



Corporate Crimes for Climate-Related Environmental Destruction

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Abstract

Background: Within the framework of international law, ecocide has not yet been explicitly criminalized under the 1998 Rome Statute, despite a massive global movement advocating for its recognition.

Objective: This article examines the concept of ecocide as an international crime and analyzes the construction of corporate criminal liability for environmental destruction that contributes to global climate change.

Methods: This study employs a normative-juridical method, utilizing both comparative-law and conceptual approaches.

Results: The findings indicate that, first, the definition of ecocide proposed by Stop Ecocide International in 2021 provides a comprehensive normative framework but requires further refinement regarding transnational corporations; second, corporate criminal liability for ecocide can be established through a doctrine that integrates *respondeat superior*, the identification doctrine, and the aggregation of fault; and third, as a megadiverse nation, Indonesia faces an urgent need to incorporate an ecocide legal framework into its national legal system, particularly through reforms to the Criminal Code and environmental protection legislation.

Conclusion: The criminalization of ecocide is an urgent necessity within the 21st-century global legal order to ensure ecosystem sustainability and climate justice.

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INTRODUCTION

The climate crisis that has affected the world in the second decade of the 21st century is not merely a natural phenomenon but also a direct result of the massive and systematic exploitation of natural resources by large corporate entities over the past two centuries. The latest data from the Intergovernmental Panel on Climate Change (IPCC), as reported in its 2023 Synthesis Report, confirms that the global mean surface temperature has increased by approximately 1.1 degrees Celsius above the 1850–1900 baseline, with cumulative carbon dioxide emissions from fossil fuel combustion and industrial processes constituting major drivers of climate change that threaten the sustainability of life on Earth. The legal problem, therefore, is not merely the existence of climate change but whether existing international criminal law can attribute criminal responsibility to corporate entities whose cumulative activities contribute to severe, widespread, and long-term environmental destruction. Climate change represents the broader environmental phenomenon,

whereas ecocide refers to a proposed legal category intended to address the most serious forms of ecosystem destruction that may result from unlawful or reckless human conduct.

Amid this ecological emergency, a fundamental question arises that has not been satisfactorily answered in international or national law: who should be held criminally responsible for the massive destruction of ecosystems that contributes to global climate change? This question becomes even more relevant as multinational corporations continue to engage in extractive activities that destroy tropical rainforests, contaminate water resources, and release greenhouse gas emissions at levels that exceed the ecological carrying capacity of Earth's ecosystems.

The concept of ecocide which literally means “killing the home” (*oikos*: home or dwelling + *caedere*: to kill) was first introduced by biologist Arthur Galston in (1972) in the context of the use of Agent Orange in Vietnam and was subsequently developed in legal scholarship by Professor Richard Falk in (1973), who proposed ecocide as an international crime (Abdalla et al., 2025; Galston, 1972; Wirtu & Abdela, 2025). Nevertheless, to date, ecocide has not received formal recognition as a standalone international crime under the Rome Statute of the International Criminal Court (ICC) (Atilgan Pazvantoğlu, 2025). The Rome Statute provides the legal basis for the jurisdiction of the ICC and currently recognizes four core international crimes: genocide, crimes against humanity, war crimes, and the crime of aggression.

The urgency of criminalizing ecocide has gained further momentum following the landmark decision of the Dutch Supreme Court in *Urgenda Foundation v. State of the Netherlands* (2019), which required the Dutch government to reduce greenhouse gas emissions, as well as the Hague District Court's ruling in *Milieudefensie et al. v. Royal Dutch Shell plc* (2021), which ordered Shell to reduce its global net carbon dioxide emissions by at least 45% by 2030, relative to 2019 levels (Spijkers, 2022). These rulings marked a new chapter in climate litigation by demonstrating how climate-related obligations can directly implicate corporate responsibility. Previous studies have predominantly examined ecocide from the perspective of international criminal law, while others have focused on corporate environmental responsibility through domestic liability doctrines. However, limited research has systematically integrated the normative construction of ecocide, corporate criminal liability, and Indonesian legislative reform within a single analytical framework.

