

Resilience, Security and the Rule of Law: Environmental and Climate Dimensions of Ukraine's Post-War Recovery

Synthesis Report



Executive Summary

Ukraine's reconstruction is unfolding under conditions unprecedented in modern Europe, where large-scale environmental damage, ongoing hostilities, and accelerated EU integration processes intersect. The panel "*Resilience, Security and the Rule of Law: Environmental and Climate Dimensions of Post-War Reconstruction*," examined how environmental protection, climate governance, and the rule of law can be integrated into recovery efforts that are already underway, rather than postponed until the end of the war.

The discussion demonstrated that war-related environmental damage has reached a scale that directly affects national security, public health, energy systems, food production, and institutional stability. Existing environmental and climate governance frameworks are being stretched beyond their original design limits, exposing weaknesses in monitoring, enforcement, liability, and access to information. At the same time, emergency derogations from environmental procedures and participation rights risk undermining environmental democracy and legal certainty at a critical moment in Ukraine's EU accession trajectory.

Participants emphasised that reconstruction decisions taken now will lock in environmental, economic, and governance outcomes for decades. Rapid rebuilding without strong legal safeguards risks reproducing vulnerabilities, while embedding EU environmental and climate acquis from the outset offers a pathway to a more resilient, competitive, and secure Ukraine. The panel highlighted the importance of maintaining environmental impact assessment (EIA), strategic environmental assessment (SEA), and public participation mechanisms, even under emergency conditions, as core components of rule-of-law-based recovery.

A central conclusion was that Ukraine's recovery constitutes a system-wide stress test for environmental governance under extreme conditions. Addressing this challenge requires not only sectoral reforms, but also horizontal institutional strengthening, capacity building across public administration and the judiciary, and improved coordination between environmental, energy, climate, and spatial planning policies. International cooperation and knowledge exchange were identified as enabling conditions, positioning Ukraine's experience as globally relevant for countries facing compound crises. Ukraine's pioneering efforts to quantify and seek redress for climate damage caused by war open new legal and policy pathways for integrating climate accountability into international reparations frameworks.

The findings of this discussion are intended to inform ongoing legislative reforms, donor programming, and EU accession screening processes, as well as international legal and policy frameworks addressing environmental and climate harm arising from armed conflict, large-scale disasters, and other compound crises.

Key Takeaways

- **Reconstruction under fire.** Ukraine's rebuilding is taking place amid ongoing hostilities, making environmental governance, climate policy, and the rule of law immediate operational challenges rather than post-conflict considerations.
- **Environmental damage as a security issue.** War-related environmental harm directly affects energy security, public health, food systems, and social stability, positioning environmental protection as a core component of national security.
- **Governance stress test.** Existing environmental and climate governance frameworks are being pushed beyond their design limits, revealing systemic gaps in monitoring, enforcement, and liability mechanisms.
- **Rule of law at risk.** Emergency derogations from EIA and SEA, restricted public participation, and fragmented access to environmental information threaten environmental democracy, legal certainty, and compliance with EU standards.
- **EU alignment as an anchor.** Embedding EU environmental and climate acquis into reconstruction planning from the outset is essential to avoid unsustainable lock-in and to advance Ukraine's EU accession trajectory.
- **Institutions and capacity matter.** Strengthening institutional capacity across government, the judiciary, academia, and civil society is a prerequisite for effective implementation of climate and environmental reforms.
- **Global relevance.** Ukraine's experience offers broader lessons on how environmental law and climate governance can function under conditions of prolonged instability and compound crises.



On 22 September 2025, the IX Kharkiv International Legal Forum hosted a high-level panel discussion, “Resilience, Security and the Rule of Law: Environmental and Climate Dimensions of Post-War Reconstruction,” bringing together Ukrainian and international experts in climate law, environmental governance, climate science, security studies, and reconstruction planning.

The session, organised within the framework of the MSCA4Ukraine project “Towards Resilient and Resistant Climate Change Law (RESCLimLaw)”, addressed one of the most urgent questions facing Ukraine today: **how to rebuild a country devastated by war while strengthening environmental and climate protection, advancing EU integration, and reinforcing the rule of law.**

Context

Ukraine’s recovery is unfolding under conditions unique in modern Europe, where active warfare, large-scale environmental harm, and evolving security threats directly affect the state’s ability to meet climate and EU integration commitments. Russia’s full-scale invasion has triggered environmental devastation of a scale unprecedented in Europe in decades. By mid-2025, the frontline stretched 1,500 km, cutting across communities, ecosystems, and agricultural landscapes. In the first five months of 2025 alone, Russia seized 1,280 km² of Ukrainian territory—an area roughly equivalent to Rome.

