

Implementation of the Polluter Pays Principle in Environmental Law Enforcement in Indonesia

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Abstract: *This study examines the effectiveness of the Polluter Pays principle in Indonesia's environmental law enforcement framework following the enactment of the Job Creation Law. It specifically analyzes how regulatory changes have affected the accountability of business actors for environmental pollution and damage. Using a normative juridical approach, this research reviews statutory regulations, court decisions, and legal doctrines to assess the coherence between legal norms and their implementation. The study finds that although the Polluter Pays principle is formally embedded in the Environmental Protection and Management Law, the Job Creation Law, and Government Regulation No. 22/2021, its practical enforcement remains ineffective. This research identifies a critical gap between normative regulation and enforcement, primarily driven by the shift toward risk-based licensing, which weakens environmental permitting, reduces public participation, and limits oversight capacity. As a result, environmental governance becomes increasingly administrative, enabling business actors to avoid substantive liability. This study contributes to the development of environmental law by demonstrating that regulatory simplification under the Job Creation Law has structurally undermined the operationalization of the Polluter Pays principle. It highlights the need to strengthen enforcement mechanisms, enhance institutional oversight, and ensure greater legal protection for affected communities, including Indigenous peoples, to achieve ecological justice.*

Keywords: AMDAL; Environmental Law Enforcement; Polluter Pays

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INTRODUCTION

The environmental condition in Indonesia increasingly reflects complex pressures driven by the continued pace of development and high levels of economic activity. These pressures do not merely constitute a normative assumption; they can

be traced through macroeconomic indicators that show the acceleration of growth and the expansion of production sectors, which directly affect the utilization of natural resources and increase environmental burdens. According to official data from Statistics Indonesia (Badan Pusat

Statistik/BPS), Indonesia's economy grew by 5.05% in 2023, while in 2022 the nominal Gross Domestic Product (GDP) reached IDR 19,588.4 trillion, with GDP per capita amounting to IDR 71.0 million.¹ Among the sectors contributing significantly to economic growth is manufacturing, which accounts for approximately 19–20% of national GDP and has grown by around 4.6–5.5% annually in recent quarters.² Meanwhile, the agriculture, mining, plantation, trade, and construction sectors continue to contribute substantially, indicating that economic development and the expansion of primary sectors remain significant and have considerable potential to intensify pressure on the natural environment.³ However, the economic growth driven by resource-intensive sectors is not always accompanied by adequate environmental controls. As a result, the expansion of industrial, mining, agricultural, and construction activities often occurs at the expense of compliance with environmental protection norms. This condition reflects a gap between the economic growth orientation and the effectiveness of environmental supervision and law enforcement, ultimately leading to increased environmental violations by business actors. Based on reports from the Directorate General of Environmental and Forestry Law Enforcement of the Ministry of Environment and Forestry (Gakkum KLHK),

between 2022 and 2024, there were 187 investigation cases involving business actors for environmental and forestry violations. These cases include practices such as the dumping of industrial waste into rivers, the illegal circulation of timber, and the unauthorized trade in wildlife.⁴

Data from the Environmental Agency of West Java Province indicate that between 2017 and 2022, only one environmental criminal case per year was successfully resolved. In contrast, reports from public complaints and field monitoring indicate that environmental violations continue. Furthermore, the implementation of administrative sanctions and compensation obligations imposed on business actors that have been proven to have caused environmental pollution or damage has not been fully equitable. It is not fair to affected communities that continue to bear the burden of losses, nor to the state that often has to allocate recovery budgets, and it is also inconsistent with environmental legal principles that require polluters to bear the full consequences of their actions.⁵ The high number of such cases indicates that environmental problems caused by business activities constitute a serious challenge.⁶ From an environmental liability perspective, the Polluter Pays Principle should ensure that parties responsible for environmental

¹ Business Indonesia, "Indonesia GDP Grows by 5.05% in 2023," Business Indonesia, 2024, <https://business-indonesia.org/news/indonesia-gdp-grows-by-5-05-in-2023>

² Siti Masitoh, "BPS: Industri Pertambangan Mengalami Kontraksi 1,23% Pada Kuartal I 2025," Nasional Kontan, 2025

³ Hooijer, A., et al. (2022). Effects of soil subsidence on plantation agriculture in Indonesian peatlands. *Regional Environmental Change*, 22 (121)

⁴ Bhawono A, "Gakkum LHK tangani 187 kasus lingkungan dan kehutanan sepanjang 2024" Greeners, accessed 03 Juli 2025 [https://www.greeners.co/berita/gakkum-lhk-](https://www.greeners.co/berita/gakkum-lhk-tangani-187-kasus-lingkungan-dan-kehutanan-sepanjang-2024/)

[tangani-187-kasus-lingkungan-dan-kehutanan-sepanjang-2024/](https://www.greeners.co/berita/gakkum-lhk-tangani-187-kasus-lingkungan-dan-kehutanan-sepanjang-2024/)

⁵ Andri Gunawan Wibisana, "Tentang Ekor Yang Tak Lagi Beracun: Kritik Konseptual Atas Sanksi Administratif Dalam Hukum Lingkungan Di Indonesia," *Jurnal Hukum Lingkungan Indonesia* 6, no. 1 (January 13, 2020): 41–71, <https://doi.org/10.38011/jhli.v6i1.123>.

⁶ Siti Suryati, "Penegakan Hukum Terhadap Korporasi Dalam Tindak Pidana Lingkungan Di Wilayah Provinsi Jawa Barat Dihubungkan Dengan Upaya Pemulihan Lingkungan Hidup," *Siyar Hukum : Jurnal Ilmu Hukum* 16, no. 2 (November 20, 2019), <https://doi.org/10.29313/sh.v16i2.5355>.

pollution or damage are accountable for its impacts, including through compensation and environmental restoration.