In the context of Indonesia, the urgency of regulating ecocide is increasingly significant, considering that Indonesia has one of the world's largest areas of tropical forest and continues to experience substantial deforestation. Data from the Ministry of Environment and Forestry (MoEF) indicate that Indonesia's deforestation rate during the 2019–2022 period remained approximately 113,000 hectares per year, much of which was associated with plantation and mining activities (Adib et al., 2024). This places Indonesia in a difficult position: it is both a country seeking economic growth and a vital guardian of globally significant biodiversity. The novelty of this article lies in constructing an integrated accountability model that connects ecocide with corporate criminal liability through organizational fault, aggregate causation, and a contextual legislative framework suitable for Indonesia. The contribution is both doctrinal, by developing theories of environmental criminal law, and practical, by providing guidance for future regulatory reform and enforcement mechanisms.

This article aims to: first, analyze the normative construction of ecocide in international criminal law and its recent developments; second, explore a framework for corporate criminal liability that can be applied in climate-related ecocide cases; third, examine the relevance and urgency of adopting the concept of ecocide within the Indonesian legal system; and fourth, formulate comprehensive legal policy recommendations. Thus, this article is expected to make a significant contribution to the development of legal scholarship, particularly in the fields of environmental criminal law and international criminal law. The research is limited to three interrelated objectives: first, identifying the normative position of ecocide within international criminal law; second, constructing a corporate criminal liability framework for climate-related ecocide; and third, formulating implications for the reform of Indonesian environmental criminal law.

METHODS

This study used a normative legal research method, which involved examining relevant literature and laws and regulations as the primary sources of legal materials. The approaches used in this study consisted of four analytical approaches: the statute approach identified applicable legal norms; the conceptual approach constructed the meaning of ecocide and corporate fault; the

comparative approach evaluated foreign liability models; and the case approach examined judicial developments relevant to corporate environmental accountability.

First, the statute approach examined regulations related to environmental crimes at both the international and national levels, including the 1998 Rome Statute, the United Nations Convention on the Law of the Sea (UNCLOS), the Kyoto Protocol, the 2015 Paris Agreement, Law No. 32 of 2009 concerning Environmental Protection and Management (PPLH), and the Indonesian Criminal Code ([Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup, 2009; Lubis et al., 2026](#)).

Second, the conceptual approach referred to views and doctrines that had developed in legal scholarship to identify ideas that gave rise to relevant legal definitions, concepts, and principles. This approach was used to construct a comprehensive concept of ecocide and corporate criminal liability.

Third, the comparative approach compared the legal systems of various countries concerning the regulation of environmental crimes and corporate liability, including those of France, the Netherlands, the United Kingdom, the United States, and several Southeast Asian countries.

Fourth, the case approach analyzed relevant legal cases at both the national and international levels to understand the development of jurisprudence in the fields of environmental law and corporate liability.

Data collection was conducted through library research using various sources of primary legal materials, including laws and regulations, court decisions, and international agreements; secondary legal materials, including law textbooks, scientific journals, and legal articles; and tertiary legal materials, including legal dictionaries and encyclopedias. The data were analyzed qualitatively using legal interpretation techniques, including grammatical, systematic, teleological, and comparative interpretation.

RESULTS AND DISCUSSION

Result

History and Development of the Ecocide Concept

The concept of ecocide has a long history in the development of international law. Etymologically, the term *ecocide* derives from the Greek *oikos* (house, household, or ecosystem) and the Latin *caedere* (to kill or destroy). Galston (1972) first used the term to describe the systematic damage caused by the herbicide Agent Orange used by the United States military during the Vietnam War, which not only destroyed vegetation but also contaminated the food chain and caused congenital defects in subsequent generations ([Abdalla et al., 2025; Galston, 1972; Wirtu & Abdela, 2025](#)). This discussion addresses the first research objective by examining only the doctrinal development necessary to establish ecocide as a potential international crime.