The ecological consequences are far-reaching. Over 22,800 war-related fires have scorched forests, protected sites, and agricultural lands, causing USD 18.4 billion in environmental losses — an amount exceeding the annual environmental protection budget of several EU Member States combined.

Warfare-related emissions are estimated at 230 million tonnes of CO₂-equivalent, exceeding Poland’s total annual emissions, one of the most carbon-intensive economies in the EU.

The destruction of 44.7% of Ukraine’s pre-war electricity-generation capacity is proportionally greater than losing all coal, nuclear, and half of the renewable generation in a country like Spain or Italy, exposing Ukraine to systemic energy instability and cascading risks for water infrastructure, health systems, and industry.

Total recovery needs now exceed USD 524 billion — equivalent to roughly 40% of Germany’s federal annual budget and comparable to a quarter of the Italian economy. This makes Ukraine’s reconstruction one of the largest recovery efforts in Europe since World War II.

These conditions fundamentally shape the legal, institutional, and governance choices facing Ukraine’s recovery. In this context, post-war reconstruction is not merely a technical or economic undertaking, it is fundamentally a question of environmental and national security.

The scale and duration of war-related environmental damage significantly increase the complexity, cost, and urgency of Ukraine’s alignment with EU environmental and climate acquis, turning reconstruction decisions into de facto accession decisions.

Environmental Security as a Pillar of National Security

Parliamentary and civil society representatives underlined that environmental security is inseparable from human security, public health and the survival of the Ukrainian state. They pointed to officially recorded environmental damage measured in trillions of hryvnias, thousands of violations of environmental legislation and ongoing criminal proceedings for ecocide as evidence that war-related harm reaches far beyond physical infrastructure.

Speakers stressed that protecting ecosystems and biodiversity, safeguarding the right to a clean, healthy and sustainable environment, and preventing further degradation must be treated as elements of national defence and statehood. The discussion repeatedly returned to the idea that a future-oriented reconstruction must be “green by design”, rooted in European principles such as the European Green Deal and the “do no significant harm” requirement of key EU support instruments.

The scale of war-related environmental damage positions environmental protection as a core element of national security and a prerequisite for compliance with EU environmental acquis, particularly in relation to risk prevention, public health protection, and long-term resilience. In practical terms, environmental degradation driven by the war translates directly into security risks through impacts on public health, water availability, food systems, and population displacement.

Climate governance and EU integration

Participants highlighted the significant progress Ukraine has made in aligning climate legislation with EU standards despite full-scale war. A recently adopted framework law on the basic principles of state climate policy was cited as a milestone, anchoring the objective of climate neutrality by 2050 and establishing institutional and procedural foundations for long-term climate action.

At the same time, panellists stressed that this framework must now be operationalised through a package of secondary legislation and strategic documents, including a long-term low-emission development strategy and a national emissions trading system for greenhouse gases. The burden of implementing the EU acquis under Chapter 27 — encompassing more than 200 directives and regulations — was described as both an opportunity to modernise Ukraine’s governance architecture and a test of administrative capacity.

Strengthening climate governance and embedding EU climate acquis into reconstruction planning from the outset is essential to avoid regulatory lock-in, ensure legal certainty, and meet accession requirements under the European Green Deal framework. Without secondary regulation and institutional capacity, Ukraine risks formal alignment with EU climate law without effective implementation on the ground.

Rule of law, environmental democracy and derogations

Civil society experts drew attention to the deterioration of environmental democracy and procedural environmental rights during wartime. They noted that derogations from environmental impact assessment (EIA) and strategic environmental assessment (SEA), adopted under emergency conditions, have weakened safeguards designed to prevent irreversible damage and to ensure public participation in decisions affecting communities and ecosystems.

Participants warned that continued reliance on exceptional regimes, including attempts to insert EIA exemptions into unrelated sectoral laws, risks undermining both environmental protection and the credibility of Ukraine’s EU alignment. Restoring full application of EIA and SEA, improving access to environmental information and reinforcing access to justice were identified as priorities for rebuilding trust in institutions and upholding the rule of law for the environment.

The weakening of environmental democracy through emergency derogations from EIA, SEA, and public participation undermines legal certainty, increases governance risks, and may delay alignment with EU rule-of-law and environmental standards.

Institutions, monitoring and horizontal reforms

Speakers agreed that effective implementation of the environmental and climate acquis is impossible without strong, specialised institutions and robust horizontal legal instruments. Proposals included re-establishing a dedicated environment ministry with a modern, EU-compatible strategy, clear policy agenda and capacity-building programmes for environmental professionals across disciplines.