Therefore, it is necessary to further examine how the Polluter Pays Principle has been accommodated within the national legal framework and to what extent these provisions are capable of addressing the aforementioned issues. Before examining the Indonesian context in greater depth, it is important to first observe how the Polluter Pays Principle emerged and developed in international law. The Polluter Pays Principle was first introduced by the Organization for Economic Co-operation and Development (OECD) in 1972, establishing that any polluter must bear the full costs of preventive and control measures for environmental impacts determined by public authorities.⁷ This principle not only obliges business actors to pay compensation for damage that has already occurred, but also requires them to bear the costs of restoration and preventive measures to prevent pollution from recurring. The OECD explains that the Polluter Pays Principle emphasizes that polluters must be the first party to consider environmental impacts in every business activity they undertake. The principle also seeks to ensure that environmental recovery costs are allocated fairly and to deter corporate behavior that fails to recognize environmental responsibility.⁸

Within the national legal framework, this principle is explicitly regulated in Law No. 32 of 2009 on Environmental Protection and Management, particularly in Articles 2, letter j; 87; and 88. These provisions stipulate that polluters are obliged to bear the costs of environmental prevention, mitigation, and restoration, including through the application of the Strict Liability principle. Normatively, this principle guarantees that the burden of environmental restoration will not be transferred to the state or society but will instead remain entirely the responsibility of the polluter.⁹ However, in practice, the implementation of this principle has not always aligned with its intended objectives. Various official reports, including findings from the Directorate General of Environmental Law Enforcement of the Ministry of Environment and Forestry, which records hundreds of environmental violation cases each year, indicate that law enforcement mechanisms remain weak and inconsistent. This situation reflects a broader crisis in environmental law enforcement that directly affects the fulfillment of the public's right to live in a good and healthy environment, as guaranteed under Article 28H, paragraph (1), of the 1945 Constitution of the Republic of Indonesia. A more detailed explanation of this law enforcement crisis will be elaborated in the discussion section of this study.¹⁰ Following the enactment of Law No. 6 of

⁷ Annisah Dian Utami Panjaitan, Novianti Novianti, and Mochammad Farisi, "Polluter Pays Principle Terkait Pertanggungjawaban Corporate PTTEP Australasia Terhadap Pencemaran Minyak Di Laut Timur Indonesia," *Uti Possidetis: Journal of International Law* 2, no. 2 (June 8, 2021): 189–209, <https://doi.org/10.22437/up.v2i2.11839>.

⁸ Muh Rifqy Ramadhan and Salmi Salmi, "Penerapan Asas Pencemar Membayar Dalam Kasus Lingkungan Hidup Dengan Menggunakan Pendekatan Keadilan Restoratif," *Jurnal To Ciung: Jurnal Ilmu Hukum* 4, no. 2 (August 18, 2024): 48–59, <https://doi.org/10.64078/tociung.v4i2.2872>.

⁹ Defril Hidayat Defril, Arzam Arzam, and Ayu Efridadewi, "Strict Liability Pada Kebakaran Hutan Dalam Perspektif Undang-Undang Nomor 32 Tahun 2009," *Jurnal Selat* 9, no. 1 (October 31, 2022): 73–88, <https://doi.org/10.31629/selat.v9i1.4337>.

¹⁰ Ahmad Ainur Ridlo and Imroatin Arsali, "Dinamika Penegakkan Hukum Lingkungan Di Indonesia Dalam Menghadapi Problematika Lingkungan Hidup," *Journal Presumption of Law* 6, no. 2 (October 18, 2024): 140–57, <https://doi.org/10.31949/jpl.v6i2.8788>.

2023 concerning the Stipulation of the Government Regulation in Lieu of Law on Job Creation, several fundamental changes have created distortions in the principles of pollution control. First, environmental permits, previously independent legal instruments, have been integrated into a risk-based business licensing system. As a consequence, the function of environmental permits as a substantive filter for environmental impacts has shifted toward merely administrative formalities. Second, public participation in the preparation of Environmental Impact Assessments (AMDAL) has been restricted only to parties directly affected.¹¹ Previously, non-governmental organizations, academics, and broader civil society actors could actively participate in monitoring the AMDAL process. These two changes substantively weaken corporate accountability while simultaneously reducing public participation in safeguarding environmental quality. The implications of these weakened legal instruments are evident in several major pollution cases in Indonesia. One notable example is the oil spill incident involving PT Pertamina Hulu Energi Offshore North West Java (PHE ONWJ) in the waters of Karawang in July 2019. In this case, the government

once again appeared to bear a significant portion of the social and environmental impacts that should have been the full responsibility of the business entity involved. The leak occurred at the YYA-1 exploration well, releasing approximately 40,000 barrels of crude oil into the sea and contaminating coastal areas across Karawang, Bekasi, Subang, and the Thousand Islands, with a total affected area of approximately 13,000 hectares.¹² According to reports from the Ministry of Environment and Forestry (2020) and the Audit Board of Indonesia (2021), the economic, social, and environmental losses from this incident were estimated at IDR 1.3 trillion.¹³ More than 13,000 fishermen lost their livelihoods, with income declining by up to 80 percent during the first three months following the incident.¹⁴ Approximately 11,000 coastal residents were directly affected by marine water pollution and damage to coastal ecosystems.¹⁵ Mangrove forests and seagrass ecosystems in the coastal areas of Subang and Karawang experienced severe damage, particularly in environmentally sensitive zones along the northern coast of West Java. In addition, mass mortality of marine biota, including fish and blue swimming crabs, was recorded, further

¹¹ Fauzi Hadi Al Amri, "Izin Lingkungan Dalam Kegiatan Usaha Pasca Penetapan Undang-Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja," *Bina Hukum Lingkungan* 6, no. 3 (August 15, 2022): 438–52, <https://doi.org/10.24970/bhl.v6i3.265>.

¹² CNN Indonesia. "Kronologi Kebocoran Minyak di Karawang, Ribuan Nelayan Terdampak." *CNN Indonesia*, 10 Agustus 2019. <https://www.cnnindonesia.com/nasional/20190810085340-20-419472/kronologi-kebocoran-minyak-di-karawang-ribuan-nelayan-terdampak>

¹³ Badan Pemeriksa Keuangan Republik Indonesia (BPK RI). *Ikhtisar Hasil Pemeriksaan Semester II Tahun 2021 – Sektor Energi dan Lingkungan Hidup*, Bab III: "Evaluasi Penanganan Dampak

Kebocoran Minyak PHE ONWJ". Jakarta: BPK RI, 2021.

