakhovka HPP dam caused huge damage, flooding 620 square kilometers of territory in four regions – Kherson, Mykolaiv, Dnipropetrovsk and Zaporizhzhia, which directly affected 100 thousand residents [9]. Significant damage was caused to housing, infrastructure, the environment, and cultural sites, such as historical buildings, museums, and religious buildings.

The world has also lost some of its ecosystems forever – for example, endemic animal species that existed only in one place on Earth, in the south of Ukraine. They will never recover. Half of the forest in this area has been lost.

Ukrainian law enforcement officers have launched an investigation into these destructions under Article 441 Ecocide on the frameworks of the Criminal Code of Ukraine and violation of the laws and customs of war. However, the issue of such a definition of these crimes is debatable. The differences between the concepts of ecocide, war crimes, and criminal offenses against the environment are also debatable. The question remains open as to whether the existing legal and institutional systems are capable to hold offenders accountable for exactly what they are guilty of.

6. Current legal regulation and practice

6.1. Legal regulation

The issues of ecocide are regulated in Ukraine under Article 441 of the Criminal Code of Ukraine. Thus, ecocide is the mass destruction of flora and fauna, poisoning of the atmosphere or water resources, as well as the commission of other actions which may cause ecological disasters. It is punishable by imprisonment for a term of eight to fifteen years. This article was included in the text of the current Criminal Code of Ukraine when it was adopted in 2001. Since then, no changes, amendments or supplements to the article have been made. For more than twenty years, lawyers did not pay much attention to elements of this crime, the possibilities of its application and interpretation. And therefore, on the existing problems of law enforcement. After all, there were not so many cases that could be qualified as ecocide, and therefore the topic did not seem relevant. However, the main problems of law enforcement are the vagueness of the wording and terms used, which leads to uncertainty of the threshold of proof and the difficulty of distinguishing between the issue of ecocide and war crimes, which may have similar features to ecocide in the course of combat operations. There is a depreciation of the concept of ecocide due to the application of Article 441 of the Criminal Code of Ukraine in cases of actual commission of less socially dangerous offenses against the environment.

Unclear wording and terms used

Now it is difficult to determine what exactly is considered an ecocide, what should be the amount of damage and what facts are needed for this. The current version of the Criminal Code of Ukraine contains many evaluative concepts regarding the elements of the crime “ecocide”, which are not determined by the current legislation, case law or doctrine. For example, the mass destruction of the plant world. There are various approaches in the doctrine, none of which has found sufficient support to become generally accepted. The same applies to the concepts of mass destruction of the animal world, poisoning of the atmosphere, poisoning of water resources, environmental disaster.

There are no clear criteria that would allow determining whether an ecocide was committed or not. According to the current version of Article 441 of the Criminal Code of Ukraine, it is almost impossible to bring to justice precisely for comprehensive violations, which mean ecocide. According to the literal interpretation of Article 441 of the Criminal Code of Ukraine, a person who destroyed both the plant and animal worlds or poisoned both the atmosphere and water resources cannot be held liable under this article, because dividing these acts, the Ukrainian legislator uses the connecting “or”, which provides for the applicability of only one of the above “options”. That is, if several types of “worlds” are destroyed, it will be impossible to bring a person to justice. But, as you know, attacks on the environment rarely affect only one natural aspect.

The moment of committing an ecocide is also poorly described

This crime has a special design. It differs from other types of criminal offenses, including against nature. In case of suspicion of committing an ecocide, both the act and the case of real danger in the form an environmental disaster created by this act must be established. Therefore, it is difficult to determine whether there was a completed ecocide crime or an attempt on it within the framework of existing legislation. Article 441 of the Criminal Code of Ukraine describes ecocide, paying more attention to the consequences of the crime than to how it was committed. This raises a new question: Can an act be considered an ecocide when someone simply does nothing to prevent damage?

Box 2

Experts are looking for ways to clearly define the concept of ecocide

The Working Group on the development of criminal law, which has been working since 2019, has suggested a draft of the new Criminal Code of Ukraine. In the initial versions, the elements of a criminal offense in the ecocide format were absent altogether. However, taking into account the suggestions, including from the public, this crime was added to the final version. It defines this crime as follows: "A person who, in order to cause long-term and wide-spread damage, used any means to change the dynamics, composition or structure of the environment, including the biosphere, lithosphere, hydrosphere and atmosphere, or to change outer space, has committed an offence of the 5th degree".

As a whole, this draft suggests to divide intentional crimes into 9 degrees. This means that in relation to Belgium, where there are a total of 8 levels of severity and ecocide is recognized as a 6-level crime, in this case ecocide is considered as a less serious crime. The wording suggested in the draft of the new code is devoid of technical errors, unlike the current version, because it defines that ecocide is a intentional action aimed at causing damage. However, the meaning of the terms "long-term" and "wide-spread" damage and whether this damage is intended to destroy the environment itself leave room for interpretation.

Nevertheless, the new version of the article on ecocide, if adopted, will apply only to crimes committed after adoption. All crimes committed before will be considered and resolved within the framework of the current article 441 of the Criminal Code of Ukraine.

Despite the fact that the new version of the Criminal Code of Ukraine offers a clearer formulation of a crime that can be regarded as ecocide, none of the versions makes it possible to understand how to distinguish crimes committed within the framework of ecocide and those committed during military operations, that is, war crimes.

The difficulty of distinguishing the concept of ecocide from war crimes

What concerns acts committed in the course of military operations that cause wide-spread and serious damage to the environment, there are contradictions regarding their qualification as ecocide or war crimes, or in the aggregate of both. In case of an unclear distinction between these concepts, which currently exists in Ukrainian legislation, there is a risk of violating the principle of preventing double liability for the same criminal act or incomplete qualification of the person's actions.

