EGMONT GROUP OF FINANCIAL INTELLIGENCE UNITS

IEWG INFORMATION EXCHANGE WORKING GROUP

BULLETIN

POLLUTION CRIMES

Egmont Group

Information Exchange Working Group

This bulletin is intended to assist Financial Intelligence Units (FIUs) in identifying financial transactions that could be connected to pollution crimes, as well as related money laundering activities. The red flag indicators provided aim to support the identification of relevant financial transactions and high-risk factors associated with pollution crimes, facilitating improved detection and prevention efforts.

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Environmental Crimes Bulletin: Pollution Crimes

INTRODUCTION

Financial Intelligence Units (FIUs) play a pivotal role in combating pollution crimes and supporting global efforts against human-caused climate change and environmental degradation. By generating actionable financial intelligence for law enforcement and regulatory authorities, FIUs help expose and disrupt criminal networks profiting from environmental harm.

Pollution crimes such as illegal dumping of hazardous waste, illicit discharge of pollutants into air, water, or soil, and violations of environmental regulations pose severe threats to public health, ecosystems, and economic stability. These crimes generate billions of dollars in illicit proceeds annually, fueling organized criminal activities, corruption, and money laundering. Beyond financial impacts, pollution crimes undermine environmental protection, accelerate climate change, and disproportionately harm vulnerable communities, while eroding legitimate businesses and regulatory frameworks.[1]

Pollution crimes driven by profit function as financial crimes. They rely on complex financial flows to operate, conceal proceeds, and remain viable. Furthermore, large-scale offences often aim to reduce costs and generate illicit profit. FIUs play a crucial role: they may trace cross-border transactions, expose shell companies and trade-based money-laundering schemes, and link environmental violations to broader predicate crimes such as corruption, tax evasion, fraud, and organized crime. Through this financial lens, pollution shifts from a regulatory issue to a profit-motivated criminal activity that can be targeted through asset freezing, confiscation, and international cooperation.

As environmental crime continues to become more profitable and sophisticated—partly due to new opportunities created by climate policies, carbon markets, ESG (Environmental, Social, and Governance) reporting, and green subsidies—FIUs must act as strategic actors rather than passive information hubs. Criminal networks increasingly exploit regulatory gaps and opaque financial structures to externalize environmental harm while capturing financial gains. Integrating environmental crime into FIU analytical priorities and applying specialized methods tailored to pollution-related financial flows, are essential to disrupt these incentives, protect market integrity, and strengthen deterrence.[2]

The Egmont Group issues this bulletin to inform FIUs, and their jurisdictions of financial transactions specifically linked to pollution crimes. By leveraging financial intelligence, FIUs can help dismantle these criminal enterprises and advance global environmental security.

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[1] UNODC https://www.unodc.org/documents/corruption/Publications/2022/Preventing_and_combating_Corruption_as_it_relates_to_Crimes_that_have_an_impact_on_the_environment_EN.pdf

[2] ESG reporting obligations refer to the formal requirement for companies to disclose data and information about their performance and impact across these three non-financial areas.

What are Pollution Crimes?

As described by INTERPOL and the United Nations Environment Programme, pollution crime refers to the illegal conduct that results in the release of pollutants into the environment in violation of international or national laws. This includes:[3]

- **Illegal dumping of hazardous waste:** Disposing of toxic substances, chemicals, or industrial waste in unauthorized locations.
- **Unlawful emissions and discharges:** Releasing pollutants into air, water, or soil without permits or in excess of permitted levels.
- **Falsification of environmental compliance documents:** Counterfeiting or altering permits, certificates, or monitoring reports.
- **Smuggling of banned substances:** Importing or exporting chemicals, pesticides, or ozone-depleting substances prohibited by law.
- **Evasion of environmental taxes or fees:** Avoiding payments required for waste management or pollution control.