¹⁴ Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia (KLHK). *Laporan Akhir Penanganan Dampak Kebocoran Minyak PT Pertamina Hulu Energi Offshore North West Java (PHE ONWJ)*. Jakarta: KLHK, 2020. Dapat diakses melalui <https://ppid.menlhk.go.id/berita/siaran-pers/4082>;

¹⁵ Meryadinata, Geofani Lingga, and Abdul Rokhim. "Pertanggungjawaban PT Pertamina Hulu Energi pada Tumpahan Minyak di Kepulauan Seribu dalam Perspektif Hukum Indonesia dan *Convention on Civil Liability for Oil Pollution Damage 1992*." *DIVERSI: Jurnal Hukum* 11, no. 1 (2025): 157–189.

exacerbating the ecological and economic losses experienced by coastal communities.¹⁶

Although PT Pertamina Hulu Energi allocated approximately IDR 700 billion for compensation and marine clean-up operations,¹⁷ most of the environmental recovery and response processes were conducted by the National Disaster Management Agency and regional governments using State and Regional Budget funds. This fact demonstrates that the state shouldered part of the financial burden that should have been borne by the company responsible for the pollution.¹⁸ Furthermore, the class action lawsuit filed by the Karawang community was registered under Decision No. 45/Pdt.G/LH/2021/PN of the North Jakarta District Court. Jkt. The order was only partially granted, thereby failing to provide full restoration for the affected victims.¹⁹ This situation confirms that the Polluter Pays Principle has not been optimally implemented. Responsibility for environmental pollution has shifted from business actors to the public, where the government and society are compelled to share the burden of environmental and social recovery resulting from corporate negligence. This also reflects the weak application of the

Strict Liability principle in Indonesian environmental law.

The PHE ONWJ oil spill case does not reflect the Polluter Pays Principle because the costs of mitigation and environmental restoration were not fully imposed on the polluting party but were largely borne by the state through public budgets. Public funds were used to address environmental and social impacts from corporate activities, thereby placing the burden of pollution on the entire population. This pattern is commonly referred to as “public pays,” in which the costs of environmental recovery are borne by the public or the government rather than by the polluter.²⁰

Furthermore, this case demonstrates the emergence of a “victim pays” pattern, in which communities affected by pollution must bear their own losses and recovery costs for events not caused by their actions. Many fishermen and coastal residents lost income and natural resources without receiving full compensation, while the company's compensation process remained slow and limited. Consequently, the PHE ONWJ case is a clear example of how weak enforcement of the Polluter Pays Principle shifts

¹⁶ Rikardi, N., Nurjaya, I. W., & Damar, A. “Indeks Kepekaan Lingkungan Ekosistem Mangrove terhadap Tumpahan Minyak di Pesisir Subang.” *Jurnal Ilmu dan Teknologi Kelautan Tropis* 13, no. 2 (2021): 251–262. <https://doi.org/10.29244/jitkt.v13i2.31792>

¹⁷ Meryadinata, Geofani Lingga, and Abdul Rokhim. “Pertanggungjawaban PT Pertamina Hulu Energi pada Tumpahan Minyak di Kepulauan Seribu dalam Perspektif Hukum Indonesia dan *Convention on Civil Liability for Oil Pollution Damage* 1992.” *DIVERSI: Jurnal Hukum* 11, no. 1 (2025): 157–189. <https://journal.um-surabaya.ac.id/diversi/article/view/14897>

¹⁸ Cahyadi, A., & Wagiono, D. “Analisis Dampak Sosial-Ekonomi dan Penegakan Hukum Lingkungan pada Kasus Tumpahan Minyak PHE ONWJ.” *Paspalum: Jurnal Ilmiah Pertanian* 13,

no. 1 (2025): 44–54. <https://ejournal.unib.ac.id/index.php/paspalum/article/view/19230>

¹⁹ Pengadilan Negeri Jakarta Utara. *Putusan Nomor 45/Pdt.G/LH/2021/PN.Jkt.Ut tentang Gugatan Class Action Masyarakat Karawang terhadap PT Pertamina Hulu Energi ONWJ*, diakses melalui Direktori Putusan Mahkamah Agung Republik Indonesia (2022). <https://putusan3.mahkamahagung.go.id/direktori/putusan/8d0f6f93e3dc4e8f1d5f2f6d7f19c4b5.html>

²⁰ Patricia W. Birnie, Alan Boyle, and Catherine Redgwell, *International Law and the Environment*, 4th ed. (Oxford: Oxford University Press, 2021), 321, accessed via Oxford Scholarship Online, <https://global.oup.com/academic/product/international-law-and-the-environment-9780199594016>.

responsibility from the polluter to the public and even to victims themselves.

A similar pattern can be observed in the Citarum River pollution case, where the government launched the Citarum Harum program in 2023 with a budget of approximately IDR 1.37 trillion sourced from the State and Regional Budgets, while hundreds of polluting industries were subjected to only relatively light administrative sanctions.²¹ This condition indicates a shift in responsibility from the Polluter Pays Principle toward public pays and even victim pays, in which society and the state ultimately bear the costs of environmental recovery resulting from pollution caused by business actors. The gap between legal norms and their practical implementation raises fundamental questions regarding the effectiveness of environmental law enforcement in Indonesia. On the one hand, the Polluter Pays Principle has been normatively recognized as an essential principle within the Environmental Protection and Management Law. On the other hand, regulatory changes introduced through the Job Creation Law, combined with weak enforcement of sanctions, have diminished the coercive power of this principle. If this situation continues, it will not only impose financial burdens on society and the state but also risk exacerbating ecological damage that may become increasingly difficult to restore, while simultaneously undermining the legitimacy of environmental law.

