

OVERCOMING THE ENVIRONMENTAL CONSEQUENCES OF THE ARMED AGGRESSION OF THE RUSSIAN FEDERATION AGAINST UKRAINE: FROM DAMAGE RECORDING TO FINANCED RESTORATION

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Abstract. The Russian Federation's armed aggression against Ukraine has caused environmental damage on an unprecedented scale in Europe since the Second World War. By June 2026, the State Environmental Inspectorate had calculated environmental losses exceeding 7 trillion UAH, while war-related greenhouse gas emissions had reached approximately 180 million tonnes of carbon dioxide equivalent during the first thousand days of the full-scale invasion. Although Ukraine has built an extensive apparatus for recording such damage, recording alone cannot restore ecosystems. This article examines how international and national legal mechanisms interact to convert recorded damage into financed ecological restoration. The study employs comparative legal and institutional analysis and content analysis of European and Ukrainian legal acts, adopting a systems approach and drawing on the precedent of the United Nations Compensation Commission. The Commission awarded approximately 5.3 billion USD for environmental claims arising from the 1990–1991 Gulf conflict and monitored the spending of these funds through a dedicated follow-up programme. The analysis distinguishes three tiers: fixation, comprising national damage assessment methodologies and monitoring systems; attribution, comprising the Register of Damage and the International Claims Commission for Ukraine; and financing, comprising environmental taxation, carbon pricing and reconstruction funds. The first tier is operational, the second is incomplete pending the ratification process and the creation of a compensation fund, and the third is the weakest. The Ukrainian carbon tax of 30 UAH per tonne equates to 0.59 EUR, compared to an average of 53.63 EUR across Europe. Its revenues are earmarked for decarbonisation rather than restoring war-damaged ecosystems. The article also highlights a reconstruction paradox: simplifying environmental impact assessments in war-affected territories conflicts with the obligations of Chapter 27 of the accession negotiations. The recommendations focus on sequencing, earmarking, and institutional coordination.

Keywords: ecocide, compensation fund, Register of Damage, State responsibility, environmental taxation, carbon pricing, green recovery, EU accession.

JEL Classification: K33, K32, Q58, H23, Q56

1. Introduction

The Russian Federation's armed aggression against Ukraine has had environmental consequences unseen in Europe since the Second World War. Hostilities have contaminated soil and water, destroyed protected areas, caused large-scale forest fires and industrial accidents, and left much of the country contaminated by explosive

remnants of war (Golovko, 2023). The destruction of the Kakhovka Hydroelectric Dam in June 2023 showed that damage to a single hydraulic structure can alter the ecological balance of a whole region. This affects the supply of drinking water, agricultural production, and the state of protected natural areas. The total damage resulting from this event has been estimated to

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be between 19 and 83 billion USD, which is between 1.4 and 6 times higher than the official post-disaster needs assessment (Benatov, Korbutyak et al., 2026; Polukarov et al., 2024; Afanasyev, 2023).

The scale of the losses is measured in trillions. According to the State Environmental Inspectorate of Ukraine, the calculated damage caused to the environment by June 2026 had exceeded 7 trillion UAH. Greenhouse gas emissions attributable to the war reached approximately 180 million tonnes of carbon dioxide equivalent during the first thousand days of the large-scale invasion. The macroeconomic dimension is comparable: the fifth Rapid Damage and Needs Assessment estimates total direct damage to be 195.1 billion USD as of December 31, 2025, with recovery and reconstruction needs amounting to 587.7 billion USD over ten years – approximately three times Ukraine's gross domestic product for 2025 (World Bank et al., 2026).

These figures illustrate two circumstances simultaneously. Firstly, Ukraine has developed a functioning system for recording environmental damage. This system is supported by ministerial methodologies, the work of the State Environmental Inspectorate, and a national monitoring platform (Ministry of Economy and Environment of Ukraine, 2026). Secondly, recording does not equate to restoration. For a recorded loss to become a restored ecosystem, it must pass through a sequence of institutions. It must be documented in a way that meets evidentiary standards and be attributed to the responsible state via a compensation mechanism. It must also be financed through fiscal or investment channels that can deliver resources to a specific territory. Each of these steps falls under a different branch of law and administrative body, and it is precisely at these junctions that the Ukrainian mechanism is weakest.

The scientific problem addressed in this article lies within this gap. While research on environmental protection in armed conflict focuses on responsibility, criminal liability and compensation (Golovko, 2024), research on environmental fiscal policy focuses on taxation, carbon pricing and green finance in peacetime (Ilchuk et al., 2023). The two areas of scholarship rarely converge. Consequently, the question of how an internationally recognised claim for environmental damage can be transformed into a financed restoration project remains largely unexplored, despite being precisely the issue that Ukraine will need to address during reconstruction.