Professor Richard Falk of Princeton University later developed the concept in juridical terms in his work "Environmental Warfare and Ecocide" (1973), in which he argued that ecocide should be recognized as an international crime on par with genocide because of its devastating impact on the foundations of human ecological life ([Wirtu & Abdela, 2025](#)). In 1996, the United Nations International Law Commission (ILC) briefly included ecocide among the five most serious crimes in the draft Code of Crimes Against the Peace and Security of Mankind, but the provision was subsequently removed from the final version, reportedly following pressure from major industrialized nations.

A significant development occurred in 2010 when British lawyer Polly Higgins submitted a proposal to the United Nations to recognize ecocide as a fifth international crime under the jurisdiction of the International Criminal Court (ICC). Higgins defined ecocide as "the extensive, severe, or systematic destruction or destruction of ecosystems in a given area in such a way that the inhabitants of that area are severely reduced in their ability to enjoy the area peacefully."⁸ This definition subsequently became a starting point for intensive academic debate and legal advocacy over the following decade.

The most important milestone in the contemporary development of ecocide law was the establishment of the Independent Expert Panel for the Legal Definition of Ecocide, convened by the Stop Ecocide Foundation in 2020–2021. The panel, comprising twelve leading international legal experts from around the world, including ICC prosecutor and legal scholar Philippe Sands, formulated a more juridically precise definition of ecocide.

Definition of Ecocide According to an International Panel of Experts 2021

In June 2021, the Independent Expert Panel released a comprehensive legal definition of ecocide, defining it as "an unlawful or wanton act committed with the knowledge that there is a substantial likelihood that the act will cause severe and either widespread or long-term environmental damage."⁹ This definition contains several key elements that require in-depth analysis.

First, the element of "unlawful" conduct refers to acts that violate applicable national or international law, including environmental regulations, emissions standards, and provisions protecting ecosystems. This element is important for distinguishing ecocide from natural disasters, which, in the absence of human conduct, cannot ordinarily be subject to criminalization.

Second, the element of "wanton" conduct refers to acts committed with reckless disregard for damage that would be clearly excessive in relation to the social and economic benefits anticipated from such conduct. It therefore constitutes a form of *mens rea* distinct from intentionality (*dolus specialis*) and negligence. The concept is comparable in certain respects to recklessness in the common-law legal tradition, although the *wanton* standard established by the 2021 Panel has its own specific formulation and should not be treated as legally identical to either recklessness or *culpa lata*.

Third, the "severe" element refers to damage involving serious, adverse, and potentially irreversible or long-lasting changes to environmental components. Damage may be considered severe where it substantially disrupts or destroys the ecological functions or integrity of an ecosystem.

Fourth, the "widespread" element refers to damage extending beyond a limited geographic area and potentially affecting a significant number of people or environmental resources. The concept is not limited to damage that crosses international borders, although transboundary effects may be relevant to establishing its scope.

Fifth, the "long-term" element refers to damage that is irreversible or cannot be redressed through natural recovery within a reasonable period. This aspect is particularly relevant in the context of climate change, where environmental effects may persist for decades or generations.

Ecocide and the Rome Statute: Possible Amendments

The 1998 Rome Statute, which forms the basis of the ICC's jurisdiction, currently recognizes four categories of international crimes: genocide (Article 6), crimes against humanity (Article 7), war crimes (Article 8), and the crime of aggression (Article 8 bis). Although Article 8(2)(b)(iv) prohibits intentionally launching an attack in an international armed conflict in the knowledge that it will cause widespread, long-term, and severe damage to the natural environment that is clearly excessive in relation to the concrete and direct overall military advantage anticipated, this provision applies only in the context of armed conflict and has a high evidentiary threshold.

The possible addition of ecocide as a fifth crime under the Rome Statute would require an amendment in accordance with Articles 121 and 122 of the Statute. Depending on the nature of the proposed amendment, the amendment procedure involves consideration and adoption by the Assembly of States Parties (ASP), with specified voting and ratification requirements. This process is highly political and may face significant obstacles from states whose economies depend heavily on extractive natural resources.