The discussion emphasised three interlinked horizontal reforms: a comprehensive system for state environmental monitoring, a deep overhaul of environmental control and inspection, and modernisation of liability regimes for environmental harm. Without reliable nationwide data, effective enforcement and procedurally sound evidence-gathering, participants cautioned that many documented cases of environmental damage, including war-related harm, may not withstand judicial scrutiny in national or international proceedings.

Strengthening horizontal environmental institutions is essential for credible implementation of the EU environmental acquis, effective accountability for wartime environmental damage, and the integrity of Ukraine's rule-of-law-based recovery. Courts and prosecutors play a critical role in this architecture, as weak monitoring and inspection systems directly undermine the evidentiary basis required for judicial review, enforcement, and accountability proceedings.

Green reconstruction, energy transition and spatial planning

Several interventions focused on the design of reconstruction projects and the risk that short-term infrastructure or energy priorities could undermine long-term environmental and social objectives. Examples included contentious projects implemented without proper EIA, such as memorial complexes or renewable energy developments in ecologically sensitive areas, which have generated social conflict and exposed gaps at the interface between environmental and urban-planning law.

Participants argued that aligning reconstruction with the EU Green Deal requires integrating biodiversity conservation, Natura 2000 obligations and landscape protection into spatial planning and investment decisions, including in the Carpathian region. They stressed that renewable energy expansion must be planned within a coherent regulatory framework that avoids exploiting legal loopholes and ensures that climate mitigation does not come at the expense of fragile ecosystems.

Failure to integrate EU environmental safeguards into reconstruction and spatial planning at an early stage risks future infringement procedures, loss of access to EU funding instruments, and long-term legal uncertainty for investors.

Accountability for environmental harm and ecocide

Legal scholars and practitioners discussed the evolving toolkit for addressing environmental harm caused by the invasion, including domestic criminal provisions on ecocide and ongoing international initiatives to define ecocide under the Rome Statute. Concerns were raised that many proposed international definitions focus on peacetime scenarios, while Ukraine's reality involves deliberate, large-scale destruction of the environment during armed conflict.

Participants highlighted the need for clearer legal criteria, scientifically grounded thresholds and procedurally robust methodologies for damage assessment to support future accountability and compensation claims. They also underlined the importance of coordinating legal, scientific and diplomatic efforts so that Ukraine's experience informs the development of international law on environmental protection in armed conflict.

Ukraine's experience exposes critical gaps in existing international legal frameworks and positions the country not only as a claimant for justice, but also as a potential norm-setter shaping emerging standards on environmental accountability, reparations, and ecocide in situations of armed conflict.

Climate Damage Caused by War: Legal Gaps and Emerging Pathways

In addition to direct environmental destruction, the full-scale invasion has generated significant climate impacts through large-scale greenhouse gas emissions resulting from military operations, fires, destruction of infrastructure, and ecosystem degradation. While physical environmental damage and economic losses are increasingly documented, the climate dimension of war-related harm remains largely unaddressed within existing international legal and compensation frameworks.

Participants highlighted that current international mechanisms for environmental accountability and reparations do not adequately capture climate damage caused by armed conflict. Methodologies for attributing greenhouse gas emissions to warfare, assessing their long-term climate impacts, and translating these impacts into legally actionable claims remain underdeveloped at the international level.

Against this background, Ukraine has begun to develop approaches to systematically account for war-related greenhouse gas emissions and to estimate associated climate damage using established concepts such as the social cost of carbon. This work, undertaken through collaboration between civil society organisations, independent scientists, and state institutions, reflects an emerging practice rather than a settled legal pathway. Preliminary assessments suggest that climate damage caused by the war may reach tens of billions of euros, with current estimates indicating a figure of approximately EUR 44 billion linked to increased greenhouse gas emissions from the ongoing conflict.

The discussion emphasised that these efforts expose a broader normative gap at the intersection of climate law, environmental protection, and the law of armed conflict. Addressing this gap will require further methodological refinement, legal clarification, and international coordination. At the same time, Ukraine's experience provides an empirical basis for advancing international debates on whether and how climate damage resulting from armed conflict can be integrated into future accountability, compensation, and reparations frameworks.

The systematic treatment of war-related climate damage highlights a significant blind spot in existing legal regimes and positions Ukraine's experience as a reference point for the gradual development of international standards addressing climate harm in situations of armed conflict.