Existing scholarship on the Polluter Pays Principle in Indonesia has primarily focused on its normative recognition within the Environmental Protection and

Management Law (UUPPLH) and its doctrinal alignment with principles of strict liability and sustainable development. However, these studies tend to emphasize formal legal compliance rather than critically examining the post-Job Creation Law regulatory restructuring and its implications for enforcement effectiveness. In particular, limited attention has been given to how risk-based licensing, deregulation of environmental permits, and reduced public participation have transformed PPP from a substantive liability principle into a predominantly administrative formality. As a result, a significant gap remains in the literature regarding the disjunction between legal norms and enforcement practices, especially in the context of large-scale environmental harm. At the international level, the Polluter Pays Principle continues to evolve as a central pillar of environmental governance. The European Union's Zero Pollution Action Plan (2025) reinforces PPP by introducing stricter liability regimes, expanding corporate accountability, and internalizing environmental costs into economic activities. Similarly, the 2024 Advisory Opinion of the International Tribunal for the Law of the Sea (ITLOS) on climate change underscores state obligations to prevent environmental harm, including greenhouse gas emissions, by strengthening due diligence and accountability frameworks. These developments indicate a global trend toward the reinforcement, rather than the dilution, of PPP as a mechanism for achieving ecological justice and sustainable governance. In contrast, Indonesia's regulatory trajectory under the Job Creation Law appears to move

²¹ Tim Pikiran Rakyat, "Terdampak Efisiensi Program Citarum Harum Tersendat Sumber Artikel Berjudul "Terdampak Efisiensi Program Citarum Harum Tersendat", Selengkapnya Dengan Link: [https://Koran.Pikiran-Rakyat.Com/News/Pr-](https://Koran.Pikiran-Rakyat.Com/News/Pr-3039062505/Terdampak-Efisiensi-Program-Citarum-Harum-Te)

[3039062505/Terdampak-Efisiensi-Program-Citarum-Harum-Te,](https://Koran.Pikiran-Rakyat.Com/News/Pr-3039062505/Terdampak-Efisiensi-Program-Citarum-Harum-Te)" Pikiran Rakyat Koran, 2025, <https://koran.pikiran-rakyat.com/news/pr-3039062505/terdampak-efisiensi-program-citarum-harum-tersendat?>

in the opposite direction, prioritizing investment facilitation and administrative simplification over substantive environmental accountability. This divergence raises an important question regarding Indonesia's position within the global environmental law landscape: whether its current legal framework is capable of aligning with international standards that increasingly emphasize strict enforcement of PPP.

Based on this background, this research is essential for analyzing how the implementation of the Polluter Pays Principle operates within environmental law enforcement in Indonesia following regulatory changes introduced by the Job Creation Law. This study also seeks to evaluate the liability of business actors, examine the shifting burden of environmental recovery to the State Budget, and assess the extent to which existing regulations are capable of ensuring ecological justice and corporate accountability in environmental governance.

METHOD

This study employs a normative legal research method to examine the legal norms, principles, and regulations governing environmental protection and management in Indonesia, particularly regarding the implementation of the Polluter Pays Principle following the enactment of Law Number 11 of 2020 on Job Creation. Normative legal research is conducted by analyzing legal materials and doctrines to understand the coherence between legal provisions and their conceptual foundations within the environmental law framework.

The approach used in this research is primarily statutory and conceptual. The statutory approach is applied by examining relevant laws and regulations, including Law

Number 32 of 2009 concerning Environmental Protection and Management, Law Number 11 of 2020 concerning Job Creation, Government Regulation Number 22 of 2021 concerning the Implementation of Environmental Protection and Management, and other related regulatory instruments. Through this approach, the study analyzes how the Polluter Pays Principle is regulated and implemented within the Indonesian environmental legal system. Meanwhile, the conceptual approach is used to analyze legal doctrines and theoretical concepts related to environmental responsibility, strict liability, environmental governance, and environmental justice. The legal materials used in this research consist of primary, secondary, and tertiary legal materials. Primary legal materials include statutory regulations, official legal documents, and judicial decisions related to environmental cases. Secondary legal materials include academic literature such as textbooks, scientific journal articles, and research reports on environmental law and the Polluter Pays Principle. Tertiary legal materials include legal dictionaries, encyclopedias, and other supporting references that explain legal concepts and terminology.

The technique of collecting legal materials involves a literature review of relevant legal documents, academic publications, and official government reports on environmental law enforcement in Indonesia. The collected legal materials are then analyzed qualitatively using descriptive and analytical methods. This analysis examines the effectiveness of environmental legal instruments in ensuring the implementation of the Polluter Pays Principle following the enactment of the Job Creation Law, and identifies the legal and institutional

challenges that affect its enforcement in practice.

ANYLISIS AND DISCUSSION

The Implementation of the Polluter Pays Principle in Environmental Law Enforcement Based on Environmental Legal Provisions in Indonesia

The Polluter Pays Principle is one of the fundamental principles of modern environmental law, placing the responsibility for environmental restoration costs on the party that causes pollution or environmental damage. National law has accommodated this principle within the Environmental Protection and Management Law (UUPPLH).²² Article 2, letter f, of the Environmental Protection and Management Law explicitly states that environmental protection and management shall be conducted in accordance with the “polluter pays” principle. This means that any party that carries out activities that cause negative environmental impacts is obliged to bear the costs of prevention, mitigation, and restoration.²³ In practice, the implementation of this principle is reinforced by Article 87 of the Environmental Protection and Management Law, which stipulates that the person in charge of a business and/or activity that causes environmental pollution or damage must restore environmental functions and may be required to pay compensation to the government. This mechanism forms the basis for state civil lawsuits against polluters, both through civil liability and strict liability. However, following the enactment of the Job

Creation Law, significant changes occurred in the licensing system and environmental supervision instruments. Several provisions of the Environmental Protection and Management Law were amended under the justification of simplifying bureaucracy and improving the investment climate. These changes include the removal of environmental permits as a separate instrument and their integration into the risk-based business licensing system, the limitation of public participation in the Environmental Impact Assessment (AMDAL) process only to directly affected parties, the modification of the AMDAL assessment mechanism which has become increasingly centralized through the Online Single Submission (OSS) system, and the simplification of business licensing requirements that causes environmental documents to no longer function as substantive control instruments. These changes ultimately reduce the strictness of environmental supervision and increase the potential for business actors to avoid environmental responsibility. Such regulatory changes could weaken the Polluter Pays Principle, particularly because several forms of environmental licensing have been integrated into risk-based business licensing, which is further regulated under Government Regulation No. 22 of 2021. Although this regulation still contains provisions concerning restoration obligations and corporate responsibility for environmental pollution, the existence of administrative leniency may

²² Winda Rachmainda Firdaus, “Polluter Pays Principle: Menyoal Tanggung Jawab PT Pertamina Hulu Energi Offshore North West Java (ONWJ) Atas Pencemaran Minyak Akibat Kebocoran Anjungan Lepas Di Laut Karawang,” *Jurnal Hukum Lingkungan Indonesia* 8, no. 1 (April 20, 2022): 193–228, <https://doi.org/10.38011/jhli.v8i1.363>.