However, global momentum has continued to strengthen. At the 21st session of the ASP in The Hague in 2022, delegates from more than 30 countries supported further discussion of possible amendments concerning ecocide. Vanuatu, Fiji, and Samoa, as small island states particularly vulnerable to the impacts of climate change, have formally advocated for the inclusion of ecocide within the Rome Statute framework. Belgium and France have also publicly expressed support for the initiative.

From the perspective of international criminal law doctrine, the criminalization of ecocide in the Rome Statute could theoretically be structured either as a new form of crime against humanity or as an independent international crime with distinctive elements. One possible approach would be to establish severe environmental destruction resulting in the destruction of livelihoods or the forced displacement of populations as a form of widespread or systematic attack directed against a civilian

population. Alternatively, ecocide could be established as a separate offense with its own actus reus and *mens rea* requirements.

Theoretical Basis of Corporate Criminal Liability

Corporate criminal liability is one of the most controversial and important developments in modern criminal law. Traditionally, criminal law has been built on the principle of personal responsibility, which emphasizes individual culpability and, among other objectives of punishment, rehabilitation. These concepts are not directly applicable to legal entities in the same manner as they are to natural persons. However, the increasingly complex nature of corporate crime has prompted significant doctrinal developments in the attribution of criminal responsibility to corporations (Ma & Ryder, 2025).

There are at least three principal approaches in the doctrine of corporate criminal liability that are relevant to the analysis of ecocide.

First, the doctrine of *respondeat superior* (vicarious liability), which originated in the legal tradition of the United States, provides that corporations may be held criminally liable for criminal acts committed by their employees within the scope of their employment and, under applicable standards, on behalf of or for the benefit of the corporation. A principal criticism of this doctrine is that its broad attribution rules may expose corporations to liability for employee conduct that is contrary to corporate policy or beyond the knowledge of senior management.¹³

Second, the identification doctrine, also associated with the alter ego approach, developed in the English legal tradition. Under this doctrine, a corporation may be held criminally liable when the criminal conduct is attributable to individuals who constitute the corporation's "directing mind and will," such as directors or senior officers who exercise substantial authority over corporate decision-making. The doctrine was articulated in *Lennard's Carrying Co Ltd v. Asiatic Petroleum Co Ltd* (1915) and further developed in *Tesco Supermarkets Ltd v. Natrass* (Horder, 2026; *Tesco Supermarkets Ltd v Natrass*, 1971).

Third, the organizational model, or organizational fault approach, developed by scholars such as Brent Fisse and John Braithwaite (1993), views corporate fault not merely as an aggregation of individual faults but as a systemic failure of the organization to establish, maintain, and enforce an adequate compliance structure (Azarova et al., 2026). The concept of organizational fault or corporate culture reflected in Part 2.5 of the Australian Criminal Code represents a legislative application of this approach.

The Construction of Corporate Accountability in Cases of Climate-Related Ecocide

The application of the foregoing doctrines in the context of climate-related ecocide presents specific challenges that require examination. In general, the principal issues in cases involving potential corporate ecocide include: (a) the attribution of causation between corporate-specific emissions and cumulative, global climate-change impacts; (b) the establishment of corporate *mens rea* in the context of conduct carried out incrementally and accumulated over an extended period; (c) the potential personal liability of corporate executives who make or authorize operational decisions; and (d) jurisdictional issues arising from transnational corporate operations.

Regarding causal attribution, the Carbon Disclosure Project (CDP) research published in 2017 and updated in 2019 identified that 100 companies were responsible for approximately 71% of global greenhouse gas emissions since 1988. These findings, reinforced by Heede's (2014) study published in the journal *Climatic Change*, provide a basis for developing a more measurable causal framework in climate litigation by demonstrating that emissions attributable to specific corporations can be quantified and linked to their contribution to global warming (Yurak & Fedorov, 2025).

In criminal law, questions of causation may be analyzed through approaches including the doctrine of *conditio sine qua non* (the but-for test) and the doctrine of adequate causation. Given the cumulative nature of climate change, an aggregate or contribution-based approach to causation, which considers the proportional contributions of multiple actors to collective harm, may be more appropriate than an exclusive single-source causation model. Such approaches have been explored in civil litigation and could, subject to significant doctrinal and evidentiary challenges, inform the development of criminal-law approaches to climate-related harm.

