INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS

ISSN(print): 2643-9840, ISSN(online): 2643-9875

Volume 08 Issue 11 November 2025

DOI: 10.47191/ijmra/v8-i11-72, Impact Factor: 8.266

Page No. 6534-6540

Bridging Environmental and Financial Crime Enforcement: The Role of Illegal Mining in Money Laundering Schemes

Ni'ma Ulinihayati[1], Riski Dysas Prabawani[2]

[1,2]Universitas Diponegoro

ABSTRACT: The rampant occurrence of illegal mining in Indonesia today has caused ecological and environmental problems as well as subsequent crimes arising from these offenses. Illegal mining is an environmental crime that generates substantial economic gains and has the potential to become a core crime in money laundering offenses, serving as an effort to disguise the origins of these crimes. Based on the Law on the Prevention and Eradication of Money Laundering and the National Criminal Code, illegal mining meets the qualifications as a core crime in money laundering with various and complex modus operandi. As a criminal offense currently receiving significant attention from the government, the enforcement of law against this crime faces various challenges and obstacles, including difficulties in proving that assets are proceeds of crime, the complex modus operandi of the offense which complicates investigation and prosecution, the involvement of law enforcement officers and local leaders making it difficult to investigate perpetrators and illegal mining activities, law enforcement that remains focused on field operators rather than intellectual actors, and the low utilization of "follow the money" strategies. The study underscores that illegal mining, as a core crime in money laundering with various modus operandi, faces enforcement challenges whose success depends on strengthening investigative capacity, integrating licensing and financial data, implementing asset-tracing-based approaches, and accountability for beneficial ownership. These findings are expected to contribute to the development of more comprehensive law enforcement strategies against illegal mining as a core crime in money laundering.

KEYWORDS: Illegal Mining, Environmental Crime, Core Crime, Money Laundering Crime, Obstacles to Law Enforcement

I. INTRODUCTION

The management of mineral and coal resources is one of the strategic sectors that plays an important role in national economic growth. However, amidst the government's efforts to promote downstream industries and improve mining governance, Indonesia is instead facing a rise in unlicensed or illegal mining activities that have spread to almost all regions. Illegal mining not only causes ecological damage, but also results in loss of potential state revenue, diminished investment attractiveness, and increased risks of cross-sectoral crimes such as corruption, smuggling, and money laundering.

The President of the Republic of Indonesia, Prabowo Subianto, in his speech at the Annual Session of the People's Consultative Assembly (MPR) on August 15, 2025, directly highlighted the urgent nature of this issue by stating that there are at least 1,063 illegal mining sites causing the country potential losses of up to Rp 300 trillion.(1) This statement was reinforced by findings of illegal coal mining activities in the Bukit Soeharto Grand Forest Park (Tahura) area, which are estimated to cause a potential loss of around Rp 1 trillion,(2) reflecting a combination of fiscal loss and ecological degradation in a strategic area located within the delineation of the new capital city, Ibu Kota Nusantara (IKN). A similar situation is also seen in the Bangka Belitung region, which reportedly has around 1,000 illegal tin mines.(1) Due to rampant unlicensed mining and tin smuggling, Indonesia has lost up to 80% of its national production, thereby threatening the sustainability of the tin industry and reducing the state's revenue contribution from this sector. The President emphasized that this condition "must be stopped", marking the government's commitment to strengthening law enforcement and governance reform.