Building upon the earlier analyses of Anisimova et al. (2025), Yemelienenko et al. (2024) and Stasiuk (2024) of international and national legal mechanisms for addressing the environmental impacts of aggression, this study re-evaluates the framework in light of subsequent developments. Since then, there have been

significant changes to the institutional landscape: the Convention on the Establishment of the International Claims Commission was opened for signature in December 2025 and ratified by Ukraine in April 2026; the list of claim categories accessible via national channels was expanded in May 2026; the definitive regime of the Carbon Border Adjustment Mechanism became operational; and an experimental simplification of environmental impact assessments in affected areas took effect in July 2026. Against these updates, this article reassesses the mechanism, shifting the analytical focus from individual structural levels to the interactions between them.

With the aim of substantiating an integrated model connecting damage recording, compensation and ecological restoration funding, this research analyses current legal frameworks for addressing war-related environmental damage in Ukraine. Specifically, the paper focuses on the following: (1) mapping international legal rules on environmental protection during conflict; (2) aligning national documentation mechanisms with international evidentiary standards; (3) analysing the scope of the international compensation mechanism for environmental losses; (4) exploring fiscal and investment options for a green recovery; (5) proposing solutions to bridge the gap between fast-tracked reconstruction and EU accession environmental standards.

2. Literature Review

2.1. Protection of the Environment in Relation to Armed Conflict

The international legal protection of the environment during times of conflict is based on a limited number of treaties. Articles 35(3) and 55 of Additional Protocol I to the Geneva Conventions (1977) prohibit methods of warfare that are intended or expected to cause widespread, long-term and severe damage to the natural environment. Meanwhile, the ENMOD Convention (United Nations, 1976) prohibits the hostile use of environmental modification techniques. The cumulative threshold of the Protocol has been consistently criticised by scholars as practically unattainable, since the three conditions must be satisfied simultaneously and the temporal criterion has been interpreted as extending over decades. The Rome Statute of the International Criminal Court (1998) presents a similar challenge: Article 8(2)(b)(iv) stipulates that the anticipated environmental damage must be clearly excessive in relation to the anticipated overall military advantage, thereby introducing a proportionality assessment into an area where ecological effects are diffuse and delayed.

The International Law Commission's (2022) adoption of the draft principles on the protection of

the environment in relation to armed conflicts marked a shift in emphasis. The principles cover the periods before, during and after armed conflict, addressing remedial measures, co-operation and reparation. This moves the discussion from prohibition towards restoration. This reorientation is directly relevant to Ukraine, where the key issue is not so much whether particular acts were unlawful, but rather how the resulting ecological damage is to be repaired (Golovko, 2024). As stated by Olusola Adu and Damoah (2025), the EU Green Deal involves financial mobilisation and coordination across member states. The same tendency is also visible at the European level, for example in Directive (EU) 2024/1203 on the protection of the environment through criminal law, which extends criminal liability to actions that result in widespread ecological destruction. Another example is Directive 2004/35/EC, which focuses on the primary, complementary and compensatory remediation of environmental damage rather than monetary compensation (Golovko, 2023).

Ukrainian law addresses the same issue through criminal liability. Article 441 of the 2001 Criminal Code of Ukraine establishes liability for ecocide, which is defined as the mass destruction of flora and fauna, the poisoning of the atmosphere or water resources, and other acts capable of causing an ecological catastrophe. This provision has been invoked in proceedings concerning the destruction of the Kakhovka dam. However, its evidentiary requirements differ substantially from those of a civil claim for compensation, and the relationship between criminal liability and the quantification of damage for compensation purposes has not yet been systematically examined (Ladychenko et al., 2026; Malysheva, 2023).

2.2. Compensation for Environmental Damage after Armed Conflict

The main precedent for the international compensation of environmental damage caused by armed aggression is the United Nations Compensation Commission, which was set up following the occupation of Kuwait. The Commission's F4 category covered environmental damage and the depletion of natural resources, and the total value of environmental awards, at approximately 5.26 billion USD, remains the largest sum ever awarded for environmental damage in the history of international law (United Nations Compensation Commission, 2005). Of that total, approximately 4.3 billion USD was specifically awarded to Iran, Jordan, Kuwait and Saudi Arabia for remediation and restoration purposes (United Nations Compensation Commission, 2005). Two features of this experience warrant particular attention. Firstly, the panels required demonstrable evidence of causation

and primarily assessed claims by reference to the cost of remediation rather than to abstract valuations of ecological loss. Secondly, Governing Council decision 258 (2005) established a Follow-up Programme for Environmental Awards. Under this programme, each recipient state was required to designate a national focal point, engage independent reviewers approved by the Commission, and submit bi-annual reports on the technical and financial implementation of funded projects (United Nations Compensation Commission, 2005). This meant that compensation was tied to actual restoration rather than being transferred as an undifferentiated budgetary receipt.