Ultimately, pollution crimes are conducted for two main reasons, namely:

- (a) Illicit actors who want to decrease spending (e.g. avoiding proper waste disposal or paying carbon emissions), or
- (b) Illicit actors who want to generate ill-gotten profit (e.g. criminal groups earning funds from conducting illegal waste disposal in areas or ways that are prohibited).

Crime Convergence and Pollution Crimes

Research on environmental crime convergence shows that pollution crimes rarely occur in isolation.[4] Instead, pollution crimes are often intertwined with other criminal activities, such as:

- **Bribery and corruption:** Officials may be bribed to overlook violations or issue fraudulent permits.
- **Fraud and forgery:** Falsification of compliance documents, mislabeling of waste, or fraudulent reporting.
- **Organized crime:** Criminal networks may control illegal waste disposal operations, smuggling routes, etc.
- **Money laundering:** Illicit proceeds from pollution crimes are laundered through front companies, shell entities, and complex financial transactions.
- **Tax evasion and smuggling:** Avoidance of environmental taxes, illegal cross-border movement of waste, etc.

Corruption is a key facilitating factor, enabling polluters criminal actors engaged in pollution crime to evade detection, avoid penalties, and falsify compliance records. Criminal networks may bribe officials to obtain permits, falsify monitoring data, or overlook illegal activities. [5]

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[3] INTERPOL https://www.interpol.int/en/Crimes/Environmental-crime/Pollution-crime#:~:text=Pollution%20crimes%20take%20various%20forms,chemicals%20and%20carbon%20trading%20crime.

[4] https://earthleagueinternational.org/crime-convergence-report/

[5] https://www.unodc.org/unodc/frontpage/2024/November/explainer_-how-corruption-facilitates-organized-crime.html

TRENDS AND TYPOLOGIES

Areas prone to Pollution Crimes

Jurisdictions particularly vulnerable to pollution crime share common risk factors that enable illicit environmental activities. These include weak governance, poor enforcement of environmental regulations, and high levels of corruption. Regions with significant industrial activity—such as large manufacturing sectors, chemical industries, and mining operations—are especially susceptible, particularly where waste management infrastructure is inadequate.

By correlating environmental non-compliance with irregular value-added tax (VAT) patterns, misclassification of goods or waste, or unlawful access to green incentives and carbon-related mechanisms, FIUs can help reveal the compounded financial benefits that strengthen the money laundering nexus. This integrated approach elevates pollution crimes from administrative breaches to multi-predicate criminal schemes with clear financial motivations and systemic impact.

Additional high-risk areas include:

- Industrial zones generating large volumes of hazardous waste.
- Countries with lax import/export controls for waste and chemicals.
- Regions near major transport hubs, ports, and borders, which facilitate illegal movement of pollutants and waste.

Industries involved in Pollution Crimes

Key industries at risk of being exploited by pollution crime actors include sectors that handle hazardous materials, waste, or chemicals, as well as entities vulnerable to corruption or weak oversight. These industries face heightened exposure due to their operational nature and regulatory dependencies.

High-risk industries include:

- **Manufacturing and processing plants** (chemical, pharmaceutical, mining): May illegally dispose of hazardous waste or discharge pollutants.
- **Waste management and recycling companies** (including e-waste, medical waste, chemical waste): Can engage in illegal dumping, mislabeling of waste streams, or fraudulent practices.
- **Transport and logistics firms**: May facilitate the movement of hazardous materials or waste without proper documentation.
- **Construction and demolition companies**: Risk improper disposal of debris and hazardous substances.
- **Agricultural enterprises**: Sometimes use banned or excessive pesticides and fertilizers or improperly dispose of animal waste.
- **Regulatory authorities**: Officials may be bribed to falsify permits, overlook violations, or enable illegal activities.