²³ Leonardo Siregar, “Penerapan Asas Pencemar Membayar Dalam Perkara Perdata Lingkungan Hidup (Studi Putusan Pengadilan Tinggi Riau Nomor 79/Pdt./2014/PTR),” *Jurnal Mercatoria* 13, no. 2 (December 28, 2020): 143–56, <https://doi.org/10.31289/mercatoria.v13i2.3964>.

reduce the effectiveness of supervision and legal accountability for polluters.²⁴

One of the most significant changes in environmental licensing regulations after the enactment of the Job Creation Law is the elimination of environmental permits as an independent instrument and their integration into risk-based business licensing. In this system, risk assessment is the primary factor in determining environmental document obligations, such as the Environmental Impact Assessment (AMDAL) and Environmental Management and Monitoring Efforts (UKL-UPL).²⁵ Administratively, this policy aims to simplify investment processes. However, from an environmental law perspective, such a measure may obscure the legal accountability of business actors. Under the risk-based system, activities categorized as “low risk” may proceed without comprehensive environmental assessments, even though, in practice, they may still pose the potential to cause unmonitored environmental pollution. In addition, the position of the AMDAL instrument has weakened since the Job Creation Law, as part of the evaluation authority has been transferred to the central government through the OSS system. As a result, the Polluter Pays Principle, which should emphasize the individual responsibility of business actors for environmental impacts, becomes blurred by an overly centralized system of evaluation and supervision.²⁶ In other words, the

effectiveness of implementing the Polluter Pays Principle after the Job Creation Law is determined not only by the content of the regulations but also by the institutional capacity to supervise and enforce environmental law against polluters. Weaknesses in the automatic licensing system create legal grey areas regarding accountability, particularly for small and medium enterprises that are not routinely monitored.

The case of pollution in the Citarum River in West Java represents a concrete example of the gap between legal norms and the reality of implementing the Polluter Pays Principle. Normatively, various regulations clearly hold industrial actors responsible for pollution. However, in practice, law enforcement remains minimal. The Citarum River has been listed among the most polluted rivers in the world due to industrial activities, particularly from the textile industry, livestock operations, and domestic waste. Data from the West Java Provincial Government indicates that before the launch of the Citarum Harum Program in 2018, the Citarum River received up to 20,000 tons of waste per day, and among approximately 2,000 industries operating in the river basin, more than 60 percent lacked properly functioning wastewater treatment facilities. The water quality index was categorized as heavily polluted, with biochemical oxygen demand (BOD) and chemical oxygen demand (COD) levels far

²⁴ Regina Sapta Samudera, “The Implementasi Kebijakan UU Cipta Kerja Dalam Tata Kelola Ketenagakerjaan, Lingkungan, Dan Perizinan Berusaha Berbasis Risiko Di Indonesia Pasca-Pandemi,” *Development Policy and Management Review (DPMR)*, July 3, 2025, 68–80, <https://doi.org/10.61731/dpmr.v5i1.44206>.

²⁵ Evan Devara, Maret Priyanta, and Yulinda Adharani, “Inovasi Pendekatan Berbasis Risiko Dalam Persetujuan Lingkungan Berdasarkan Undang-Undang Cipta Kerja,” *Litra: Jurnal Hukum*

Lingkungan, Tata Ruang, Dan Agraria 1, no. 1 (September 13, 2021): 101–16, <https://doi.org/10.23920/litra.v1i1.641>.

²⁶ Averin Dian Boruna Sidaurok, “Interdependensi Kewenangan Pemerintah Daerah Dengan Otonomi Daerah Dalam Perlindungan Dan Pengelolaan Lingkungan Hidup Di Indonesia,” *Neoclassical Legal Review: Journal of Law and Contemporary Issues* 4, no. 1 (May 9, 2025): 11–19, <https://doi.org/10.32734/nlrjolci.v4i1.20190>.

exceeding quality standards, along with the presence of heavy metals such as mercury and lead in fish samples. The Citarum Harum Program itself has required combined funding exceeding IDR 20 trillion, much of which originates from the State and Regional Budgets, meaning that the burden of environmental restoration has not been fully borne by polluters. According to data from the Ministry of Environment and Forestry in 2023, of the approximately 2,000 industries located in the Citarum River Basin, only about 40 percent have properly functioning wastewater treatment plants.²⁷ In reality, liquid waste discharged from these industries directly contributes to water quality degradation and harms the health of surrounding communities.

Legal actions against polluters are often ineffective. Administrative sanctions, such as license suspensions, are rarely enforced strictly, while criminal sanctions are difficult to pursue due to a lack of scientific evidence and lengthy legal processes. As a result, the Polluter Pays Principle does not operate as intended. Although the Citarum Harum Program, launched in 2018, has improved cross-sectoral coordination, it has not yet produced concrete financial accountability from polluters. The costs of river rehabilitation and normalization are still largely borne by the government through the State Budget and Regional Budgets rather

than by polluting business actors in accordance with the spirit of the Polluter Pays Principle.²⁸

The weak implementation of the Polluter Pays Principle is also closely related to the low quality of environmental law enforcement in Indonesia. Institutionally, coordination between the Ministry of Environment and Forestry, regional governments, and law enforcement authorities remains suboptimal. Many pollution cases end at the administrative stage without proceeding to civil or criminal proceedings. In addition, public participation in environmental monitoring remains limited.²⁹ Although Article 70 of the Environmental Protection and Management Law grants the public the right to actively participate in environmental protection, mechanisms for access to information and public involvement in the AMDAL process remain largely formalistic.

In many cases, affected communities lack the capacity to demand accountability from polluters due to limited legal knowledge and restricted access to judicial institutions. Inconsistency in the application of the strict liability principle, which is actually regulated under Article 88 of the Environmental Protection and Management Law, also contributes to the legal system's failure to effectively implement the Polluter Pays Principle.³⁰ This principle should allow lawsuits to proceed without requiring proof of

²⁷ Egietta Christy Tarigan and Christine S T Kansil, "Analisis Pertanggungjawaban Korporasi Dalam Penanggulangan Limbah: Studi Kasus 20/Pdt.G/LH/2024/PN Sby," *Journal of Education Religion Humanities and Multidisciplinary* 2, no. 2 (November 30, 2024): 1341–46, <https://doi.org/10.57235/jerumi.v2i2.4293>.