Regarding corporate *mens rea* in cases of climate-related ecocide, there is an argument that certain major fossil-fuel companies could potentially satisfy the "wanton" element under the 2021 Panel's proposed definition where the requisite knowledge and disregard can be established. An investigation by Supran and Oreskes (2017), published in *Environmental Research Letters*, found that ExxonMobil had internally recognized the connection between fossil-fuel combustion and climate change for decades while simultaneously engaging in public communications that questioned or downplayed the significance of climate-change risks (Supran et al., 2023). Such evidence of internal knowledge and external conduct could potentially be relevant to establishing the *mens rea* of a corporation, although additional evidence would be required to establish all elements of the proposed crime beyond the applicable standard of proof.

Comparison of Corporate Accountability Systems in Different Countries

Comparative analysis shows significant variation in corporate criminal liability regimes across relevant jurisdictions.

Table 1
Comparison of Corporate Criminal Liability System

Country	Legal Basis	Accountability Model	Maximum Sanctions
United States	Sherman Act, Clean Air Act, Clean Water Act	Respondeat Superior	Unlimited fines + corporate probation
English	Corporate Manslaughter Act 2007, Bribery Act 2010	Identification + Senior Manager Model	Unlimited fines + remedial orders
France	Penal Code Art. 121-2; Vigilance Law 2017	Organ Representation Model	5x fine of individual fine + closure
Australia	Criminal Code Act 1995, Part 2.5	Corporate Culture Model	Heavy fines + probation + community service
The Netherlands	Art. 51 of the Criminal Code	Functional/Social	Unlimited fines + publication of the verdict
Indonesia	Law No. 32/2009; Law No. 40/2007; Criminal Code 2023	Limited corporate organs	Criminal fines + forfeiture of profits

From the comparative analysis of the table above, the corporate criminal liability model in Indonesia remains relatively limited compared with those of countries with more advanced legal traditions. Law No. 32 of 2009 concerning Environmental Protection and Management (PPLH Law) does regulate corporate crimes in Articles 116–119, but its application remains focused on corporate officers who give orders or act as leaders in the commission of environmental crimes, without addressing corporate culture failures or organizational negligence (Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup, 2009; Lubis et al., 2026).

Existing Legal Framework

Indonesia's environmental legal system already has several instruments that can serve as an initial basis for regulating ecocide, although none has yet explicitly adopted the terminology of ecocide or criminalized large-scale ecosystem destruction as a crime in its own right.

Law No. 32 of 2009 concerning Environmental Protection and Management (PPLH Law) is the principal environmental law in Indonesia (Undang-Undang Nomor 32 Tahun 2009 Tentang Perlindungan Dan Pengelolaan Lingkungan Hidup, 2009; Lubis et al., 2026). Articles 98–99 of the PPLH Law regulate criminal offenses involving acts that result in the exceedance of ambient air quality standards, water quality standards, seawater quality standards, or standard criteria for environmental damage. Article 108 regulates the more serious offense of land burning. However, all these criminal provisions are designed to address specific and measurable violations of environmental standards rather than large-scale, systematic ecosystem destruction.

Law No. 41 of 1999 concerning Forestry, as amended several times, including through the Job Creation Law, regulates criminal sanctions for various forestry offenses. Article 78 of the Forestry Law provides for a maximum prison sentence of 15 years and a fine of Rp5 billion for the destruction

of forest areas ([Undang-Undang Nomor 41 Tahun 1999 Tentang Kehutanan, 1999; Suslianto & Hadi, 2022](#)). However, academic criticism has highlighted that the law is sectoral in nature and is incapable of capturing the concept of cross-sectoral ecological damage characteristic of ecocide.