Money Laundering Methods[6]

Pollution crime such as illegal dumping of hazardous waste, illicit discharge of pollutants, and violations of environmental regulations generates substantial illicit proceeds. Criminals use a variety of sophisticated money laundering techniques to disguise these profits and integrate them into the legitimate financial system. Common money laundering methods include:

1. Trade-Based Money Laundering (TBML)
Criminals alter invoices and trade documents to misrepresent the type or value of goods. In pollution-related crimes, this typically includes:

- Falsifying documentation for waste shipments (e.g., hazardous waste labeled as recyclable material).
- Mixing illegal waste with legal shipments.
- Over- or under-invoicing the value of waste management services to move illicit funds across borders.
- Using fraudulent certificates of origin or environmental compliance.

Illegal waste shipments, mislabelled secondary raw materials, circular or economically unjustifiable trade routes, and repeated cross-border movements of low-value goods with high disposal costs all generate financial footprints that FIUs are uniquely positioned to analyse. [7]

An especially effective strategic shift for FIUs is to focus less on individual polluters and more on the networks and facilitators that enable pollution crimes. Waste brokers, transport companies, sham treatment facilities, professional intermediaries, and financial service providers often operate across multiple schemes and jurisdictions, supporting both cost-avoidance and profit-generating models. By mapping these ecosystems, FIUs can disrupt entire criminal infrastructures rather than isolated actors, producing intelligence with higher strategic and operational value. This network-centric approach also aligns more closely with modern organized-crime methodologies and maximizes the preventive impact of financial intelligence.

2. Front Companies
Illicit proceeds from pollution crime are funneled through legitimate businesses, often in the waste management, recycling, or chemical sectors. These companies:

- Co-mingle legal and illegal funds.
- Conduct transactions that appear legitimate but that are actually payments for illegal dumping or pollution.
- May have little operational footprint but high-value transactions.

3. Shell Companies and Complex Corporate Structures
Criminals set up shell companies and use complex ownership structures to obscure the origin of funds and beneficial ownership. These entities:

- Operate in secrecy jurisdictions or tax havens.
- Make tracing financial flows difficult for authorities.
- Facilitate cross-border movement of illicit proceeds.

[6] https://complyadvantage.com/insights/aml-environmental-crime/
[7] Special attention in this bulletin is paid to TBML, as the Egmont Group produced many past reports, including jointly with the FATF and WCO, focusing on different such techniques and ways for their uncovering – including the reverse analysis method. By combining trade data, customs declarations, transport records, and payment flows, FIUs can identify cases where environmental harm is externalized while financial value is laundered through seemingly legitimate commercial transactions. In this context, pollution becomes an integral part of a broader TBML scheme rather than an ancillary offence.

4. Use of Nominees
Nominees (individuals or entities acting on behalf of the real owners) are used to:
- Funnel illicit proceeds.
- Conceal beneficial ownership.
- Make excessive cash deposits and withdrawals.

5. Investment in Assets
Proceeds from pollution crime are often invested in:
- Real estate (warehouses, land, industrial sites).
- High-value vehicles and equipment.
- Luxury goods.

These investments help launder money by converting illicit cash into tangible assets.

6. Corruption and Bribery
Corruption is a key enabler of pollution crime and its associated money laundering. Bribes are paid to regulatory officials to:
- Obtain permits.
- Falsify compliance records.
- Avoid detection and penalties.

7. Cash-Intensive Transactions
Criminals use cash transactions to:
- Avoid detection.
- Operate anonymously.
- Make frequent, high-value deposits and withdrawals.

8. Offshore Banking and Secrecy Jurisdictions
Funds are moved through offshore accounts and secrecy jurisdictions to:
- Hide the origin and destination of money.
- Exploit weak regulatory oversight.

Pollution crimes, when viewed through a financial-intelligence lens, emerge as highly organized operations that depend on professional money-laundering infrastructures. Large-scale illegal dumping, falsified environmental documentation, and long-term avoidance of compliance costs all require planning, insider expertise, and access to specialized services. These features make pollution crimes resemble other forms of organized economic crime, where legitimate business structures mask illicit activity embedded within the business model.