²⁸ T. Subarsyah, "Penegakan Hukum Pidana Dalam Menanggulangi Tindak Pidana Pencemaran Lingkungan Sungai Citarum Melalui Pendekatan Restorative Justice," *Jurnal Soshum Insentif* 3, no.

2 (October 30, 2020): 160–70, <https://doi.org/10.36787/jsi.v3i2.264>.

²⁹ Donny Setha, "Implementasi Hukum Lingkungan Di Indonesia: Analisis Kebijakan Dan Praktik Penegakan Hukum," *Jurnal Ilmu Hukum, Humaniora Dan Politik* 5, no. 2 (December 26, 2024): 1338–47, <https://doi.org/10.38035/jihhp.v5i2.3555>.

³⁰ Reza Noor Ihsan and Ifrani Ifrani, "Prinsip Tanggung Jawab Mutlak Strict Liability Dalam Tindak Pidana Lingkungan," *Badamai Law Journal* 3, no. 2 (August 25, 2020): 302, <https://doi.org/10.32801/damai.v3i2.9059>.

fault. However, in practice, law enforcement authorities frequently require complex proof of causation, thereby weakening victims' positions and prolonging the environmental recovery process.

This economic failure is further exacerbated by a normative ambiguity in the application of strict liability under Article 88 of the Environmental Protection and Management Law (UUPPLH). Although the provision formally remains in force, the post-Job Creation Law regulatory framework has diluted its clarity, particularly regarding the trigger of liability. The removal or weakening of the explanatory clause emphasizing liability “without the need to prove fault” in several implementing regulations has created interpretative uncertainty for judges. As a result, courts may revert to fault-based reasoning, thereby undermining the very essence of strict liability as a mechanism to ensure full cost internalization. In contrast, comparative legal systems such as the Dutch Civil Code (Articles 6:173–6:175) demonstrate a more stable and coherent model of strict liability (*risico-aansprakelijkheid*). In the Dutch framework, liability for hazardous activities is codified within general civil law and is not contingent upon administrative licensing regimes. This ensures that responsibility attaches directly to the risk-creating activity itself, rather than being influenced by the fluctuating nature of regulatory permits. Such stability enhances legal certainty and strengthens the internalization of environmental costs, as business actors cannot rely on administrative compliance to evade substantive liability.

Strengthening the Polluter Pays Principle requires both structural and substantive approaches. Structurally, institutional reform in environmental law enforcement is necessary, particularly through strengthening the role of Environmental Civil Servant Investigators and improving coordination between the Ministry of Environment and Forestry and the Attorney General's Office in investigating environmental cases. Substantively, revisions to the derivative regulations of the Job Creation Law are necessary to ensure that environmental licensing instruments continue to serve as legal control mechanisms. The government may also adopt mechanisms such as environmental taxes or green levies to ensure that environmental externality costs are truly borne by polluters rather than by the public.³¹ Environmental taxes or green levies are special charges imposed on business activities that generate negative environmental impacts, such as carbon emissions, waste disposal, the use of single-use plastics, or the exploitation of natural resources. The objective is to provide economic incentives for business actors to reduce pollution while ensuring that the costs of environmental restoration, ecosystem rehabilitation, and damage management do not burden the State Budget, regional budgets, or society.³² Through this mechanism, the greater the pollution potential of a particular activity, the greater the environmental tax that must be paid. This system encourages business actors to adopt cleaner technologies and more sustainable business practices.

Strengthening the Polluter Pays Principle can also be achieved by expanding communities'

³¹ Aryanto Renaldi Sahala, “Penerapan Asas Pencemar Membayar,” *Jurnal Hukum To-Ra: Hukum Untuk Mengatur Dan Melindungi Masyarakat* 8, no. 2

(August 25, 2022): 209–16, <https://doi.org/10.55809/tora.v8i2.125>.

³² OECD. *Environmental Tax Policy Review of Indonesia*. Paris: OECD Publishing, 2021. <https://doi.org/10.1787/2a9efee2-en>.

right of action through citizen lawsuits and class actions, as regulated under Supreme Court Regulation No. 1 of 2002, allowing communities to demand financial accountability directly from polluters without relying entirely on government action. Finally, efforts to promote environmental legal awareness and improve environmental law literacy at the local level must become a priority. Public legal awareness is a crucial factor in establishing social control over polluting industries. The Polluter Pays Principle will only function effectively if society, government, and the business sector share a common commitment to ecological justice and environmental sustainability.³³

The Effectiveness of Environmental Legal Instruments After the Enactment of the Job Creation Law in Ensuring the Implementation of the Polluter Pays Principle in Indonesia

The enactment of Law Number 11 of 2020 on Job Creation and its implementing regulations has brought fundamental changes to the architecture of environmental law in Indonesia. The Job Creation Law explicitly promotes licensing simplification and investment acceleration by implementing a Risk-Based Business Licensing System.³⁴ These changes have direct implications for environmental legal instruments, ranging from Environmental Impact Assessment (AMDAL) and Environmental Management and Monitoring Efforts (UKL-UPL) to environmental permits and mechanisms of

supervision and administrative sanctions. Amid these changes, an important question arises regarding the extent to which the new instruments introduced after the Job Creation Law are still capable of ensuring the implementation of the Polluter Pays Principle, a fundamental principle that places the responsibility for prevention, control, and environmental restoration costs upon the polluting party. Normatively, the Polluter Pays Principle continues to exist within Law Number 32 of 2009 on Environmental Protection and Management, particularly under Article 2 letter j, Article 87, and Article 88, which emphasize the obligation of business actors to bear environmental restoration costs and open the possibility for the application of strict liability.³⁵ However, the effectiveness of legal instruments after the enactment of the Job Creation Law in realizing this principle is determined not only by the legal norms themselves but also by institutional structures, supervision mechanisms, and the consistency of sanction enforcement. In other words, the issue is not merely what the law states, but how it operates in practice.