The compensation architecture created for Ukraine has a three-part structure. The Register of Damage Caused by the Aggression of the Russian Federation against Ukraine was established by Resolution CM/Res (2023) 3 of the Committee of Ministers on May 12, 2023. This was announced at the Reykjavik Summit and subsequently confirmed by the Committee of Ministers in July 2025 (Council of Europe, 2023). The Convention establishing the International Claims Commission for Ukraine was adopted and opened for signature in The Hague on 16 December 2025 (Council of Europe, 2025). However, the third component – a compensation fund – has yet to be created. The practical effectiveness of the entire construction depends on this component (Ladychenko & Stasiuk, 2025; Svitlychnyi et al., 2026).

General international law of state responsibility establishes a fundamental obligation. According to the Articles on the Responsibility of States for Internationally Wrongful Acts (United Nations, 2001), the responsible state is obligated to provide full compensation for any harm that can be financially assessed. However, applying this rule to ecological loss raises the persistent difficulty of valuing goods that are not traded on markets. This is where the international legal literature on state responsibility meets the environmental economics literature on the valuation of ecosystem services.

2.3. Fiscal and Investment Instruments of Ecological Restoration

A substantial body of research has examined the ability of fiscal instruments to internalise environmental externalities and mobilise resources for environmental purposes (Ilchuk et al., 2023). Finland introduced the first carbon tax in 1990, followed by Sweden, Denmark, and other European states. The Swedish reform of 1991 is generally regarded as the reference case: the tax was introduced at a rate of 250 SEK (approximately 23 EUR) per tonne of fossil carbon dioxide, and was gradually raised to 1,520 SEK (approximately 138 EUR) for natural gas and coal by 2026. The rate for other fuels was set separately,

allowing households and businesses time to adapt, thereby improving the political feasibility of successive increases (Government Offices of Sweden, 2026). Two design features are often overlooked. Firstly, industries covered by the European Emissions Trading Scheme are exempt from the Swedish carbon tax, meaning the headline rate does not apply uniformly across the economy. Secondly, the environmental impact of such reforms depends more on the combination of taxation and investment support, as well as the reinvestment of revenues into environmental programmes, than on the nominal rate (Ilchuk et al., 2023).

At the European level, fiscal instruments are embedded within a broader regulatory framework. The European Green Deal established climate neutrality as the strategic objective of Union policy (Uliutina, 2024). The Taxonomy Regulation established common criteria for identifying environmentally sustainable economic activities, providing a framework for investment allocation (Regulation (EU) 2020/852), while the Carbon Border Adjustment Mechanism extended carbon pricing to imported goods (Regulation (EU) 2023/956). For candidate states, these instruments simultaneously present opportunities and constraints. They determine the conditions for accessing European markets and the criteria for allocating reconstruction finance (Koval, 2024; Golovko, 2023).

Another area of research focuses on the valuation of ecosystem services and their incorporation into public decision-making processes. While the argument that regulating, provisioning, cultural and supporting services constitute economic assets whose loss should be reflected in policy is well established, their integration into tax systems and public investment planning remains limited. In the context of war damage, this issue is particularly significant because a large proportion of losses relate to ecosystem functions that are not captured by conventional accounting.

2.4. The Research Gap

The three strands outlined above have largely developed in isolation from one another. Studies of the law of armed conflict analyse prohibition and responsibility, but rarely consider how restoration is financed. Studies of compensation mechanisms focus on institutional design and the admissibility of claims, treating the source of funds as an external factor. Studies of environmental fiscal policy are based on the premise that the state taxes domestic polluters. However, this does not reflect situations where the main polluter is a foreign state against which no fiscal jurisdiction exists. Research on Ukraine tends to be fragmented, with studies examining environmental taxation, damage assessment methodologies, and

the compensation mechanism as separate subjects (Ladychenko, Yankovsky et al., 2025).

The present study addresses this gap by treating recording, attribution and financing as three tiers of a single mechanism, examining the junctions between them where practical failures occur.

3. Method

The study employs a qualitative research design that combines legal and institutional analysis. Comparative legal analysis is used to examine the treaty framework that governs environmental protection in relation to armed conflict, the design of the compensation mechanism created for Ukraine, and the corresponding European Union instruments. These are then compared with the practice of the United Nations Compensation Commission, which is the closest available precedent.