This problem becomes apparent due to the existence of two articles in the Criminal Code of Ukraine that can be applied in the case of environmental destruction during combat operations – Article 441 "Ecocide" and Article 438 of the Criminal Code of Ukraine "Violation of the laws and customs of war". The first states: "Mass destruction of flora or fauna, poisoning of the atmosphere or water resources, as well as the commission of other actions which may cause an environmental disaster", whereas the second defines: "Ill-treatment of prisoners of war or civilians, expulsion of the civilian population for forced labor, looting of national property in the occupied territory, the use of means of warfare prohibited by international law, other violations of the laws and customs of war provided for by international treaties, consent to be bound by which was granted by the Verkhovna Rada of Ukraine, as well as ordering to perform such actions".

Although externally, the crimes referred to in both articles are similar in relation to the environment: the environment is being destroyed. However, the subjective side of these acts is different. By committing an ecocide, the offender has a goal and commits it with the goal of destroying the environment. The environment itself is the focus of the offender, and the destruction of nature is his/her goal. In the case of war crimes, the perpetrator seeks to gain military or other advantage over the enemy, while the environment becomes a "side" victim. Despite a certain similarity of concepts, there are signs, such as the intent to commit, the subject of the commission, the time of the act,

which can be used to distinguish between war crimes and ecocide committed during the conduct of hostilities. Table 2 proposes some differences between ecocide and war crimes.

Table 2

Differences between some signs of ecocide and war crimes

Ecocide	War crimes
The person's intent is aimed at destroying the environment	The intent of a person is mainly aimed at obtaining military advantage or related goals
Common subject	Often the subject of the commission is special
There is no link to violations of international treaties, agreements, or customs	It is characterized by binding to violations of international treaties, agreements, and customs
It can be committed both in a peaceful period and in conditions of war or armed conflict	Committed in conditions of war or armed conflict
It is not typical to implement it by using a person's official status	In most cases, it is carried out by using the official status of a person
The moment of completion of the act commission depends on the objective side	In vast majority of cases, formal elements of crime

In cases where there is an ideal set of criminally illegal acts, for example, the offender hoped to damage the environment and gain a military advantage, the case will be considered under both articles: 441 and 438 of the Criminal Code of Ukraine.

Application of Article 441 of the Criminal Code of Ukraine for less socially dangerous offenses against the environment

The elements of a crime of the scale of "ecocide" imply an act that has consequences for the entire global peace and security of humanity as a whole. The commission of such criminally illegal actions cannot be called "ordinary" or those occurring on a regular basis. However, the unclear wording of this concept in the existing legislation allows you to "pull up" any offenses against the environment and call it ecocide. Even those that do not have extreme negative consequences. It is unclear definitions that form the basis of investigations and can distort the results. This may lead to the depreciation of the concept of ecocide and bringing responsibility not for what was actually committed.

Criminal offenses against the environment are different from ecocide. The difference lies, for example, in the form of guilt, the purpose of committing the act, and the scope of consequences.

Table 3

Comparison of some signs of ecocide and criminal offenses against the environment

Ecocide	Criminal offenses against the environment (Section VIII of the Criminal Code of Ukraine)
Intentional commission (characteristic direct intent)	Intentional or careless form of guilt - to commission of a socially dangerous act and negligence - to the occurrence of socially dangerous consequences in the form of damage to the environment
The purpose of the commission is to destroy the environment	If a criminally illegal act is committed intentionally, the main motives for its commission are, for example, self-serving, but do not consist in destroying the environment
It has extremely significant consequences not only for specific individuals or groups of individuals, but also for the state, global peace, the security of humanity as a whole, and the international legal order	The consequences are more local
Acts are not "ordinary"	Unfortunately, the commission is more mundane and systematic

Despite the presence of these differences, in practice, the correct differentiation of these events is problematic, because most of the signs of differentiation consist in the subjective side of the offender, which is difficult to establish. This is also complicated by the problems of the practical investigation of ecocide.

6.2. Problems of the ecocide investigation

During the ecocide investigation, there is a problem with personnel and equipment. Unclear wording in the legislation does not contribute to the recording and collection of information on criminal offenses against the environment. Even if a new version of the Criminal Code of Ukraine is adopted with clearer wording, the problem of equipment and personnel will remain. According to the Specialized Environmental Prosecutor's Office of the Office of the Prosecutor General of Ukraine, currently in some regions, especially in the eastern regions, there are no expert institutions and experts who can provide the necessary conclusions about the nature of violations or confirm the consequences of the impact of criminal actions on the environment. For example, to analyze the results of chemical pollution of water resources. There is no necessary equipment for conducting laboratory tests in the SEI. This makes it difficult to collect facts and evidence that would help to correctly qualify a person's actions: as an ecocide, as a war crime, or as an offense against the environment.

6.3. Practice of bringing to justice for ecocide

Since the beginning of the full-scale invasion, the prosecutor's office has been investigating criminal offenses, in particular those that can be considered as ecocide. Among them — the destruction of the reservoir, the shelling of the scientific center and the explosion of the power plant. Russian senior-level commanders who ordered the shelling of a nuclear research facility in Kharkiv were charged with committing ecocide in conjunction with war crimes against the environment. For the first time since the independence of Ukraine, legal proceedings were brought on the fact of committing an ecocide that was not related to military operations. Two responsible persons of a large

private enterprise in the Khmelnytskyi Region are suspected of systematic discharges of polluted water into the river, which led to the mass death of plants and animals in the area.

Despite the challenges of the war and problems with national legislation, the practice of bringing to justice for ecocide is beginning to take shape in Ukraine. However, the first attempts are not always successful. Thus, Article 441 of the Criminal Code of Ukraine is sometimes used in relation to acts that cannot be considered as ecocide, which devalues the concept and reduces the weight of real crimes of this scale. It can also lead to unfair punishment or, worse, avoidance of punishment. The erroneous simultaneous application of Articles 441 and 438 of the Criminal Code of Ukraine, which were discussed above, leads to the fact that a person is responsible for two crimes, although in fact s/he committed only one.