The Corruption Eradication Commission (KPK) also revealed the existence of illegal gold mines operating not far from the strategic tourism area of Mandalika, Lombok, West Nusa Tenggara. These mines reportedly are able to produce up to 3 kilograms of gold per day, according to findings by KPK Regional Task Force V on October 4, 2024.(3) Law enforcement efforts reportedly face various challenges, including institutional structures, conflicts of interest, and weak oversight at the regional level. Nationally, data from the Indonesian National Police's Criminal Investigation Agency (Bareskrim) indicates that in 2025 there are 1,517 illegal mining locations spread across 35 provinces, covering various commodities such as gold, sand, excavated earth, coal, andesite, and tin. North Sumatra Province is recorded as having the largest number of illegal mining sites.(4) Bareskrim emphasized that illegal mining activities have now reached almost the entire territory of Indonesia, indicating a systemic spread that requires a cross-sectoral approach to address. Illegal mining often takes place in protected areas and threatens the welfare of indigenous communities.(5) These activities pollute water with heavy metals and trigger degradation of aquatic and terrestrial ecosystems, leading to adverse health impacts. The impact is not only local; water pollution and increased sedimentation can spread hundreds of kilometers from the mining site, threatening far wider communities and ecosystems. Although often cited as small-scale activities that cause only minimal forest damage, illegal gold mining in reality has great destructive potential, especially when interacting with other drivers such as large-scale infrastructure development.(6) The combination of these activities can lead to cumulative forest damage and significantly reduce forest cover over time.(7)

Accumulated data on illegal mining shows that this practice is one of the most dominant forms of environmental crime in Indonesia. In addition to causing serious ecological damage, illegal mining is closely linked to the dimension of economic crime, particularly money laundering offenses. This can be seen from the status of illegal mining as a core crime that produces huge profits, driving offenders to conceal the origins of funds through various money laundering mechanisms. Thus, the problem of illegal mining is not only relevant in the context of environmental protection, but also directly related to the anti-financial crime regime.(8)

Nevertheless, academic studies that comprehensively connect environmental crimes such as illegal mining with the structures and patterns of money laundering remain relatively limited. Most previous research has focused on ecological aspects or the legal-administrative framework of mining, while discussions on how illegal mining serves as a core crime in money laundering offenses—including its implications for the effectiveness of criminal law enforcement—have not yet been widely explored in depth. This research gap indicates the need for an integrative analysis that combines perspectives from environmental crime studies and anti-money laundering policy.

Based on this gap, this article seeks to examine the relationship between illegal mining as an environmental crime and its role as a core crime in money laundering offenses, as well as to analyze the challenges of law enforcement in Indonesia. This research is expected to contribute both theoretically and practically to enriching discourse on combating environmental crimes related to economic offenses.

II. RESEARCH METHODOLOGY

This research is a literature review (library research) that does not involve direct field data collection. The approach used is qualitative with a case study method, focusing on document and literature analysis related to illegal mining as an environmental crime, its connection to money laundering offenses, and the challenges of law enforcement in Indonesia. This study uses a qualitative approach with a case study method based on literature review to examine the phenomenon of illegal mining and its relationship with money laundering crimes.

The data used in this research is secondary, including: legal documents such as Law No. 1 of 2023, Law No. 2 of 2025, and Law No. 3 of 2020; official reports from relevant agencies such as the Indonesian National Police Criminal Investigation Agency (Bareskrim Polri) and the Corruption Eradication Commission (KPK); academic literature, scientific articles, as well as publicly available statistical data on illegal mining and money laundering crimes.

Data collection was carried out through document study and literature review to understand the legal framework, regulations, and policies related to illegal mining and money laundering offenses. In addition, content analysis was conducted on official reports and statistical data to obtain an overview of the scale, characteristics, and patterns of illegal mining, as well as its links to financial crimes.

The data was analyzed using a qualitative approach and thematic analysis to identify patterns, relationships, and challenges in law enforcement relating to illegal mining as an environmental crime that serves as a core crime in money laundering. Legal analysis was also applied to evaluate the effectiveness of regulations and the implementation of law enforcement based on statutory documents and official reports.

A synthesis of findings from various sources was used to formulate a comprehensive understanding of legal, institutional, and policy aspects. This research integrates perspectives from environmental crime, economic criminal law, and anti-money laundering policy to build a comprehensive analytical framework for understanding illegal mining as the core crime of money laundering, as well as the implications for its law enforcement.