The present study employs institutional analysis to examine the interaction between the bodies responsible for the individual tiers of the mechanism. The bodies in question comprise the environmental authorities responsible for recording damage, the Council of Europe institutions responsible for registering and adjudicating claims, and the fiscal and financial institutions responsible for allocating resources. The analysis focuses on the transitions between tiers rather than on the tiers considered separately.

Content analysis covers relevant legal acts and policy documents. At an international level, this includes Additional Protocol I to the Geneva Conventions, the ENMOD Convention, the International Law Commission's draft principles, the Convention establishing the International Claims Commission for Ukraine, and the Council of Europe's instruments establishing the Register of Damage. At the level of the European Union, these include the European Green Deal, the Taxonomy Regulation, the amended Carbon Border Adjustment Mechanism Regulation, the Environmental Liability Directive, the Environmental Impact Assessment Directive, the Directive on the Protection of the Environment through Criminal Law, and the Ukraine Facility Regulation. At the national level, these include the Tax Code of Ukraine, Article 441 of the Criminal Code and Cabinet of Ministers' legislation governing the submission of claims to the Register of Damage, as well as environmental impact assessments in war-affected territories.

A systems approach provides the conceptual framework, allowing recording, attribution and financing to be treated as interdependent elements whose overall effectiveness is determined by the weakest junction rather than by the strongest component. The integrated model presented in Section 4.5 is constructed using methods of scientific abstraction, synthesis and generalisation.

The study is subject to several limitations. Damage assessments are preliminary and produced by different institutions for different purposes using different methodologies, meaning that aggregate figures are not directly comparable. Ongoing hostilities and the occupation of part of the territory prevent the verification of a significant proportion of the recorded damage on the ground. As individual claim files submitted to the Register of Damage are not publicly accessible, conclusions regarding the treatment of environmental claims are drawn from the applicable rules rather than from actual case decisions. This restricts the analysis to issues of institutional structure and prevents a quantitative assessment of the results.

4. Results

4.1. Environmental Damage as a Legal and Economic Object: The Measurement Problem

The environmental consequences of aggression manifest in a variety of forms, which are subject to variation in terms of the applicable legal regime and the type of remedy required. Table 1 presents a typology that establishes a correlation between each category of damage and the relevant legal channel, as well as the financing options capable of addressing it.

The typology reveals the first structural problem. National damage assessment methodologies are designed for domestic environmental liability, where the calculated sum acts as a claim against a specific domestic polluter (Medynska et al., 2024). By contrast, international compensation practice proceeds from the cost of remediation and requires a demonstrable causal

link between specific conduct and specific ecological harm (United Nations Compensation Commission, 2005). These different approaches produce different figures for the same event, which is why the State Environmental Inspectorate's aggregate assessment, which exceeds 7 trillion UAH, and the sectoral estimates contained in the Rapid Damage and Needs Assessment (World Bank et al., 2026) are not directly comparable. Neither is incorrect; they answer different questions. The risk is that sums calculated using national methodologies will be presented as claims in an international forum that applies a different evidentiary standard and will reduce them accordingly. A methodological response to this discrepancy has been suggested for the case of the Kakhovka dam. A five-component formula was applied, combining direct damage, economic losses, losses of ecosystem services, indirect effects, and recovery needs. This formula was applied over time horizons of thirty to one hundred years, with a declining discount rate. The resulting estimate was several times higher than the official assessment (Benatov, Korbutyak, et al., 2026). The principal outstanding task of the fixation tier is to generalise that approach from one event to the full body of recorded damage.

4.2. The Fixation Tier: National Mechanisms and Their Evidentiary Function

The national tier performs a dual function that has not received sufficient recognition. Approved by the environmental authorities and applied by the State Environmental Inspectorate, damage assessment methodologies primarily serve the purposes of domestic environmental liability and criminal

Table 1

Typology of environmental damage caused by armed aggression and corresponding remedial channels

Category of damage	Principal manifestations	Legal channel	Financing capable of addressing it
Contamination of land	Pollution and littering of soils by munitions, fuels and debris	Register of Damage (category B3.1); national administrative liability	Compensation fund; remediation programmes
Water resources	Direct pollution of water bodies; unauthorised use of resources in occupied areas	Register of Damage; national water protection legislation	Compensation fund; infrastructure investment
Protected areas and biodiversity	Destruction of nature reserve fund objects, loss of species and habitats	Ecocide proceedings (Article 441); Register of Damage	Compensation fund; ecosystem restoration programmes
Atmospheric emissions	War-related greenhouse gas emissions and pollution from fires	Register of Damage (climate-related losses)	Climate finance; national carbon pricing revenues
Explosive contamination	Mined and contaminated territories requiring clearance before any restoration	Register of Damage (category B5, demining costs)	State budget; donor demining programmes
Destroyed infrastructure with ecological effect	Hydraulic structures, industrial sites, waste facilities	Register of Damage; State responsibility	Reconstruction finance; Ukraine Facility