Integration into the European Union and the adoption of its rules and laws prior to membership can help to simultaneously resolve both legislative regulation and practice. As noted in the section on international practice of penalty for ecocide, Belgium has already created conditions at the legislative level and it is hoped that other member states will follow suit. At the EU level, there are also directives aimed at protecting the environment from any crimes.

Box 3

Environmental Protection at the EU level

Within the European Union, the protection of the environment is regulated by Directive 2008/99/EC of 2008.

Its first version was not good according to the European Commission, as it contained only general rules on the determination of criminal offenses and sanctions. It did not allow or even hinder effective investigation, prosecution and quality cross-border cooperation, and contained vague definitions used for description of environmental criminal offences. Sanctions imposed were too low to have a deterrent effect and be sufficiently effective in all member states in accordance with the current Directive. Even in the European Union, 15 years ago, there was no understanding of the importance of creating clear and effective mechanisms for environmental protection.

The revised version of Directive of December 2021 provides for clear detailed effective criminal law measures for the effective protection of the environment.

What does this mean for the protection of the environment in the EU

The revision of Directive 2008/99/EC aims to create clearer legal norms that will help combat environmental crimes more effectively. In particular:

Clear definitions of terms. Articles 2 and 3 contain broader definitions of "unlawful conduct" and the "public concerned", which will make investigation, prosecution more efficient and will promote a better understanding of these terms.

Expanding scope. Increasing the number of categories of crime from nine to eighteen, allowing more acts to be investigated and prosecuted, especially when they relate to cross-border criminal acts, and providing greater legal clarity.

Ensuring tough sanctions. Member states should include a minimum level of maximum sanctions proportional to the severity of offenses in their own national criminal law. For example, offences listed in Article 3 that caused or are likely to cause death or serious injury to any person must be punishable by a maximum term of imprisonment of at least 10 years (Article 5, Part 1). The proposed Directive also introduces additional sanctions and measures for individuals (Part 5 of Article 5), such as the obligation to restore the environment (a), fines (b), deprivation of access to public funding (c) or withdrawal of permits (e). Sanctions for legal entities are listed, ranging from fines to imprisonment (Article 7).

By creating equal conditions for the types and levels of sanctions in member states, it will be easier for the competent authorities of different member states to cooperate. Ultimately, this can lead to a more effective investigation and prosecution.

Improved enforcement. New rules for establishing jurisdiction will facilitate cross-border investigations and prosecutions, and will promote more effective investigation (Article 12). To assess the extent of environmental offences as well as their trends, the proposed Directive will require member states to collect accurate, consistent data and comparable statistics in accordance with harmonized common standards (Article 21).

Institutional support. The directive instructs member states to ensure that national authorities which detect, investigate, prosecute or adjudicate environmental offences have a sufficient number of qualified staff and sufficient financial, technical and technological resources necessary for the effective performance of their functions (Article 16). Member states are also mandated to provide specialised training with respect to the objectives of this Directive to judges, prosecutors, police, judicial staff and competent authorities' staff on a regular basis (Article 17). Member states should ensure that effective and proportionate investigative tools, such as those which are used in organised crime, are also available for investigating and prosecuting environmental offenses (Article 18). Coordination and cooperation among the competent authorities of member states should also be strengthened in this area (Article 19). It is expected that taking these measures to improve national enforcement chains will allow more crime cases to be successfully investigated.

7. If we leave everything as it is

7.1. The state of the environment

The state of the planet in general

If we leave everything as it is, we must be prepared for the fact that the environment will scream so loudly that it will be impossible not to hear. The planet Earth is already suffering from the effects of climate change, environmental disasters and other disasters. The lack of a mechanism for liability for the destruction of nature at the international level seems to encourage "Come on, go on with destroying the environment, there will be no punishment for it." And what is the result? The planet will continue to collapse. The average temperature of the planet will be increasing. Drinking water supplies will be running out. More plant and animal species will be disappearing. Humanity will be forced to switch to completely synthetic food and face a food shortage. Next wars that will be waged for food resources and water will only worsen these problems. The Earth will become uninhabitable for people. But these are rather abstract concepts for many people, businessmen, and politicians to demand change at the global and local level.

The state of the environment in Ukraine

In Ukraine, the consequences of state laws that contradict the laws of nature are already being felt. The role of the “breadbasket” for the Asian and African countries has led to the plowing of 54% of Ukrainian lands [11]. Because of this, we are one of the leaders both in terms of plowing and soil degradation. High plowing destroys biodiversity. Plants and animals lose their natural habitats, which leads to their disappearance. There are few natural areas left under the acreage, and wild species cannot survive in small remote areas. For example, steppe animals such as saigas and tarpans disappeared precisely because of plowing. In addition, the use of pesticides pollutes the environment, killing pollinating insects and small organisms that create the soil. This leads to the spread of aggressive alien species, displacing local ones. Plowed land also causes intense greenhouse gas emissions that contribute to global warming. The result is dust storms that destroy the fertile soil layer and turn the lands into deserts. Using the example of Ukraine, you can already see how intensive agriculture creates deserts, such as the Oleshky Sands, where vegetation is not restored even after 100 years. No one has been punished for this yet.

Lets look at how much such an active desert formation can cost Ukraine? The area of Oleshky Sands is 1,612 square kilometers [12]. In hectares, it makes 161 thousand hectares. In turn, in the third quarter of 2023, the price of agricultural land amounted to 38.5 thousand UAH/ha. Thus, once agricultural – and now desert territories of the Oleshky Sands – could cost UAH 6 billion, which is equal to more than USD 150 million [13]. This amounts to two annual budgets of Ternopil Region for 2024 [14].

This is how the Ukrainian environment is being destroyed in peacetime. This is how the economy and residents of Ukraine are losing.

7.2. The world law and order

Now international organizations create rules, prescribe them in conventions or other agreements. But as soon as one of the states violates such agreements, they cannot do anything about it. There is a situation where international law exists on one side of the barricades, and the state practice exists on the other.