The new Criminal Code, enacted through Law No. 1 of 2023, regulates corporate criminal liability more systematically in Articles 45–50, including provisions on principal and additional penalties for corporations. However, the new Criminal Code still employs an identification approach to determining corporate criminal responsibility, namely by examining whether the criminal act was committed on the orders of management or decided upon by an authorized corporate organ ([Undang-Undang Republik Indonesia Nomor 1 Tahun 2023 Tentang Kitab Undang-Undang Hukum Pidana, 2023](#)).

Normative Gaps and the Need for Reform

There are several fundamental normative gaps in Indonesian law that need to be addressed to effectively criminalize ecocide.

First, there is no comprehensive legal definition of “ecosystem damage” that is cross-sectoral and multidimensional. The PPLH Law uses the concept of “environmental damage,” which is defined on the basis of direct or indirect changes to the physical, chemical, and/or biological properties of the environment that exceed the standard criteria for environmental damage. This definition is highly technical and sectoral and does not encompass the broader ecosystem dimension contemplated by the concept of ecocide.

Second, there is no legal provision that explicitly criminalizes climate-related environmental harm as a form of environmental crime. Although Indonesia ratified the Paris Agreement through Law No. 16 of 2016, its climate commitments have not been translated into criminal provisions that can be applied to high-emitting corporations ([Undang-Undang Nomor 16 Tahun 2016 Tentang Pengesahan Paris Agreement to the United Nations Framework Convention on Climate Change, 2016; Suwatno, 2022](#)).

Third, the mechanisms for enforcing the law against large corporations that commit environmental crimes remain weak. Data from the Ministry of Environment and Forestry show that, of the hundreds of forest-fire cases that occur each year involving plantation companies, only a small percentage are successfully prosecuted to a final and legally binding judgment, and the sanctions imposed are often disproportionate to the economic benefits that corporations derive from such crimes.

Fourth, there is no specific provision requiring ecosystem restoration (*pemulihan ekosistem*) as an additional penalty for corporations that commit environmental crimes. The restorative justice approach in environmental law, which requires perpetrators not only to pay fines but also to actively repair environmental damage, remains underdeveloped in Indonesia’s legal system.

Legislative Reform Recommendations

Based on the foregoing analysis of normative gaps, the author formulates several legislative reform recommendations for integrating the concept of ecocide into the Indonesian legal system.

The first recommendation is the enactment of an Indonesian Ecocide Law, either as a standalone statute or through comprehensive amendments to the PPLH Law. This law should contain: (a) a definition of ecocide that adapts the definition proposed by the 2021 Independent Expert Panel to the context of Indonesian law and ecosystems; (b) provisions on corporate criminal liability that adopt an organizational fault model; (c) provisions establishing minimum and maximum penalties proportionate to the severity and extent of the resulting damage; (d) provisions establishing an obligation of ecological restoration; and (e) compensation mechanisms for communities affected by ecosystem damage.

The second recommendation is the establishment of a Special Environmental Court with exclusive jurisdiction over ecocide cases and large-scale environmental crimes. The court should be staffed by judges with expertise in environmental law and ecological science and supported by an independent panel of technical experts.

The third recommendation is to reform the environmental law enforcement mechanism by empowering and strengthening the capacity of Environmental Civil Servant Investigators (PPNS), developing specialized environmental crime units within the police and prosecution services, and

establishing mechanisms for international cooperation in the enforcement of laws addressing transboundary ecocide.

The fourth recommendation is the adoption of the ecocide principle in environmental investment and licensing policies, namely by requiring all corporations operating in the extractive sector to conduct an Environmental Impact Assessment that includes an ecocide risk analysis, as well as by establishing legally binding emissions thresholds, the systematic violation of which may give rise to criminal liability.

International Cases

The development of international jurisprudence in the field of corporate environmental responsibility has produced several important precedents relevant to the development of ecocide law.

The case of *Milieudefensie et al. v. Royal Dutch Shell* (District Court of The Hague) ([Milieudefensie et al. v. Royal Dutch Shell plc, C/09/571932 / HA ZA 19-379, 2021](#)) is a landmark ruling that ordered a multinational oil company to significantly reduce its carbon emissions ([López et al., 2023](#)). The court held that Shell had a duty under Dutch civil law, specifically its tortious duty of care, derived in part from human rights principles and international environmental law, to prevent harmful climate change. Although the ruling arose from a civil case, its relevance to the development of criminal law lies in the court's recognition that corporations may be subject to legal obligations arising from their knowledge of climate-related risks ([Gostlow et al., 2026](#); [Macchi & van Zeven, 2021](#)).