One of the most significant changes is the integration of environmental permits into the business licensing system through the Risk-Based Approach scheme. Prior to the enactment of the Job Creation Law, environmental permits served as a separate legal instrument, acting as a gatekeeper for business activities with potential environmental impacts. Environmental

³³ Ayu Sekar Saraswati Putri, "Pentingnya Kesadaran Hukum Pada Lingkungan Masyarakat," *De Cive : Jurnal Penelitian Pendidikan Pancasila Dan Kewarganegaraan* 2, no. 12 (December 31, 2022), <https://doi.org/10.56393/decive.v2i12.1597>.

³⁴ Nabila Aulia Rahma, "Politik Hukum Tata Kelola Perizinan Lingkungan Pasca Undang-Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja," *Jurnal Hukum Lex Generalis* 3, no. 11 (November

29, 2022): 892–911, <https://doi.org/10.56370/jhlg.v3i11.337>.

³⁵ Muhammad Akib et al., "Application of Strict Liability Principles in Environmental Dispute Resolution," *Annals of Justice and Humanity* 2, no. 2 (December 27, 2023): 65–75, <https://doi.org/10.35912/ajh.v2i2.1796>.

permits served as substantive control instruments, as only activities that met the AMDAL or UKL-UPL standards could obtain them. However, after the enactment of the Job Creation Law, environmental permits no longer stand on their own; they are now part of the Risk-Based Business Licensing system, regulated by Government Regulation Number 5 of 2021 and Government Regulation Number 22 of 2021.³⁶ This integration has shifted the function of environmental permits from a substantive control instrument to merely an administrative procedure for obtaining business authorization.

In theory, the Risk-Based Approach aims to focus supervision on high-risk activities while providing administrative convenience for low-risk activities. However, in the context of environmental law, this approach can create blind spots, as environmental risks cannot always be identified in a static manner. Many pollution cases originate from activities initially categorized as low risk, but, due to insufficient supervision and non-compliance by business actors, they eventually result in serious environmental impacts. This condition indicates that the risk classification under the Job Creation Law has not fully accommodated the complexity and uncertainty of environmental pollution characteristics.³⁷ If licensing instruments are no longer capable of functioning as substantive filters, then the effectiveness of the Polluter Pays Principle is also indirectly threatened. Furthermore, changes concerning public participation in the AMDAL process constitute an important

factor influencing the effectiveness of implementing the Polluter Pays Principle. Article 26, paragraph (2) of the Environmental Protection and Management Law previously provided broad opportunities for public participation, including academics, non-governmental organizations, and environmental communities. However, the Job Creation Law restricts participation only to directly affected parties. This limitation has attracted criticism because it reduces the space for social control over business actors, while transparency and public participation are essential to preventing pollution, ensuring the quality of AMDAL assessments, and maintaining corporate accountability. AMDAL instruments prepared without adequate public oversight risk becoming mere administrative formalities rather than effective preventive mechanisms.³⁸ Consequently, weaknesses in the AMDAL process may ultimately weaken the implementation of the Polluter Pays Principle from the earliest stage of business activities. From the perspective of law enforcement, the Job Creation Law and Government Regulation Number 22 of 2021 still retain administrative sanction instruments, such as warnings, government-coercive measures, license suspension, and license revocation. However, their effectiveness largely depends on the firmness of supervisory authorities and the institutional capacity of environmental

³⁶ Sulung Nugroho and Moh. Abdul Lathif, "Resiko Kerusakan Lingkungan Dan Perubahan Iklim Akibat Perizinan Berusaha Online," *Judge : Jurnal Hukum* 5, no. 01 (June 23, 2024), <https://doi.org/10.54209/judge.v5i01.519>.

³⁷ Irwan Susanto, M Nur Ikhwan, and Nugara Nugara, "Problematisasi Uu Cipta Kerja Dalam Implementasi Perizinan Usaha Berbasis Resiko (Risk Based Licensing)," *Kajen: Jurnal Penelitian Dan*

Pengembangan Pembangunan 6, no. 01 (October 17, 2022): 32–41, <https://doi.org/10.54687/jurnalkajenv6i01.3>.

³⁸ Martika Dini Syaputri, "Partisipasi Masyarakat Dalam Penyusunan Analisis Mengenai Dampak Lingkungan Berdasarkan Uu No 32 Tahun 2009," *Varia Justicia* 13, no. 2 (October 30, 2017): 123–31, <https://doi.org/10.31603/variajusticia.v13i2.1886>.

agencies.³⁹ In many cases, administrative sanctions remain largely formalistic and rarely extend to license suspension or revocation. Even government coercive measures requiring environmental restoration are often not optimally implemented due to insufficient monitoring mechanisms. Although regulations provide legal instruments, weak implementation means that business actors do not experience sufficient legal pressure to comply with the Polluter Pays Principle.

This weakness in implementation is clearly evident in several cases. In the case of the Citarum River, although thousands of industries have been identified as polluters, strict enforcement of sanctions has affected only a small portion of them. The Ministry of Environment and Forestry recorded that between 2018 and 2022, more than 70 industries were subject to sealing sanctions for discharging hazardous waste into the Citarum River. However, this figure remains very small compared to the approximately 2,000 industries operating in the river basin. Even prior to the implementation of the Citarum Harum program, around 60 percent of industries were known to discharge waste without adequate treatment. The costs of river restoration have largely been financed through the State and Regional Budgets under the Citarum Harum program, rather than borne by the industrial actors responsible for polluting the river for years. This demonstrates that although the Polluter Pays Principle is recognized normatively, its

implementation is often weakened by weak supervision and low corporate accountability. The Lapindo mudflow case also illustrates how the state may become trapped in a situation where the burden of environmental restoration shifts from the polluter to the government.⁴⁰ Consequently, the Polluter Pays Principle may transform into public pays or even victim pays.

From the perspective of strict liability, although the provisions of Article 88 of the Environmental Protection and Management Law remain unchanged, their implementation after the enactment of the Job Creation Law indicates that law enforcement authorities still face obstacles in obtaining scientific evidence, determining causality, and willingness to litigate against large corporations. Strict liability should facilitate legal claims by the state or affected communities without requiring proof of fault.⁴¹ However, in practice, many environmental cases fail to fully utilize the strict liability mechanism due to institutional capacity constraints, limitations of environmental laboratories, and weak coordination among environmental investigators, prosecutors, and the courts.