How can an international body, institution, or any other entity function if it cannot enforce its own requirements? If international law is not able to influence real events, this leads to the loss of its authority among the international community. Distrust to the system of international law undermines the legitimacy of international institutions, such as the UN, the International Criminal Court, and so on. Such circumstances only contribute to the commission of various kinds of international crimes, including the outbreak of wars.

Anarchy and its consequences

The loss of faith in the international rule of law leads to anarchy, which becomes a breeding ground for new conflicts. In such conditions, use of destructive weapons is possible, which leads to mass deaths and epidemics. Insufficient response to violations of international law undermines peace and security efforts, setting precedents for new violations and crimes. The lack of accountability mechanisms creates an atmosphere of impunity.

The destruction of the environment in conditions of lawlessness and anarchy becomes an even greater threat to humanity. Unpunished illegal deforestation, water pollution, and uncontrolled industrial waste emissions all lead to degradation of ecosystems and loss of biodiversity. The lack of an effective international legal mechanism to protect the environment only exacerbates these problems, creating irreversible consequences for the planet. The sea level rise, extreme weather events, and reduction in habitable areas can cause new conflicts and migration crises. In such circumstances, it becomes obvious that ensuring international compliance with environmental standards is critical to preventing catastrophic consequences, which is not possible without making the necessary changes.

Despondency in the legal system of Ukraine

¹³ Calculations were made at the official exchange rate of the National Bank of Ukraine as of 16.06.2024

During the war, Ukrainian society is particularly acutely aware of the lack of confidence in the ability of the legal system to protect the interests of the population. The failure of the authorities to bring to justice all those responsible for the destruction of the environment during and after the war will further undermine confidence in Ukraine as a state governed by the rule of law. What does this mean in practice? Desperate citizens will seek a safer and more stable environment for themselves and their families. This will mean further emigration, the outflow of human capital. This will mean fewer people to rebuild the country and more dependence on external aid, decreased investment attractiveness.

8. What needs and can be changed

8.1. Necessary changes at the international law level

Reforming the functioning of the UN Security Council now looks like an unaffordable task

The first and most serious problem of the applicability of international law in cases of the destruction of the environment in war conditions is the right of veto of states that are permanent members of the UN Security Council. In the course of attempts by the international community to apply international legislation during the war in Ukraine, the example of the behavior of the Russian Federation shows how a permanent member state of the Security Council can block this initiative. This is a well-known structural flaw that has existed in the system of international law since the creation of the UN. It is what hinders many initiatives to protect peace, including solving environmental problems that arise as a result of armed conflicts.

The veto power assigned to permanent members of the Security Council is used to protect the national interests (or personal interests of the leaders of these states), even if this is contrary to the principles of international law and the interests of humanity. This is how important initiatives aimed at protecting the environment are blocked. This leads to impunity and the continuation of environmental crimes. Therefore, the mechanism of the right of veto in the UN Security Council should be reformed. This can be achieved through amendments to the UN Charter, which will allow reducing the influence of separate states on decision-making of global significance. The reform should provide for fixing the prohibition of using the veto power of a member state of the UN Security Council in cases where the issue concerns global environmental security and violations of international humanitarian law in the UN Charter. At the same time, this idea is as old as the world and it is still difficult to imagine that the UN member states and especially the Security Council Member States will agree to such a reform. The environment will keep being held hostage by politicians.

UN member states have different attitudes to such changes. There are those who are against it. These are some member states of the Security Council, which are joined by various criminal groups and even large business corporations that are interested in the weak institutional capacity of the UN. There are countries that will support these changes: democratic states that strive for peace, their leaders, intergovernmental bodies and international organizations that work towards ensuring development, peace and prosperity on the planet.

There are also those who do not care about environmental problems for various reasons and those who can be convinced of the urgency of change. These are states that have not yet decided on their position on UN reform, non-governmental organizations and groups that have not yet decided whether to support these changes, ordinary people who may not understand why it is important. These are representatives of small and medium-sized businesses who want stability in the world and do not think within the framework of the world order.

Solving problems of applying international environmental law

Definition of ecocide as an international crime

The problems of inapplicability, ambiguity, and complexity of understanding and implementing the provisions of international environmental law must be solved by introducing changes. Thus, the provisions on ecocide should be included as a separate crime in the text of the Rome Statute of the ICC. An example of the formulation of an ecocide in the Rome Statute may be the following wording: "an ecocide is an intentional act committed in conditions of armed conflict or in peacetime that can lead to the loss of natural ecosystems and/or their components, which poses a threat to the survival of species and/or to the life and health of people." This will make it possible to clearly define responsibility and punish for enormous damage to the environment.

Defining clear ecocide criteria

In order for the ecocide rule in the Rome Statute to work effectively, lawyers must propose and fix clear criteria for actions that may be considered ecocide. A variant of such criteria was developed by a group of Ukrainian expert lawyers and botanists this year.

Criterion 1. If an act is committed, the entire population(s) of at least one biota species that existed within the plant and climate zone or subzone or high-altitude zone completely disappears, or there remains less than 20% of individuals, which is insufficient for its(their) natural recovery, and monitoring for up to three years does not confirm their recovery.

Criterion 2. If an act is committed, unique groups of biota (associations) that existed within the plant and climatic zone or subzone or high-altitude zone completely disappear, or no more than 10% of the area of their distribution remains, and monitoring the structure of cenopopulations for up to three years does not confirm the recovery of destroyed groups to their native state.

Criterion 3. If an act is committed, unique biotopes that existed within only this biogeographic region (plant and climate zone or subzone or high-altitude zone) completely disappear or no more than 10% of their area remains, and monitoring of the components of the destroyed biotope for up to three years does not confirm its recovery to its native state.