In the 2024 appellate decision of the Court of Appeal of The Hague, which partially overturned the lower court's decision, the court continued to recognize Shell's legal obligation to contribute to emissions reductions but narrowed the scope of that obligation. This ruling demonstrates the complexity of causal attribution in corporate climate litigation, an issue that is likely to become even more complex in the context of corporate criminal liability.

The case of *United States v. Citgo Petroleum Corporation* (2007) is a U.S. federal criminal case involving Citgo and two of its subsidiaries for violations of the Clean Water Act and the Clean Air Act that resulted in significant oil pollution ([Rodriguez-Mazza, 2023](#)). The corporations were fined more than USD 13 million and required to pay environmental restoration costs. This precedent demonstrates that corporate criminal accountability for large-scale environmental offenses is both legally possible and practically feasible.

At the International Criminal Court (ICC) level, although ecocide has not yet been formally criminalized, the ICC's *Policy Paper on Case Selection and Prioritization* (2016), together with the *Policy on the Crime of Ecocide* (2024), indicates that the Office of the Prosecutor will pay particular attention to crimes committed through, or resulting in, environmental damage.

National Cases in Indonesia

In the context of Indonesian law, several court rulings have established important precedents, although they remain far from providing comprehensive coverage of ecocide.

The Supreme Court's Decision No. 1204 K/Pdt/2017, concerning forest fires involving oil palm plantation companies, is one of the most important decisions in Indonesian environmental law. The Supreme Court ordered the company to pay compensation of Rp366 billion to the state and required the restoration of thousands of hectares of burned land. This precedent demonstrates that Indonesian courts are beginning to recognize the substantial economic value of damaged ecosystems.

However, from a criminal law perspective, forest-fire cases in Indonesia continue to face significant evidentiary challenges. The Palembang District Court's decision in a forest-fire criminal case involving several companies illustrates the difficulty prosecutors face in proving the *mens rea* of a corporation and establishing a direct causal relationship between the negligence of company management and the occurrence of the fires.

Cases involving illegal mining and river pollution implicating coal-mining corporations in Kalimantan show a similar pattern: the criminal sanctions imposed are often disproportionate to the ecological damage caused, while court-ordered environmental restoration measures are frequently not implemented effectively.

Geopolitical and Economic Challenges

The criminalization of ecocide at the international level faces significant geopolitical obstacles. Countries with large extractive industries (such as the United States, Russia, China, Brazil, and Australia) have direct economic interests that may conflict with the criminalization of ecocide. Pressure from the oil, mining, and agribusiness industries on the governments of these countries has made the process of amending the Rome Statute particularly difficult.

The arguments often raised by groups opposing the criminalization of ecocide include: (1) the definition of ecocide is too broad and uncertain, potentially hindering legitimate economic development; (2) criminalizing ecocide will create legal uncertainty that could adversely affect investment; (3) the ICC is already overburdened and lacks the capacity to handle complex ecocide cases; and (4) existing legal mechanisms are sufficient to address environmental crimes.

In response to these arguments, proponents of criminalizing ecocide offer several strong counterarguments. First, uncertainty in the definition can be addressed through judicial interpretation and elaboration, as has occurred with other emerging legal concepts genocide itself took decades to acquire more definitive content through jurisprudence. Second, legal certainty can increase through the establishment of clear standards, because corporations can plan their operations around ecological boundaries that must not be violated.

Prospects for the Legal Development of Ecocide

Despite these obstacles, several developments provide grounds for optimism regarding the prospects for criminalizing ecocide.

At the national level, several countries have taken concrete steps. France incorporated the concept of ecocide into its national law through the *Loi Climat et Résilience* in 2021, although the applicable threshold for criminal liability is relatively high. Belgium, Mexico, and Scotland have also been pursuing similar legislative initiatives. Brazil and Colombia have constitutional provisions that could provide a basis for the criminalization of ecocide.