Source: compiled by the authors on the basis of the claim categories established by Cabinet of Ministers of Ukraine (2026a) and national damage assessment methodologies

proceedings, including those under Article 441 of the Criminal Code. At the same time, they are the main source of evidence for the international compensation mechanism because the Register of Damage is based on documentation produced by national authorities and affected individuals.

This dual function gives rise to a need that national methodologies were not designed to address. Evidence intended for an international claims body must demonstrate causation in relation to specific events, be capable of independent verification and be presented in a way that allows remediation costs to be assessed (Golovko, 2024). While assessments produced primarily for administrative purposes, based on standardised coefficients applied to affected areas, satisfy domestic requirements, they are vulnerable in an international forum. Therefore, aligning national damage assessment methodologies with international evidentiary standards is not just a technical matter, but a precondition for the effectiveness of the compensation mechanism as a whole.

A second weakness concerns institutional continuity. On July 21, 2025, the Ministry of Environmental Protection and Natural Resources was dissolved by Resolution No. 903, and its functions were transferred to a merged ministry. This ministry was renamed again in July 2026 (The Resolution of the Cabinet of Ministers of Ukraine 'Certain Issues Concerning the Ministry of Economy, Environment and Agriculture' of July 21, 2025, No. 903). The repeated reorganisation of the authority responsible for environmental policy at a time when evidence for international claims is being compiled creates a risk of discontinuity in methodological guidance and the management of records. This is precisely the kind of weakness that an opposing party in an adjudication process could exploit.

A third weakness relates to the coverage of occupied and actively contested territories, where direct assessment is impossible. While reliance on remote sensing and indirect indicators is unavoidable in such cases, the resulting assessments require an explicit methodological framework if they are to be defended in adjudication.

4.3. The Attribution Tier: The International Compensation Architecture

The Register of Damage is responsible for recording claims. Initially accepting applications in April 2024 for damage to residential property only, its categories have since been progressively extended. At the national level, the procedures for submitting applications through the Unified State Electronic Services Portal by legal entities and the state were established by Resolution No. 365 of 29 March 2024, and were substantially expanded by Resolution No. 670 of May 27, 2026. The latter resolution came into force

on 4 June 2026, adding fourteen further categories (The Resolution of the Cabinet of Ministers of Ukraine 'On Amendments to the Procedures Approved by Resolution of the Cabinet of Ministers of Ukraine No. 365 of March 29, 2024' of May 27, 2026, No. 670). Two of these are directly relevant to the present analysis. Category B3.1 on environmental damage now covers the direct adverse impact on the environment, as well as the costs of monitoring, assessing and restoring ecosystems. This brings the national submission procedure into line with the logic of remediation costs applied in international claims practice. Category B5 covers expenditure on demining, including humanitarian demining, land clearance and specialist training, funded from state budgets. This recognises that land clearance in these areas is a prerequisite for environmental restoration.

The second component is the International Claims Commission for Ukraine. This is an independent body within the Council of Europe's institutional framework. It is responsible for examining, evaluating and deciding on claims for damage, loss and injury caused by the Russian Federation's internationally wrongful acts in or against Ukraine since 24 February 2022. The Convention establishing the Commission was opened for signature in The Hague on 16 December 2025, and Ukraine ratified it on April 30, 2026 (Council of Europe, 2025). When it opened for signature, the Convention was signed by thirty-five states and the European Union. It will enter into force once at least twenty-five signatories have expressed their consent to be bound, and once the aggregate contributions of those signatories cover at least half of the Register's annual budget (Council of Europe, 2025). By August 2026, the number of ratifications received remained well below this threshold, meaning that the Commission is not expected to begin work until 2027 at the earliest.

The third component – a compensation fund – has not yet been created. This is the decisive gap in the system. Although a register records and a commission adjudicates, neither disburses funds. Without a source of funds, the mechanism produces recognised claims rather than restored ecosystems, and the entire structure risks becoming merely declaratory. This risk is particularly acute for environmental claims, because ecological restoration is time-sensitive. Contaminated soils, damaged hydrological regimes and degraded habitats deteriorate further while a claim is pending, and the cost of remediation increases accordingly.