Criterion 4. If an act is committed, valuable biotopes are destroyed, which are included in the UNESCO Natural World Heritage or in Resolution 4 of the Bern Convention, or more than 50% of their area, structural elements are destroyed, and monitoring for up to three years of destroyed components of the biotope does not confirm their recovery to their native state.

Criterion 5. If an act is committed, biotopes are destroyed within the plant and climate zone or subzone or high-altitude zone, from which 75% of the population who received direct or indirect ecosystem services before committing the act, after commission of such act, does not receive such services.

Criterion 6. If an act is committed, the landscape is polluted and destroyed causing great environmental and socio-economic damage and caused the resettlement of more than 50% of the population of the district(s).

Clarity in understanding concepts

The problem is the vagueness and complexity of understanding and applying of the provisions of international environmental law. To improve the situation qualitatively, a number of changes should be made to Protocol I. Firstly, the definition of "environment" as a separate object of international legal protection should be included. Secondly, it is important to regulate the concept of damage to the environment, taking into account the criteria of wide-spread, long-term and serious damage. Thirdly, in part 3 of Article 35 of Protocol I, the wording "which are intended, or may be expected, to cause" should be replaced with "which have caused or created the risk of causing", which will help clarify accountability for damage to the environment and avoid possible ambiguities in interpretation. Finally, a note should be added to the first part of Article 55 of Protocol I explaining the term "concern for the protection of the environment", defining it as a set of measures and actions aimed at preventing, eliminating and recovering damage caused to the environment during international armed conflicts. This will help clarify the responsibilities of the parties to the conflict to preserve the environment during military operations.

Ensuring the applicability of the Rome Statute

The problem here is ambiguity and contradictions in the interpretation of standards for the definition of military action, which are excessive in relation to the overall military advantage. To address this problem, it is necessary to amend Article 8(iv)(b) of the Rome Statute of the International Criminal Court, removing the part "which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated". This will avoid possible ambiguities and contradictions in the interpretation of these standards, contributing to a clearer and more unambiguous application of legal norms in international law on war crimes.

Determining what kind of damage is disproportionate to military advantage

Now it is necessary to clarify and strengthen international standards in the field of human rights and international humanitarian law. To do this, it is worth adopting a resolution of the UN General Assembly, which would determine that any damage caused to non-military facilities in the course of unprovoked and illegal aggression of one state against another is disproportionate to the military advantage obtained in the course of such actions. This will help to define international standards more clearly and strengthen the protection of human rights and international humanitarian law.

These measures constitute a minimum package of changes that will make it possible to hold people accountable for damage to the environment at the international level.

Democratic states and their leaders should lobby for change at international forums, promoting the idea of reforms at international conferences, UN sessions, and other global platforms. An important step is the signing and ratification of international agreements, approval of international treaties and conventions that provide for changes in the use of the veto power at the level of the UN Security Council, amendments to the Rome Statute and the Geneva Conventions.

Intergovernmental bodies and international organizations should support such initiatives of democratic states. It is important to provide financial and technical support to countries implementing reforms through financial grants and technical assistance.

Journalists and mass media should conduct information campaigns to raise public awareness of the importance of protecting the environment and criminalizing ecocide. Their role is also to publish investigations into violations of environmental laws, highlight cases of impunity and promote public control, as well as to organize public discussions, round tables and interviews with experts to discuss the importance of proposed reforms.

Scientists and researchers should provide scientific data and conclusions to justify the need for proposed reforms, develop criteria and methods for assessing damage to the environment and defining ecocide acts, and cooperate with government bodies in developing regulatory documents and standards at the international level.

Non-governmental organizations and the active public should monitor compliance with existing norms and the process of adopting new rules, record and disclose violations, promote the interests of the protection of the environment at all levels, interact with governmental and international bodies, as well as conduct educational programs and trainings for the population, raising the level of environmental awareness.

Among those who will oppose such changes will be countries (or their leaders) that are interested in maintaining a legal vacuum that allows violations of international law to be carried out with impunity. They may use political and economic weight to block international initiatives through their impact on organizations and forums, justifying this by the national interests or economic needs, although the true goal is to preserve conditions for uncontrolled use of resources and conduct military operations.

Dishonest businesses will also counteract the changes, considering them as risks to their activities. Representatives of this business may argue that tougher environmental regulations would lead to higher costs and lower competitiveness. They will actively oppose the reforms through lobbyists, legal battles and financing of anti-ecological and anti-ecocidal campaigns in the media.

Manufacturers of destructive weapons will also oppose the changes, as the new proposed rules punish the use of such weapons in conflicts. They may put pressure on governments to argue that the new rules will limit defense capabilities and affect national security, even though their real motivation is the economic benefits of selling weapons without restrictions.

So, opposition to reforms can be large-scale and diverse, including political pressure, economic arguments, lobbying efforts, and information campaigns aimed at discrediting change. Successful implementation of reforms is possible only through coordinated activities of all stakeholders. Interaction between states, international organizations, scientists, journalists and the public will overcome resistance and ensure effective protection of the environment at the international level.

8.2. Changes at the national level in Ukraine

If Ukraine seeks to fairly punish people for what they have done, it is necessary to develop a clear understanding of what ecocide is, what is a violation of the laws and customs of war (Article 438 of the Criminal Code of Ukraine), what characterizes criminal offenses against the environment. After

all, the task of the justice system is to ensure fair and proportionate liability, and not to collect likes in social networks or apply as many articles as possible at the same time, or apply the article with the greatest sanction.

According to the principles of the criminal law, the criminal law has no retroactive effect. All situations that occurred or will occur before amendments are made to articles of the Criminal Code of Ukraine, which are applied in cases of damage to the environment, will be subject to the provisions in force at the time of committing a criminal offense. This means that all committed crimes will be considered within the framework of Article 441, which does not contain clear provisions on the definition of ecocide, its characteristics and scale. However, it is possible to adopt a new version of this article in order to create more favorable conditions for the investigation and punishment of future crimes.