From an institutional perspective, implementing the Job Creation Law also faces serious challenges related to regional governments' readiness to operate the risk-based system. Many local governments do not yet possess sufficient human resources, laboratory facilities, or information systems to conduct effective risk-based supervision. Consequently, activities categorized as

³⁹ Wibisana, "Tentang Ekor Yang Tak Lagi Beracun: Kritik Konseptual Atas Sanksi Administratif Dalam Hukum Lingkungan Di Indonesia."

⁴⁰ Fatimah Noor Jannah and Aminah Aminah, "Implementation of the Polluters Pays Principle in The Case Of PT. Kumai Sentosa," *International Journal of Social Science and Human Research* 7, no. 06 (June 11, 2024), <https://doi.org/10.47191/ijsshr/v7-i06-39>.

⁴¹ Jalu Akbar Maulana and Fadila Nur Annisa, "Analisa Yuridis Perubahan Makna Strict Liability Dalam Undang-Undang Lingkungan Hidup Pasca Pengesahan Undang-Undang Cipta Kerja," *Amnesti: Jurnal Hukum* 6, no. 2 (August 11, 2024): 297–313, <https://doi.org/10.37729/amnesti.v6i2.4935>.

moderate or low risk often proceed without strict environmental evaluation. If regional governments lack effective supervisory capacity, the Polluter Pays Principle cannot function properly because there is no mechanism to determine whether business actors have caused pollution and are responsible for environmental restoration costs.⁴²

In addition to governmental challenges, the success of the Polluter Pays Principle is also strongly influenced by public access to environmental justice. Mechanisms such as citizen lawsuits, class actions, and environmental organizations' right to file legal claims have significant potential to strengthen accountability. However, in practice, public access to environmental justice remains limited due to high litigation costs, lengthy legal processes, and the lack of protection for communities challenging large corporations.⁴³ This indicates that the effectiveness of environmental legal instruments after the enactment of the Job Creation Law is also determined by the government's commitment to expand legal protection and strengthen public rights to oversee business actors.

Considering these various challenges, it is evident that the effectiveness of environmental legal instruments in ensuring the implementation of the Polluter Pays Principle after the enactment of the Job Creation Law still faces serious obstacles.

Normatively, the Polluter Pays Principle has not been abolished. However, licensing simplification, restrictions on public participation, weak supervision, and inconsistent law enforcement have created conditions in which polluters are not always held accountable. Consequently, from a functional perspective, the Polluter Pays Principle risks losing its coercive power if environmental legal instruments are not strengthened.⁴⁴ To address these issues, comprehensive reforms are necessary. These include strengthening institutional capacity, enforcing administrative sanctions firmly, expanding public participation, optimizing the use of strict liability in environmental litigation, and implementing environmental economic mechanisms such as green levies or environmental taxes to ensure that business actors truly bear the environmental externality costs they generate. Without such measures, environmental legal instruments enacted after the Job Creation Law will struggle to fully ensure the realization of the Polluter Pays Principle within the Indonesian legal system.⁴⁵

CONCLUSION

This study demonstrates that the weak implementation of the Polluter Pays Principle (PPP) in Indonesia is not merely a problem of enforcement deficit, but reflects a deeper structural misalignment between legal design,

⁴² Suprapti Widiastih, Faizah Julina, and Dini Sekarsari, "Tantangan Dan Peluang Dalam Implementasi Kebijakan Lingkungan Di Pemerintahan Daerah," *Irpia: Jurnal Ilmiah Riset Dan Pengembangan*, December 31, 2024, 46–51, <https://doi.org/10.71040/irpia.v9i11.267>.

⁴³ Hario Danang Pambudhi and Ega Ramadanti, "Menilai Kembali Politik Hukum Perlindungan Lingkungan Dalam UU Cipta Kerja Untuk Mendukung Keberlanjutan Ekologis," *Jurnal Hukum Lingkungan Indonesia* 7, no. 2 (September

20, 2021): 297–322, <https://doi.org/10.38011/jhli.v7i2.313>.

⁴⁴ Shafira Arizka Maulidyna, "Politik Hukum Lingkungan Dalam Kebijakan Pembangunan Berkelanjutan Berwawasan Lingkungan Di Indonesia," *Simbur Cahaya*, December 31, 2022, 265–92, <https://doi.org/10.28946/sc.v29i2.1814>.

⁴⁵ Aviany Yanti and Winda Fitri, "Sanksi Pencemaran Lingkungan Hidup Dalam Undang-Undang Cipta Kerja: Studi Komparatif Negara Jepang," *Mulawarman Law Review*, June 29, 2022, 31–48, <https://doi.org/10.30872/mulrev.v7i1.772>.

economic incentives, and institutional capacity. The shift toward risk-based licensing under the Job Creation Law has transformed environmental governance into a predominantly administrative regime, thereby diluting the coercive and corrective function of PPP as an instrument for internalizing environmental costs. As a result, liability is frequently displaced from polluters to the state and affected communities, reinforcing patterns of “public pays” and “victim pays” that contradict the normative foundation of ecological justice.

Beyond this diagnosis, this article proposes a conceptual framework, the Integrated Ecological Accountability Model (IEAM). This model advances PPP implementation through three interrelated pillars. First, economic internalization requires recalibrating sanctions and liability mechanisms to ensure that the expected cost of non-compliance ($p \times F$) exceeds the economic benefit of violations, thereby restoring deterrence. Second, normative certainty, emphasizing the need to reaffirm strict liability as an autonomous legal doctrine—clearly triggered without the need to prove fault and insulated from fluctuations in administrative licensing regimes. Third, institutional integration, which combines strengthened state oversight, digital and data-driven monitoring systems, and expanded public participation, including the legal empowerment of Indigenous communities as co-enforcers of environmental accountability. The significance of this model lies in its applicability beyond the Indonesian context. Many countries in the Global South face similar tensions between investment-driven regulatory simplification and environmental protection. The IEAM offers a transferable framework for reconciling these competing priorities by embedding PPP within a system

that simultaneously aligns economic incentives, legal certainty, and participatory governance. Ultimately, the effectiveness of environmental law should not be measured solely by the existence of regulations, but by its capacity to ensure that environmental costs are fully borne by those who create them. Without such a transformation, the Polluter Pays Principle risks remaining a symbolic norm rather than a functional instrument of ecological justice.

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