4.4. The Financing Tier: Fiscal Instruments Under Wartime Constraints

The financing tier is the weakest of the three. The Ukrainian environmental tax on carbon dioxide emissions has remained at 30 UAH per tonne since 2022, as set out in paragraph 243.4 of the Tax Code of

Ukraine (2010). The rates have not been revised for 2026. Table 2 shows how this rate compares with other European countries (Tax Foundation, 2026).

At this level, the tax has a symbolic rather than an incentive function. The effect is compounded by the exemption of annual emissions below 500 tonnes, which further narrows the taxable base. However, it is inaccurate to claim, as is often done, that the revenues are not earmarked. Under Article 24-6 of the Budget Code of Ukraine, the State Fund for Decarbonisation and Energy Efficient Transformation has been established as part of the State Budget's special fund. Paragraph 75 of Part Three, Article 29 allocates the proceeds of the environmental tax on carbon dioxide emissions from stationary sources to this fund. This arrangement has been in place since January 1, 2024 (The Budget Code of Ukraine). The defect is therefore not the absence of an earmarking mechanism, but rather its object: the existing channel finances decarbonisation and energy efficiency, not the restoration of ecosystems damaged by hostilities. The establishment of a restoration channel would not necessitate the creation of a new fund; rather, it would entail either an extension of the mandate of the existing fund or the creation of a parallel fund operating on the same budgetary model.

At the same time, external carbon regulation is creating further pressure. The final rules for the Carbon Border Adjustment Mechanism are due to take effect on January 1, 2026. However, Regulation (EU) No. 2025/2083 introduced a single 'de minimis' threshold, calculated by weight, of fifty metric tons per calendar year. This excludes a significant number of small shipments from the scope of the relevant obligations. Ukrainian exports remain heavily concentrated in the covered sectors. Prior to the simplification, sectoral estimates suggested that the mechanism could cost Ukraine approximately 202 million USD in exports in the first year of full application, rising to around 1.44 billion USD annually by 2030. Modelled macroeconomic effects included a reduction in gross domestic product of around 4.8%, a contraction in tax revenues of approximately 2.8 billion USD, and the loss of over 70,000 jobs (GMK Center, 2024). However, these figures should

be treated as an upper bound since they do not account for the subsequent narrowing of scope.

Against this background, Ukraine has requested an exemption from the financial components of the mechanism under Article 30(7) of Regulation (EU) 2023/956. This provision states that, in the event of an unforeseeable, exceptional and unprovoked event outside the control of a third country that has destructive consequences for its economic and industrial infrastructure, the Commission must assess the situation and submit a report to the European Parliament and the Council, accompanied by a legislative proposal to amend the Regulation and set out the necessary provisional measures, where appropriate. Therefore, the Article does not confer an exemption; it establishes a procedure that could lead to one through ordinary legislative amendment. This distinction is important because an argument framed as an existing entitlement is weaker than one presented as a request for a temporary measure supported by evidence. Meanwhile, the procedure has produced its first result: the Commission's review report, presented in December 2025, assessed the expected impact of the mechanism on the Ukrainian economy as limited, and did not propose provisional measures with regard to Ukraine (European Commission, 2025). The assessment proceeded from the projected scale of the economic effect rather than from the nature of the event, and it is precisely this substitution of an *ex post* economic test for the *ex ante* legal criterion of the provision that Ukraine's further submissions will have to contest.

The domestic equivalent of this argument is the establishment of a national emissions trading system. This was developed to fulfil the obligation to implement Directive 2003/87/EC, and is supported by the existing framework for monitoring, reporting and verifying greenhouse gas emissions (The Law of Ukraine 'On Principles of Monitoring, Reporting and Verification of Greenhouse Gas Emissions' of 01.02.2025, No. 377-IX). As part of the implementation of the action plan approved by Order No. 146-p on February 21, 2025, a draft law on the operation of a national greenhouse gas emission allowance trading scheme was published for public consultation in

Table 2
Carbon tax rates in selected European States, as of April 1, 2026

Jurisdiction	Rate per tonne of CO ₂	Comment
Norway	146.23 EUR	Highest rate in Europe
Sweden	133.17 EUR	Introduced 1991; industry covered by the EU ETS exempt
European average (24 States)	53.63 EUR	Arithmetic average of national carbon tax rates
Poland	0.09 EUR	Lowest rate in Europe
Ukraine	0.59 EUR	30 UAH per tonne; emissions below 500 t per year exempt

Source: compiled by the authors on the basis of Tax Foundation (2026), Government Offices of Sweden (2026) and the Tax Code of Ukraine (2010)

May 2026 (The Resolution of the Cabinet of Ministers of Ukraine 'On the Approval of the Action Plan for the Establishment of a National Greenhouse Gas Emissions Quota Trading System' of February 21, 2025, No. 146-p). The sequencing question is whether a carbon price can be introduced to an economy under martial law without undermining the industrial base on which reconstruction depends. The proposed answer is that introduction should be gradual, with revenues earmarked for restoring war-damaged ecosystems. This links the financing tier directly to the damage recorded in the fixation tier.