8.2.1. Step No. 1 or "Barely alive recovery operation"

Despite the fact that there are no simple answers to complex questions, in order to recover the barely alive mechanism of criminal liability for damage to the environment, it is necessary to implement a number of regulatory and more organizational changes. This is especially true for liability for ecocide.

A pinch of clarity in the determination of ecocide

First of all, it is necessary to fix that an ecocide should be considered as an act that affects both the plant and animal world, the atmosphere, and water resources. At that, it does not matter whether several of the described categories are affected simultaneously or only one of them. In addition, each of the described elements does not have to be necessarily destroyed in order for the act to be considered an ecocide. Therefore, from the text of article "Ecocide" in the Criminal Code of Ukraine, it is necessary to remove the conjunction "or" between the words "plant" and "animal", as well as between the words "atmosphere" and "water resources". This conjunction must be replaced with a comma in these cases.

It is essentially necessary to exclude the possibility of abuse of Article 441 of the Criminal Code of Ukraine and its application in cases where a person did not intend to cause damage to the environment, but such damage was caused through his/her negligence. This is especially true for businesses, as the vast majority of damage caused to the environment by business entities will be characterized by negligence in one form or another. This can be done by adding the word "intentional" before the phrase "mass destruction of the plant".

If possible, it is necessary to eliminate discussions about whether ecocide can be committed by inaction. It can. To do this, the phrase "committing other actions" should be replaced with "committing other acts".

If possible, the problem should be resolved, that of aligning the provisions of legislation among themselves and forming a clear idea of what risks an act should create in order to be considered an ecocide in the context of an environmental disaster. To do this, the term "environmental disaster" should be removed from the text of the current Article 441 of the Criminal Code of Ukraine and replaced with the term "environmental emergency", which will be consistent with the current legislation of Ukraine.

Clarifying the terminology

Another problem that cannot be solved is the introduction of clarity in the terminology used in Article "Ecocide", the creation of a more effective legal framework for protecting the environment and bringing to justice for environmental crimes, including ecocide. To do this, it is necessary to supplement the Law of Ukraine "On the plant world" with the definition of the concept of "mass destruction of the plant world"; the Law of Ukraine "On the animal world" with the definition of the concept of "mass destruction of the animal world"; the Law of Ukraine on the protection of atmospheric air with the concept of "poisoning of the atmosphere"; the Water Code of Ukraine with the concept of "poisoning of water resources". In the course of formulating these definitions, the ecocide criteria developed by the EPL team jointly with Ukrainian scientists and described above should be used.

Ensuring the effectiveness of the investigation

As soon as possible, it is necessary to create a clear algorithm of actions to record criminal and illegal impacts on the environment, clearly define the role of each subject of such activities (what is

the role of employees of the SEI, what is the role of representatives of the prosecutor's office or the police). After all, it is necessary to collect evidence that will be taken into account by the courts, reduce the burden on existing state laboratories and their experts, conduct laboratory tests faster and receive more complete and high-quality information during the research.

To do this, the State Environmental Inspectorate, together with the Office of the Prosecutor General, should develop and approve a special instruction on the procedure for recording and investigating criminal offenses, during which damage to the environment is caused. A separate order of the SEI should provide for the procedure for involving independent private and public research institutions in the collection, recording and research of the consequences of the impact of criminal illegal actions on the environment. There should also be conditions under which research institutions and laboratories may be involved by the SEI in the mentioned activities.

Distinguishing between "Violation of the laws and customs of war" and "Ecocide"

To solve the problems of distinguishing between "Ecocide" and "Violation of the laws and customs of war", it is necessary to clearly define: for example, "Violation of the laws and customs of war" and "Ecocide" are about different things. For example, the destruction of the environment may be a "side" result of conducting military operations; as the parties to the conflict must take into account the environment when conducting military operations. And if they do not do this, it aggravates the danger of what they have committed and, naturally, increases the amount of sanctions that would be applied to them. This can be done by introducing amendments to Article 438 of the Criminal Code of Ukraine "Violation of the laws and customs of war" to stipulate that intentional destruction or causing severe damage to the environment for military purposes is a qualifying or especially qualifying sign of the commission of this crime.

Thus, we will clearly distinguish between "Violation of the laws and customs of war" and "Ecocide".

Inclusion of ecocide in the context of criminal offenses against the environment

In order to include ecocide in the context of criminal offenses against the environment, it is necessary to create a clear understanding that ecocide is about the most severe, destructive and inevitable damage to the environment. Providing a mechanism under which, in order to apply the crime "Ecocide" to a person, it is necessary to first check whether the person has actually committed an act of ecocide and whether another article providing for a less serious criminal offense will not be applicable. Following the experience of Belgium, the crime "Ecocide" should be included in Section VIII "Criminal offenses against the environment" of the Criminal Code of Ukraine, as the last, most severe crime against the environment. Under such conditions, all criminal offenses against the environment will be ranked by severity and ecocide will be included in their system.

This is the first step in reforming the system of criminal liability for criminal offenses against the environment. These changes are mainly aimed at the past and present, because the environment is destroyed every day, and especially in war conditions. Such destructions require an immediate response, and the proposed changes will ensure this response. However, we also need a step into the future, and this is the proposed Step No. 2.

8.2.2. Step No. 2 or "Looking to the future": categorizing environmental offenses

Carrying out "cosmetic repairs" is not able to eliminate the root of the problem – a lack of a systematic approach to categorizing criminal offenses that cause damage to the environment. And in terms of ecocide, this is the legislator's lack of vision: "what is it?" and "what is it about?". Therefore, the next important step is the step No. 2 – the introduction of a systematic approach to the categorization of criminal offenses in the course of which damage to the environment is caused. In particular, changing the approach to the vision and determination of ecocide in the criminal law of Ukraine.