At the regional level, the European Union adopted the Directive on the Protection of the Environment through Criminal Law in 2024, expanding the definition of serious environmental offenses and requiring member states to establish effective criminal sanctions against corporations. Some provisions of the directive closely intersect with elements associated with ecocide.

At the level of civil society, the global ecocide movement, driven by organizations such as Stop Ecocide International and the Earth Law Center, continues to gain strength and attract broad support from academics, religious leaders, and young people around the world. The petition calling for the recognition of ecocide as an international crime has garnered support from more than 2 million people and dozens of heads of state.

From an academic perspective, the development of Earth jurisprudence and the rights of nature, which recognize ecosystems or elements of nature as legal subjects with rights that can be protected by courts, provides an increasingly strong philosophical foundation for the criminalization of ecocide. Countries such as Ecuador, Bolivia, and New Zealand have recognized rights of nature or legal rights of natural entities in their constitutions or legislation, contributing to a new paradigm in global environmental law.

CONCLUSION

Based on the comprehensive discussion presented above, this article draws several important conclusions. The principal legal contribution of this study is the formulation of an integrated framework linking ecocide, corporate organizational fault, and Indonesian legislative reform. Future research should empirically examine the feasibility of enforcement, evidentiary standards, and institutional readiness for implementing such a framework.

First, ecocide as a legal concept has an increasingly solid normative foundation in contemporary international law. The definition formulated in 2021 by the Independent Expert Panel for the Legal Definition of Ecocide provides a precise and operational juridical framework, although further elaboration is still needed, particularly regarding scientifically verifiable thresholds of environmental harm and appropriate standards of proof for different ecosystem contexts.

Second, corporate criminal liability for climate-related ecocide can be constructed in a comprehensive juridical manner by incorporating: (a) the doctrine of organizational fault, which

assesses systemic failures by corporations to establish and maintain a culture of ecological compliance; (b) documentary evidence demonstrating the corporation's internal knowledge of climate risks that has been concealed from the public; (c) an aggregate causation approach that takes into account the proportional contribution of different corporations to global warming; and (d) the principle of proportionate strict liability for industrial activities that are inherently harmful to the environment.

Third, Indonesia's legal system requires substantial legislative reform to effectively address the crime of ecocide. The principal normative gaps that need to be addressed are the absence of a comprehensive definition of systematic ecosystem destruction, the weakness of the existing model of corporate criminal liability, which still relies on an identification approach, and the absence of a comprehensive ecological restoration mechanism as part of criminal sanctions.

Fourth, the reform of ecocide law in Indonesia must be carried out in a holistic and integrated manner, not only through amendments to environmental legislation, but also through institutional capacity building in environmental law enforcement, the progressive development of jurisprudence through specialized environmental courts, and the strengthening of public and civil society participation in environmental monitoring.

The criminalization of ecocide, both at the international and national levels, is not merely a technical legal reform; it represents a paradigmatic transformation in the way humanity understands its relationship with nature. Law, ultimately, reflects the values that a society considers most fundamental. When a healthy ecosystem is a prerequisite for life itself, making the protection of ecosystems a paramount object of legal protection, including through instruments of criminal law, is a moral and juridical necessity that can no longer be postponed.

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AUTHOR CONTRIBUTION STATEMENT

Walim contributed to the conceptualization of the research, development of the theoretical framework, formulation of research objectives, and overall supervision of the manuscript preparation. Sukama contributed to the analysis of international environmental criminal law, literature review, and interpretation of legal doctrines related to ecocide. Ahmad Faisal Azhar contributed to the comparative legal analysis, examination of corporate criminal liability models, and evaluation of relevant legal cases. Saefullah Yamin contributed to the analysis of Indonesian environmental law, legislative reform perspectives, manuscript review, and refinement of the final version of the article. All authors discussed the results, reviewed the manuscript critically, approved the final version, and agreed to be accountable for all aspects of the research.

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