Finally, external reconstruction finance operates under its own conditionality. The Ukraine Facility links disbursement to the implementation of reforms (Regulation (EU) 2024/792), while the Taxonomy Regulation defines the criteria for identifying sustainable investment. Recovery and reconstruction needs are estimated at 587.7 billion USD over ten years (World Bank et al., 2026), so these instruments, rather than domestic environmental taxation, are the main way environmental requirements are included in reconstruction practice.

4.5. The Reconstruction Paradox and the Integrated Model

The analysis reveals a contradiction between two policy trajectories occurring simultaneously. On the one hand, Ukraine has made substantial progress in the accession process in the environmental field. The bilateral screening sessions under Chapter 27 on environment and climate change took place from June 16th to 20th, 2025. The formal screening exercise was completed on September 30th, 2025. In December 2025, the government approved negotiating positions covering the cluster that includes the environment. However, the political opening of the clusters was subsequently delayed (Government of Ukraine, 2025). Chapter 27 covers over two hundred *acquis* acts, including Directive 2011/92/EU on environmental impact assessment (Ministry of Environmental Protection and Natural Resources of Ukraine, 2025).

Conversely, the requirements of accelerated reconstruction have produced pressure in the opposite direction. Through Resolution No. 836, which came into effect on 2 July 2026, the government launched an experimental project to establish specific environmental impact assessment criteria in areas affected by or subject to ongoing hostilities. The project's stated objectives were to streamline procedures and reduce costs for businesses seeking to resume operations in these regions (The Resolution of the Cabinet of Ministers of Ukraine 'On the Implementation of a Pilot Project Concerning the Specifics of Conducting Environmental Impact Assessments in Areas Where Hostilities Are (or Have Been) Taking Place' of June 4, 2026, No. 836.). The objective is legitimate and the need is real (Butsenko, 2026). However, the difficulty lies in the fact that the *acquis* leaves the least room for national discretion in the area of procedural simplification of environmental impact assessment, and that a measure adopted as an experiment may set a precedent.

Rather than abandoning simplification, the proposed resolution to this contradiction is to reframe it. Accession practice provides a recognised instrument for situations in which full compliance is temporarily impossible, with transitional periods permitting deferred implementation subject to a binding timetable. In the enlargement rounds of 2004 and 2007, such periods were granted to Poland, Romania and Bulgaria in the environment chapter (then numbered Chapter 22) for compliance with the most demanding directives on wastewater treatment, landfills and industrial emissions. Under the current numbering system, the same approach was adopted for Croatia in Chapter 27 (Treaty of Accession of Croatia, 2012). A time-limited derogation accompanied by compensating safeguards, such as mandatory post-project monitoring, guaranteed public access to information, a sunset clause and regular reporting, is defensible in the accession process. However, the same measure adopted as open-ended domestic deregulation is not.

Table 3

Three-tier mechanism for overcoming the environmental consequences of armed aggression

Tier	Content	Current status	Junction condition to the next tier
I. Fixation	Damage assessment methodologies; State Environmental Inspectorate; monitoring platform; ecocide proceedings	Operational	Evidence must satisfy international standards of causation and verifiability
II. Attribution	Register of Damage; International Claims Commission for Ukraine; State responsibility and reparation	Constructed, not yet operational	Adjudicated claims must be connected to a source of funds, that is, a compensation fund
III. Financing	Environmental taxation and carbon pricing; State Fund for Decarbonisation; Ukraine Facility; taxonomy-aligned investment	Weakest; no restoration-specific channel	Resources must be earmarked for the restoration of the specific ecosystems recorded in Tier I

Source: developed by the authors

The integrated model resulting from the analysis is presented in Table 3. This model treats the three tiers as sequential and interdependent, identifying the junction conditions that determine the overall functionality of the mechanism.

The model explicitly states the main finding. The effectiveness of the mechanism is determined not by the strength of any individual tier, but by the two junctions between them. Although Ukraine has recorded considerable damage and secured an international adjudicative forum, the evidentiary junction between the first and second tiers is misaligned and the financing junction between the second and third tiers has not yet been established.