Changing the view of ecocide

In order to effectively protect nature in the future, a new approach to ecocide is needed. This approach should offer protection of the interests of the environment itself through the punishability of ecocide. The formulation of the new article "Ecocide" should offer more effective protection of ecosystems and biodiversity. It should be difficult to confuse it in practice with other criminal offenses against the environment or war crimes, which will bring exactness and clarity to law enforcement.

The new qualifying *умри* should take into account the different level of public danger of committing an ecocide, depending on certain actual circumstances of its commission, and therefore guarantee a proportional amount of sanction for the guilty person.

This can be achieved if as the main category in the new ecocide formulation, the habitat of species, i.e. "biotope", is used. Scientists working with environmental issues should be involved in the development of a new definition of ecocide in the Criminal Code of Ukraine. For example, it can be fixed that an ecocide is considered to be intentional acts of a person that can cause damage to a biotope, as a result of which such a biotope on the territory of Ukraine loses its ability to self-recovery. Qualifying signs of committing such crime should be: committing a crime by prior agreement by a group of persons, committing it in a protected area, committing it by a person previously convicted of criminal offenses against the environment, committing it by an official using his/her official position.

Normative consolidation of the concept of "biotope"

In the context of changing approaches to ecocide, it is necessary to clearly understand all the terms and words used in the crime "ecocide". Thus, the question of what is discussed in the article and where the court or other law enforcement body should take its meaning from will not arise. All this will have a positive impact on the practice of using the proposed provision.

Therefore, it is necessary to supplement the text of the Law of Ukraine "On the protection of the environment" with the definition of the notion "biotope", which would be consistent with the standards of the International Union for Conservation of Nature. Zoologists, botanists, biologists, etc. should also be involved in the development of this definition.

Defining clear ecocide criteria

There is an urgent need to properly qualify an act that causes devastating damage to the environment. In order to correctly qualify such acts, one can use the corresponding criteria. These criteria should show a clear distinction between ecocide, other criminal offenses against the environment, and war crimes. The above-mentioned criteria developed by the EPL team jointly with Ukrainian scientists are quite suitable for this role. However, for this purpose, the list of criteria should be fixed at the legislative level. In this case, it would be appropriate to have a separate decree adopted by the Cabinet of Ministers of Ukraine, that could approve the methodics containing the list of criteria for an act that can be considered an ecocide and methods for applying these criteria. Such consolidation will eliminate contradictions in the application of the article on ecocide, promote legal certainty, and prevent the risks of applying double liability for the same act.

The above changes proposed in Step No. 2 are mandatory and without them, changing approaches to ecocide is impossible. If there is sufficient institutional capacity, another set of changes should be implemented, as outlined below.

Reloading the system of the state environmental control and strengthening of personnel

Without the ability to fully and effectively record environmental impacts, the ability to promptly conduct laboratory tests of collected samples, and with a lack of a well-established system for investigating commission of damage to the environment, any regulatory changes would be doomed to inapplicability. Therefore, the cross-cutting thread of all the proposed changes should be the establishment of effective work of state environmental control bodies, the prosecutor's office and research laboratories. After all, every norm would be dead if there is no one and how to apply it. It is important that damage caused to the environment is correctly and quickly recorded, and the investigation is carried out taking into account natural processes and with knowledge of environmental specifics.

Working for the future, it is important to ensure that the State Environmental Inspectorate is efficient, modern, transparent, has an updated aim, goals, principles, has a wide scope of authorities, forms of measures, contemporary means of environmental monitoring and control, that all SEI employees have the necessary environmental and nature protection knowledge. This can be achieved by conducting a reform of the state environmental control and adoption of a new Law of Ukraine "On the state environmental control", development and adoption of a package of regulatory acts, where one of the first issues should be development and adoption of a new Regulation on the State Environmental Inspectorate of Ukraine.

For all officials of the central office of the SEI and the local bodies of the SEI recording the impacts on the environment by certain phenomena, the mandatory requirement should be established as for the availability of full and completed specialized education (specialty 101 "Ecology", 091 "Biology and biochemistry", 207 "Water bioresources and aquaculture", 106 "Geography", 202 "Protection and quarantine of plants" and/or other specialties related to environmental issues), educational level not lower than a Bachelor.

In addition, all prosecutors of the Specialized Environmental Prosecutor's Office of the Office of the Prosecutor General of Ukraine should regularly undergo training modules on environmental issues. The training center for prosecutors of Ukraine should involve representatives of environmental organizations and environmental scientists in such training modules. It is important that representatives of the prosecutor's office have their own idea of the impact of certain factors on the environment and what this may mean for nature.

Who will be for and against

Of course, the implementation of all the described reforms at the national level will face different points of view from the stakeholders. There will be those who will support such a reform. We are talking about bodies and individuals who are interested in preservation of the environment, bringing those responsible for the destruction of the Ukrainian environment to justice, and obtaining the necessary compensation for the damage caused. Such bodies and persons are: the Office of the Prosecutor General of Ukraine, the Ministry of Environmental Protection and Natural Resources of Ukraine, the State Environmental Inspectorate of Ukraine, the interested scientific community and the expert environmental community, journalists, etc. They should join efforts and actively work to support the implementation of the described changes.

The Office of the Prosecutor General of Ukraine should develop and submit proposals on the described amendments to the Criminal Code of Ukraine (Articles 441 and 438), provide legal support and advice when the proposed amendments are considered by the Verkhovna Rada of Ukraine, jointly with the State Environmental Inspectorate should develop and approve the instruction on the procedure for recording and investigating criminal offenses, in the course of which damage to the environment is caused, ensure the participation of all prosecutors of the Specialized Environmental Prosecutor's Office of the Office of the Prosecutor General of Ukraine in training modules on environmental issues.