To ensure the validity and reliability of the findings, this study applies data triangulation by comparing and cross-verifying various document and literature sources. The use of official data sources and reliable literature serves as the basis for analysis, ensuring the consistency and accuracy of the research results.

This study is limited to a literature and document review related to illegal mining in Indonesia without involving the collection of primary field data. The research focuses on mineral and coal commodities and their connection to money laundering offenses, so the results are contextual and can serve as a basis for policy development and future research.

III. ILLEGAL MINING AS THE CORE CRIME OF MONEY LAUNDERING

Mining without a permit, or illegal mining, is conceptually regarded as a form of environmental crime that encompasses various unlawful acts and causes environmental damage, both on a broad scale and within specific geographic areas.(9) These activities involve the extraction of mineral and coal resources without obtaining an official permit from the government, resulting not only in losses to the state in terms of tax and royalty revenues but also threatening the sustainability of ecosystems in mining areas. Illegal mining often occurs in regions with significant environmental and economic value, such as protected forests, conservation areas, and zones that serve as water sources and biodiversity buffers.(10)

According to Article 35 paragraph (1) of Law Number 2 of 2025 on the Fourth Amendment to Law Number 4 of 2009 concerning Mineral and Coal Mining,(11) it is firmly stated that every mining business activity must be carried out based on a Business License issued by the Central Government. This provision emphasizes the importance of strict regulation and supervision of mining activities to ensure that all mineral and coal extraction processes comply with prevailing laws and regulations as well as the principles of environmental sustainability and good governance. The Business License is implemented through the issuance of a business identification number, standard certificates, and/or permits. With the requirement to obtain permits from the Central Government, it is hoped that illegal mining practices—which have long been a serious problem in Indonesia, both in terms of environmental degradation and economic losses to the state—can be prevented.

Furthermore, this regulation aims to increase transparency and accountability in the management of mineral and coal resources, so that the management of natural resources can provide optimal benefits for national development. In addition, the obligation to obtain a Business License from the Central Government also serves as a legal basis for law enforcement officials and regulators in monitoring and taking action against violations in the mining sector. This includes preventive measures as well as administrative and criminal sanctions against business actors who carry out mining activities without permits or violate the established licensing provisions. Thus, Article 35 paragraph (1) becomes a key instrument in efforts to improve mining governance in Indonesia, while also supporting the achievement of sustainable development goals and environmental protection.

This provision also emphasizes the central role of the Central Government in regulating and supervising all mineral and coal mining activities throughout Indonesia, ensuring that the management of these strategic natural resources does not become fragmented and remains within a unified and consistent national policy framework. In conducting mining activities, business actors are required to comply with all licensing requirements set out in applicable regulations. This includes the obligation to conduct an Environmental Impact Assessment (AMDAL) as an initial step in identifying and managing potential environmental impacts arising from mining activities. Furthermore, good environmental management and fulfillment of other technical and administrative requirements are also integral parts of the permit process. Compliance with these requirements aims not only to preserve the environment but also to ensure that mining activities are conducted legally and responsibly.

If there is a violation in the form of mining without a permit, business actors will face strict legal consequences as stipulated in Article 158 of Law Number 3 of 2020 as an amendment to Law Number 4 of 2009 concerning Mineral and Coal Mining, which regulates that "Anyone who conducts mining without a permit as referred to in Article 35 shall be punished with imprisonment for a maximum of 5 (five) years and a fine of up to Rp. 100,000,000,000 (one hundred billion rupiah)."(12) This provision shows the government's seriousness in enforcing regulations to uphold good and responsible mining governance. Such law enforcement also serves as a strong deterrent effect to prevent illegal mining practices that can harm the country, society, and the environment at large.