5. Discussion

The findings raise a sequencing question with practical policy implications. The compensation tier will not deliver resources before 2027 at the earliest, and probably much later than this, given the requirement for twenty-five ratifications and the lack of a funding source. By contrast, the need for ecological restoration is immediate, and delay increases the cost of several categories of damage. It can thus be concluded that domestic fiscal instruments should not be regarded as a substitute for compensation; rather, they should be considered a bridge covering the period until the international mechanism becomes operational. The expectation is that recovered compensation will subsequently reimburse the national budget. This framing modifies the political economy of environmental taxation during wartime, since it presents a carbon price not as an additional burden on a weakened economy but as pre-financing of a claim that has already been recognised.

The precedent involving the United Nations Compensation Commission is also instructive from another perspective. In accordance with the United Nations Compensation Commission (2005), environmental awards were accompanied by a follow-up programme. This programme required recipients to account for the use of funds through independent review and semi-annual reporting. A comparable arrangement would address the principal objection to earmarking, namely that it fragments the budget. However, a counter-argument is presented, which asserts that ecological restoration financed from general revenue is politically vulnerable during reconstruction, when competing claims on the budget are overwhelming. It is further asserted that a transparent, monitored and reported allocation is more likely to survive both domestic budgetary pressure and international scrutiny (Kiuntzli, 2026). The State Fund for Decarbonisation and Energy Efficient Transformation demonstrates that the budgetary technique is already available in Ukrainian

law; however, what is absent is a fund whose object is the restoration of war-damaged ecosystems.

A third consideration is the coherence of Ukraine's external position. Seeking provisional measures under Article 30(7) of the border adjustment mechanism while presenting reconstruction as 'green' is only defensible if the request is expressly transitional and accompanied by a credible domestic carbon pricing trajectory. Otherwise, the two positions will appear contradictory, with consequences that extend beyond climate policy to the accession process in general, where the environmental chapter is one of the most demanding.

The study has clear limitations. It analyses institutional design rather than outcomes because the latter do not yet exist. The Commission has not started working, the fund has not been set up, and the experimental simplification of environmental impact assessments has only recently come into effect. The damage figures on which the analysis relies are preliminary and methodologically heterogeneous. Therefore, future research should firstly address the empirical comparison of national damage assessment methodologies with the evidentiary requirements applied in international claims practice. Secondly, it should model the fiscal implications of gradually increasing the carbon price in line with the constraints of a wartime economy.

6. Conclusions

The environmental consequences of the armed aggression against Ukraine are too complex to be resolved by a single branch of law or category of instrument. This study has shown that the mechanism for overcoming these consequences consists of three tiers and that its effectiveness depends on the connections between them rather than on the tiers in isolation.

The fixed-rate tier is operational. Ukraine systematically records environmental damage, and the recorded amounts, which are expected to exceed 7 trillion UAH by mid-2026, demonstrate an administrative capacity that few states would possess under comparable conditions. The weakness of this tier lies not in its scope, but in its purpose. Methodologies designed for domestic administrative liability are not automatically admissible as evidence before an international claims body. Furthermore, the repeated reorganisation of the responsible ministry poses a risk of methodological discontinuity.

The attribution tier has been constructed, but is not yet operational. The Register of Damage now accepts environmental claims and has extended its categories to cover the costs of monitoring, assessment, ecosystem restoration, and demining. The Convention establishing the International Claims Commission has also been adopted and ratified by Ukraine.

However, the mechanism lacks its third component: a compensation fund. Without this, adjudicated claims do not become resources.

The financing tier is the weakest. With a carbon tax of just 0.59 EUR per tonne, compared to a European average of 53.63 EUR, and with revenues directed towards decarbonisation rather than restoration, the State will be left without an autonomous financial instrument for ecological restoration at a time when it is most needed, when it will be subject to external carbon regulation from 2026.

The following three recommendations are made. Firstly, national damage assessment methodologies should align with international evidentiary requirements, treating each assessment as prospective evidence rather than solely as an administrative act. Secondly, a dedicated fund for the restoration of war-damaged ecosystems should be set up using the

budgetary model already employed for the State Fund for Decarbonisation. This fund would be financed initially through a gradually increasing carbon price, and subsequently through compensation. Transparent reporting would be modelled on the follow-up programme applied to the environmental awards of the United Nations Compensation Commission. Thirdly, the procedural simplifications adopted for reconstruction should be formalised as time-limited derogations with compensating safeguards, rather than open-ended deregulation. This will ensure that they remain defensible within the accession process.

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