The Ministry of Environmental Protection and Natural Resources of Ukraine should develop and submit draft laws to implement proposals aimed at clarifying the terminology, with a separate decree approve the methodics of criteria for an act that can be considered an ecocide, conduct information campaigns to raise awareness of new norms among the population and businesses, and coordinate with the SEI and other bodies to ensure effective implementation of changes. The Ministry of Environmental Protection jointly with the Committee for the Verkhovna Rada on Environmental Policy and Nature Management should ensure conducting a comprehensive reform of the state environmental control and revise the draft Law of Ukraine "On the state environmental control", develop a new Regulation on the State Environmental Inspectorate of Ukraine, where for all officials of the central office of the SEI and local SEI bodies recording the impacts on the environment by certain phenomena, the mandatory requirement should be established as for the availability of full and completed specialized education, educational level not lower than a Bachelor.

The State Environmental Inspectorate of Ukraine should develop and approve the instruction on the procedure for recording and investigating criminal offenses, in the course of which damage to the environment is caused, a separate order of the SEI should provide for the procedure for involving independent private and public research institutions in the collection, recording and research of the consequences of the impact of criminal illegal actions on the environment, and provide for conditions under which research institutions and laboratories may join the SEI in these activities.

Scientists from various fields of scientific knowledge should be involved in the development of ecocide criteria and meaningful description of concepts used in cases where damage to the environment is considered.

What concerns the environmental community, its role is to support community initiatives, monitor compliance with new standards, and cover identified violations in the media. Environmental organizations and activists should actively cooperate with the authorities, provide their expertise and

promote information dissemination about the significance and necessity of implementing reforms for protection of the environment. It is necessary to conduct awareness-raising activities among local communities, explaining to them exactly how these changes can have a positive impact on their lives. It is important to show entrepreneurs that implementation of the proposed changes will facilitate their security, and not vice versa. Active involvement of the youth and educational institutions in environmental initiatives and educational programs will raise environmental awareness.

Journalists, in their turn, should raise issues of environmental safety in society, conduct investigations and cover problems related to environmental crimes in order to ensure proper public control over compliance with new standards and encourage the authorities to take effective actions.

And there will also be those who are against such changes: starting with lobbyists of Russian interests in Ukraine and ending with dishonest business representatives who will believe to the last that improvement of the environmental legislation would somehow burden their economic activities. Some authorities may also oppose it, mainly services and agencies related to solving issues related to the use of natural resources, for example, the State Service of Geology and Mineral Resources of Ukraine, the State Forest Resources Agency of Ukraine, the State Agency of Ukraine for the Development of Land Reclamation, Fisheries and Food Programs, etc. Their position "against" may be due to the risks of restricting their powers, and for some unscrupulous officials – to the risks of limiting corruption abuses. It should also be borne in mind that representatives of large businesses, in particular in the fields of mining, logging and agriculture, may resist reforms due to concerns about increase in the costs of compliance with new environmental regulations, which may affect their competitiveness. There may also be opposition from local authorities, who may worry about local budgets and economic development, fearing job cuts and investment reduction.

Opposition to reforms can manifest itself in open resistance, sabotage of the introduction of new norms, delays in decision-making, manipulation of public opinion and disinformation. To effectively implement changes, all those who support such changes need to take these risks into account, develop strategies for communication and cooperation with all stakeholders, ensuring transparency in the reform process.

Conclusions

People destroy the environment with impunity while conducting military operations and carrying out economic activities. World history knows a number of cases when nature was involved in the war and died in it: Vietnam, Korea, Kuwait, Albania. Each of these cases, in its own way, stresses on the urgency of the talks about the need to bring those responsible for environmental destruction to criminal liability at the international level. None of these cases became the driving force for establishing a system of such liability. Currently, the protection of the environment during the war at the international level is hindered by the veto power of such states as Russia in the UN Security Council, the lack of understanding of the state of the environment as an object of legal protection, the widespread use of value judgments and a high threshold for proving damage caused to the environment. Protection of the environment in peace is not without problems. Existing environmental conventions are characterized by a lack of practice in their application and guarantees of compliance with the established provisions. As a result, international precedents for bringing to justice for damage to the environment can be counted on the fingers of one hand, and all of them are about the pecuniary liability of the states. The persons who were responsible for such damage got away with it.

The war in Ukraine has become another impetus for initiatives to improve the international mechanism of liability for damage to the environment, in particular recognizing ecocide as a separate crime under the Rome Statute. These initiatives are actively supported by small island states that are at risk of disappearing from the face of the Earth as a result of global warming, a number of European countries: Sweden, Finland, the Netherlands. Belgium is particularly progressive in this part, being the first EU state to recognize ecocide as a crime under its criminal law.

This experience is useful for Ukraine, whose nature is burning in war. But the legal regulation and practice of bringing those responsible to justice for damage to the environment in Ukraine is characterized by: unclear wording and terms used, difficulty in distinguishing between the concept of ecocide, and war crimes, and less socially dangerous offenses against the environment, lack of technical and personnel capacities to investigate the destruction of the environment both in the rear and during military operations.

Thus, the system of responsibility for the destruction of the environment requires simultaneous changes both at the International and national levels. In the international context, we are talking about changes in the functioning of the UN Security Council – limiting the abuse of the right of veto, ensuring a comprehensive approach to responsibility for the destruction of the environment by recognizing ecocide as an international crime with clear criteria for its commission, and clarifying the concepts and terms already enshrined in international law, in particular the Rome Statute and the Geneva Conventions. Changes at the national level should include two steps. The first is to improve the existing regulation: to make the definition of an ecocide more exact and clarify the terminology, to ensure the effectiveness of the investigation, to distinguish between "Violation of the laws and customs of war" and "Ecocide", and to include ecocide in the context of criminal offenses against the environment. The second step is about a comprehensive change of approaches. This step provides for a new approach to ecocide, where the interests of the environment are in focus. This approach should be based on the protection of biotopes, clear ecocide criteria and conducting a comprehensive reform of the state environmental control.

Only a comprehensive approach involving international and national change can ensure effective protection of the environment and responsibility for its destruction. It is important to implement and support such initiatives to create a sustainable system of responsibility for damage to the environment, so that future generations find a habitable planet.

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