Because the illicit gains from pollution crimes must be reintegrated into the financial system, offenders frequently rely on professional money-laundering networks. These networks use complex corporate structures, shell companies, cross-border trade schemes, and professional intermediaries such as lawyers and accountants. The same laundering channels often serve multiple criminal markets—corruption, tax fraud, trafficking, and environmental crime—revealing a shared ecosystem of facilitators and financial conduits.

For FIUs, this means pollution crimes should not be treated as isolated environmental violations. Instead, they must be analyzed as financially engineered, organized-crime activities that form part of broader illicit value chains. Network-centric analysis becomes essential: identifying shell-company clusters, trade-based laundering routes, or recurring professional intermediaries often exposes pollution crimes alongside other predicate offences. International intelligence exchange is equally critical, given the cross-border nature of both the crimes and the laundering structures that support them.

Ultimately, pollution crimes persist because they are financially viable for organized-crime actors. Professional laundering networks reduce risk, enable scale, and help offenders evade enforcement. FIUs play a central role in disrupting this system by targeting the financial architecture that sustains environmental harm. Weakening these financial foundations is key to dismantling the economic incentives that allow pollution crimes to flourish and become normalized within global markets.

Pollution-as-a-Service Schemes

The most advanced and dangerous manifestation of profit-driven pollution crime is the pollution as a cross-border criminal service, delivered through a deliberately fragmented value chain designed to defeat regulatory, environmental, and financial controls simultaneously. From an FIU perspective, this model fundamentally changes both the analytical starting point and the expected complexity of the laundering process.

In this scenario, pollution is no longer a by-product of criminal activity or a side effect of cost avoidance. It becomes a contracted illicit service embedded in international commerce.

Environmental Crime (Marine Pollution)

Between August 2019 and March 2020, a large-scale marine pollution incident affected over 1,000 coastal locations across Country A, constituting one of the most significant environmental events recorded in the region. The contamination, caused by crude oil, resulted in widespread ecological damage and substantial public expenditure for mitigation and clean-up efforts, initially estimated at a minimum of USD 40 million.

Investigations conducted by authorities in Country A, in coordination with international partners, identified strong indications that the oil originated from a foreign-flagged oil tanker (Vessel X) operating in international waters. The incident was not reported to competent authorities, raising suspicions of deliberate concealment or gross negligence. The vessel was linked to a foreign shipping company (Company Y), and the cargo was associated with crude oil sourced from another jurisdiction (Country B).

The investigation required a multidisciplinary approach combining environmental forensics, geospatial intelligence, and international cooperation. Chemical analysis of the oil enabled authorities to determine its origin and characteristics, while satellite imagery and oceanographic modelling were used to estimate the likely location of the discharge and reconstruct the trajectory of the pollutant. These efforts allowed investigators to narrow down the list of vessels present in the relevant maritime area and identify Vessel X as the primary suspect.

Given the transnational dimensions of the case, authorities relied extensively on international cooperation mechanisms to obtain information related to the vessel, its crew, and the corporate entities involved. Requests for assistance were disseminated through established law enforcement channels, including international police cooperation frameworks, and collaboration with foreign counterparts proved essential in advancing the investigation.

Scientific studies later demonstrated that the environmental impact extended beyond Country A. Ocean currents transported the oil across thousands of kilometres over several months, eventually reaching coastal areas in Country C, located in another continent 8.500 km away. This finding underscored the global nature of marine pollution incidents and the potential for environmental harm to cross multiple jurisdictions.

The case also revealed relevant financial intelligence aspects. The operation of Vessel X involved a corporate structure spanning multiple jurisdictions, including the flag state (Country D), the location of the operating company (Company Y), and the origin of the cargo (Country B). This complexity required the engagement of financial intelligence units (FIUs) to support the identification of beneficial ownership and to analyse financial flows associated with the vessel's operations and logistics.