Summary

The panel “Resilience, Security and the Rule of Law: Environmental and Climate Dimensions of Post-War Reconstruction” addressed a gap in many recovery discussions: how environmental security, climate governance and legal reforms can be integrated into Ukraine’s reconstruction at a time of ongoing hostilities. Rather than treating recovery as a post-conflict exercise, the discussion focused on how legal frameworks, institutions, and governance systems are already being tested and reshaped in real time by wartime environmental damage, security pressures, and accelerated integration with the European Union.

The panel brought together representatives of the Verkhovna Rada, government institutions, the judiciary, academia, civil society, and international experts from Europe and North America, reflecting the reality that Ukraine’s green recovery is inherently cross-sectoral and cannot be addressed through environmental policy alone. Contributions highlighted the interdependence between environmental protection, climate policy, energy security, economic recovery, and rule-of-law reform, as well as the central role of legal certainty and institutional capacity in sustaining these processes.

Across interventions, participants emphasised that Ukraine’s reconstruction represents a stress test for environmental governance under extreme conditions. The discussion moved beyond abstract commitments to sustainability, focusing instead on concrete legal instruments, institutional reforms, and governance choices that will determine whether reconstruction strengthens resilience or reproduces existing vulnerabilities. Particular attention was given to the risks posed by emergency derogations, fragmented reforms, and capacity gaps, as well as to opportunities for embedding EU environmental and climate standards into reconstruction planning from the outset.

The panel also underscored the importance of international cooperation and knowledge exchange. Ukraine’s experience was repeatedly framed not only as a national challenge, but as a case with broader relevance for countries facing compound crises, offering lessons on how environmental law, climate governance, and democratic accountability can function under conditions of prolonged instability. Taken together, the discussion underscores that environmental governance, climate policy, and the rule of law are not ancillary to reconstruction, but foundational to Ukraine’s long-term security, resilience, and European future.

Challenges identified

Panellists converged on a set of interrelated challenges that must be addressed to ensure a green, just and law-based recovery:

- **The scale and complexity of war-related environmental damage**, which exceeds the design limits of existing legal frameworks, data systems, and institutions, requiring new approaches to assessment, prioritisation, and accountability.

- **The erosion of environmental democracy and procedural safeguards**, including derogations from environmental impact assessment (EIA) and strategic environmental assessment (SEA), restricted public participation, and fragmented access to environmental information, all of which risk undermining legal certainty and compliance with EU standards.

- **Persistent institutional and governance gaps, particularly in environmental monitoring, inspection, enforcement, and liability regimes**, constraining both routine environmental governance and efforts to document and remedy wartime environmental harm.

- **Structural tensions between rapid reconstruction, energy security, and EU environmental and climate obligations**, notably in relation to biodiversity protection, management of protected areas, spatial planning, and infrastructure development.

- **Capacity constraints across public administration, the judiciary, academia, and civil society**, complicating the effective implementation of the extensive and technically demanding EU environmental and climate acquis.



Recommendations

In response to these challenges, participants articulated a set of recommendations to guide policymakers, practitioners and international partners:

Restore and strengthen environmental democracy. Reinstate full application of EIA and SEA, guarantee timely access to environmental information and ensure meaningful public participation in reconstruction and investment decisions.

Rebuild environmental institutions and horizontal functions. Establish strong, specialised environmental authorities and complete systemic reforms in monitoring, control and environmental liability as prerequisites for effective acquis implementation and accountability for war-related damage.

Embed climate and biodiversity objectives in recovery. Integrate climate neutrality, “do no significant harm”, ecosystem restoration and biodiversity conservation into all reconstruction policies and funding instruments, including a dedicated legal framework for green recovery aligned with the EU Green Deal.

Develop robust frameworks for environmental war-damage assessment and accountability. Harmonise legal and scientific methodologies for quantifying environmental harm, strengthen evidence-gathering capacities and pursue avenues for compensation at national and international levels.

Invest in capacity-building and knowledge transfer. Expand training and education in environmental and climate law for public officials, judges, lawyers and civil society, and support research projects such as RESClimLaw that connect legal reform, climate security and reconstruction planning.

Develop legal pathways for climate damage compensation. Support the international recognition of methodologies for accounting and monetising war-related greenhouse gas emissions, and pursue integration of climate damage claims into emerging compensation and reparations mechanisms.

Leverage Ukraine’s experience in global debates. Use Ukraine’s case to inform international discussions on ecocide, environmental protection in armed conflict and climate-resilient reconstruction in high-risk contexts, fostering partnerships that reinforce both national recovery and global environmental governance.

The panel underscored that Ukraine’s reconstruction is not only a question of rebuilding infrastructure and attracting investment, but a profound legal and institutional transformation in which environmental protection, climate policy and the rule of law become central pillars of a secure and European future.

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