Therefore, every business actor is expected to carry out mining activities within a clear legal framework, transparently and in accordance with established standards, in order to realize a sustainable and environmentally conscious mining industry. However, field facts show that this regulation has not yet succeeded in serving as a deterrent or providing a sufficient effect of deterrence for perpetrators of illegal mining offenses. This is evident from data on the spread of illegal mining in Indonesia, as released by the Deputy Director of Tipidter, Criminal Investigation Agency of the National Police (Bareskrim Polri), at the Minerba Convex 2025 event at the JCC, as follows:

Table 1. Data on the spread of illegal mining in Indonesia

NO	Region	Types of Mining	Number of Cases
1	Aceh	gold	65
2	Sumatera Utara	gold, sand, excavated soil	396
3	Sumatera Barat	gold	4
4	Sumatera Selatan	coal	7
5	Riau	land, coal, gold	14
6	Jambi	gold	18
7	Lampung	sand, coal, andesit, gold	32
8	Bangka Belitung	timah	116
9	Banten	gold , excavation c	4
10	Jawa Barat	sand, laterite, limestone, andesit, gold , marble, bentonit	314
11	Jawa Tengah	excavation c, andesit, limestone	25
12	DIY	excavation c	3
13	Jawa Timur	excavation c, fill soil, limestone	23
14	Bali	batu, gold	2
15	Nusa Tenggara Barat	gold , manganese, precious metal	32
16	Nusa Tenggara Timur	manganese, excavation c, precious metal	31
17	Kalimantan Timur	coal	57
18	Kalimantan Barat	gold , bauxite, coal	19
19	Kalimantan Tengah	gold	133
20	Kalimantan Selatan	coal	230
21	Kalimantan Utara	gold	2
22	Sulawesi Selatan	excavation c, gold	4
23	Sulawesi Utara	gold	11
24	Sulawesi Tengah	gold , excavation c	9
25	Sulawesi Tenggara	nickel	6
26	Sulawesi Barat	gold	70
27	Gorontalo	black stone	7
28	Maluku	gold	2
29	Maluku Utara	gold	7
30	Papua Selatan	metal/mineral	13
31	Papua Barat	gold , other metal minerals, oil and gas	83
32	Papua Tengah	gold	1
33	Papua Barat Daya	gold	5 .

Source: Wadirtipidter Bareskrim Polri at the Minerba Convex 2025 event, at JCC

Bridging Environmental and Financial Crime Enforcement: The Role of Illegal Mining in Money Laundering Schemes

Based on the data, it is evident that unlicensed mining crimes are occurring quite massively in Indonesia. As a "low-risk, high-reward" crime, income from illegal mining is highly lucrative from an economic perspective. To conceal these illicit sources and complicate the detection of financial flows from illegal mining, many perpetrators disguise their proceeds by committing money laundering offenses. According to Article 2 paragraph (1) of Law No. 8 of 2010 on the Prevention and Eradication of Money Laundering Crimes, which has been repealed by Article 607 paragraph (1) of Law No. 1 of 2023 on the Criminal Code, the core crime of Money Laundering can originate from offenses in the field of environmental law, in this case, illegal mining.

According to the 2021 FATF report, environmental crimes have a high risk of becoming the predicate offenses for money laundering.(13) The estimated scale of financial flows from environmental crimes reaches hundreds of billions of dollars annually, impacting all regions in Indonesia.(13) The modus operandi of these crimes generally takes place in remote areas with minimal presence of authorities for monitoring and law enforcement. In border areas, this situation is worsened by rampant smuggling of illegal labor and cross-border movement of cash to conceal the flow of funds.

To facilitate the physical transfer of illegally mined goods abroad, criminal networks exploit corrupt customs officials or take advantage of vulnerable points along border routes. This non-transparent environment allows concessions to be issued to individuals connected to those in power. Corrupt public officials play a vital role in operating complex money laundering schemes.(14) Therefore, it is crucial to identify the true beneficial owners and conduct screening for individuals classified as Politically Exposed Persons (PEPs).(13) Prevention and oversight mechanisms must be implemented to address the various illegal mining methods that serve as predicate offenses for money laundering, as outlined below:

a. Strengthening Supervision in Remote Areas by increasing the presence of law enforcement officers and oversight in remote regions prone to illegal mining, in order to prevent undetected operations.
b. Border Route Control by tightening supervision in border areas through inter-agency coordination and the use of monitoring technology to anticipate the smuggling of illegal labor and cross-border movement of cash.
c. Eradication of corruption in Customs and related authorities by conducting audits, internal supervision, and firm action against corrupt customs officials who facilitate the export of illegal mining products abroad.
d. Transparency in Granting Concession Permits by implementing a transparent, technology-based permit issuance system to prevent collusion and nepotism in the granting of mining concessions.
e. Identification of Beneficial Owners by requiring the reporting and verification of the true beneficial owner's identity of mining companies to break the chain of asset concealment resulting from criminal activities.
f. Screening of Politically Exposed Persons (PEPs) by conducting thorough screening of public officials who are potentially involved in money laundering schemes and implementing mechanisms for reporting suspicious transactions.
g. Coordination Between Law Enforcement Agencies and Regulators by building synergy among the police, the prosecutor's office, tax authorities, and mining supervisory agencies for information exchange and integrated actions in uncovering illegal mining and money laundering.
h. Education and Public Awareness by conducting educational campaigns for the public and industry players about the risks and impacts of illegal mining and money laundering to encourage active participation in oversight.

IV. CHALLENGES IN LAW ENFORCEMENT OF ILLEGAL MINING AS THE CORE CRIME OF MONEY LAUNDERING

Money laundering as a follow-up crime to illegal mining is carried out by perpetrators to obscure the origins of criminal proceeds, and faces many law enforcement challenges. These challenges arise from structural, technical, and cultural aspects:

a. Difficulties in proving assets resulting from criminal acts. In illegal mining, there are substantial economic gains, but law enforcement officers often face obstacles in tracing the origins of assets because transactions are conducted in cash and financial record keeping is minimal in illegal mining operations. As a result, asset tracing and identifying beneficial ownership do not meet the standard of proof required for money laundering offenses(15).
b. Modus operandi of complex criminal acts . As a crime intended to obscure the origin of criminal sources, illegal mining—which serves as the core crime in money laundering offenses—has many complex modus operandi. The methods or tactics of this crime are carried out in such a way that law enforcement officers will have difficulty tracing and proving these criminal acts.
c. The involvement of law enforcement officers and regional leaders. The presence of law enforcement officers in remote areas, where there is limited oversight by authorized authorities to carry out transparent monitoring and law enforcement, poses a challenge to law enforcement efforts against this crime. In various cases, illegal mining operations can continue because they receive support from certain law enforcement officials, affiliations between perpetrators and political figures or local leaders, and bribery practices that facilitate these illegal mining activities.

d. Law enforcement is still focused on the perpetrators in the field rather than the intellectual actors. Many cases of illegal mining that develop into money laundering crimes only arrest and prosecute those in the field, without being able to track down the intellectual perpetrators. In these crimes, business owners who control the supply chain are often untouched by the law, resulting in the true beneficiaries of these crimes remaining untraceable.

e. Low utilization of the follow the money strategy. In money laundering crimes where the core crime stems from illegal mining, there is a global law enforcement principle that states, "don't just prosecute the crime, follow the money." However, in enforcing the law against this crime, authorities often focus on seizing heavy equipment, closing mining sites, and evicting workers, while asset recovery, civil forfeiture, and non-conviction based forfeiture are not implemented.

V. CONCLUSIONS

The conclusion of this paper emphasizes that illegal mining in Indonesia is a massive environmental crime with serious ecological and economic impacts. Illegal mining not only damages the environment and reduces state revenue, but also serves as a core crime in money laundering offenses, employing various complex modi operandi. Law enforcement against illegal mining faces significant challenges, including difficulties in proving assets derived from crime, involvement of law enforcement officers and local officials, a focus of enforcement still limited to field perpetrators without targeting intellectual actors, as well as the low implementation of the “follow the money” strategy. To improve the effectiveness of law enforcement, it is necessary to strengthen investigative capacity, integrate licensing and financial data, ensure transparency in permit issuance, identify beneficial ownership, and enhance coordination between law enforcement agencies and regulators. Public education is also important to support supervision and prevention. This study makes a significant contribution to the development of a comprehensive law enforcement strategy against illegal mining as a core crime in money laundering offenses in Indonesia.

REFERENCES

1) Pertambangan Ilegal Perlu Solusi, Bukan Janji. Available from: https://perhapi.or.id/pertambangan-ilegal-perlu-solusi-bukan-janji/
2) Potensi Kerugian Negara Capai Rp 1 Triliun, Gakkumhut Tetapkan Aktor Utama Tambang Ilegal Tahura Bukit Soeharto. Available from: https://www.kehutanan.go.id/news/potensi-kerugian-negara-capai-rp-1-triliun-gakkumhut-tetapkan-aktor-utama-tambang-ilegal-tahura-bukit-soeharto
3) Dwi Muliawati F. Gawat! Indonesia Dikepung Tambang Ilegal, Ini Datanya. Available from: https://www.cnbcindonesia.com/news/20251022181832-4-678370/gawat-indonesia-dikepung-tambang-ilegal-ini-datanya
4) Polri Petakan 1.517 Tambang Ilegal di RI: Emas, Batu Bara, Timah. Available from: https://apbi-icma.org/id/media-article/polri-petakan-1-517-tambang-ilegal-di-ri-emas-batu-bara-timah
5) Villén-Pérez S, Anaya-Valenzuela L, Conrado Da Cruz D, Fearnside PM. Mining threatens isolated indigenous peoples in the Brazilian Amazon. Global Environmental Change. 2022 Jan;72:102398.
6) Abugre S, Asigbaase M, Kumi S, Nkoah G, Asare A. Forest landscape degradation, carbon loss and ecological consequences of illegal gold mining in Ghana. Discov For. 2025 July 21;1(1):20.
7) Siqueira-Gay J, Sánchez LE. The outbreak of illegal gold mining in the Brazilian Amazon boosts deforestation. Reg Environ Change. 2021 June;21(2):28.
8) Starnini M, Tsourakakis CE, Zamanipour M, Panisson A, Allasia W, Fornasiero M, et al. Smurf-Based Anti-money Laundering in Time-Evolving Transaction Networks. In: Dong Y, Kourtellis N, Hammer B, Lozano JA, editors. Machine Learning and Knowledge Discovery in Databases Applied Data Science Track [Internet]. Cham: Springer International Publishing; 2021 [cited 2025 Nov 19]. p. 171–86. (Lecture Notes in Computer Science; vol. 12978). Available from: https://link.springer.com/10.1007/978-3-030-86514-6_11
9) Rohman A, Hartiwiningsih, Rustamaji M. Illegal mining in Indonesia: need for robust legislation and enforcement. Law, Criminology and Criminal Justice. 2024;10(1).
10) Fitriani, Iksan M, Kamal M, Hasanah P. Environmental Degradation and Weak Law Enforcement in Illegal Mining Activities: A Juridicial Review. International Journal of Law, Social Science and Humanities (IJLSH). 2(3):July 2025.
11) Undang-Undang Nomor 2 Tahun 2025 tentang Perubahan Keempat atas Undang-Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara.

12) Undang-Undang No 3 Tahun 2020 sebagai perubahan atas Undang-Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara.
13) Laporan FATF Pencucian Uang dari Kejahatan Lingkungan. 2021 July.
14) Anagnostou M, Doberstein B. Illegal wildlife trade and other organised crime: A scoping review. Ambio. 2022 July;51(7):1615–31.
15) Gilmour PM. Reexamining the anti-money-laundering framework: a legal critique and new approach to combating money laundering. Journal of Financial Crime. 2023 Jan 2;30(1):35–47.