FIUs from the jurisdictions involved cooperated through secure information-sharing channels, contributing to the mapping of corporate linkages and financial activities potentially connected to the incident. This cooperation supported the broader investigative effort by providing insights into the economic dimension of the case and assisting in the identification of responsible entities.

Based on the evidence gathered, authorities in Country A brought charges against individuals (Individual A and Individual B) and a legal entity (Company Y) associated with the operation of Vessel X for environmental offences, including marine pollution and damage to protected areas. Judicial proceedings remain ongoing.

This case illustrates the inherently transnational nature of large-scale environmental crimes and highlights the importance of coordinated international responses. It also demonstrates the added value of financial intelligence in supporting environmental investigations, particularly where complex corporate structures and cross-border activities are involved. The integration of scientific analysis, geospatial data, and financial intelligence proved critical for attribution and accountability in this case, reinforcing the need for continued cooperation among FIUs and competent authorities in addressing similar threats.

FIU Analytical Techniques

FIUs can strengthen their analysis of pollution crimes by looking beyond traditional "follow-the-money" methods and examining how companies financially benefit from avoiding legitimate environmental costs. In many cases, the profit is hidden not in suspicious income but in unusually low spending on waste management, emissions controls, or compliance. By assessing whether a company's cost structure aligns with its regulatory obligations, FIUs can identify economic inconsistencies that signal concealed gains from environmental non-compliance.

Data analytics and AI can further support this work by highlighting anomalies such as missing payments for required environmental services or irregular supplier-payment patterns. When paired with sector-specific knowledge and human judgment, these tools help FIUs uncover subtle financial benefits that fall between regulatory breaches and traditional money-laundering schemes, revealing pollution as a deliberate profit mechanism rather than a simple compliance failure.

RED FLAG INDICATORS

The below risk indicators should not be taken in isolation but considered in conjunction with other suspicious activity. No single risk indicator can lead to a confirmed suspicion of laundering the proceeds of illegal pollution.

Client

- Waste management companies with contracts for unrelated services (corruption risks for licenses).
- Entities repeatedly using the same brokers or transporters for waste shipments.
- Clients associated with politically exposed persons, regulatory officials, or law enforcement.
- Publicly available information or law enforcement reports identify the client or related parties as being involved in pollution crime.
- Suppliers or buyers located in or routing payments through high-risk jurisdictions with little environmental oversight.
- Clients unable to provide evidence of compliance with environmental regulations (permits, certificates, etc.).
- The client's waste volume/value exceeds what is expected for the region.
- The client holds a position within private entities that could facilitate pollution crime (e.g., waste broker, chemical supplier).
- The client is a regulatory official exhibiting unexplained wealth.
- The client provides environmental documents that seem fake, counterfeited, or inaccurate.
- The client is registered as a waste management company but has little operational footprint but high-value transactions.
- The client is registered in a high-risk jurisdiction known for pollution crime.

Financial Transactions

- Cash payments or transfers to accounts held by waste management or transport companies from foreign nationals with no clear business relationship.
- Payments for waste disposal routed to third-party accounts not matching exporter/importer names.
- Excessive volume/value of cash transfers from cash-intensive businesses to beneficiaries in areas known for illegal dumping.
- Frequent payments from waste-related entities to individuals unrelated to the business.
- Incoming deposits and wire transfers from several origins without economic or financial grounds.
- Investment of proceeds into local real estate, vehicles, or rapid expansion of processing capacity without transparent financing.
- Sudden and unexplained increases in economic activity in rural or industrial zones.
- Transactions/business activity involving countries with weak money laundering controls or highly secretive banking.
- Falsified or missing certificates of origin, export permits, or compliance documents.

Indicators related to "missing" or implausible environmental services:

- Repeated payments for waste treatment, disposal, recycling, remediation, or emissions management where no corresponding licensed facility, permits, staff, or technical capacity can be identified

- Environmental service providers with minimal physical presence, no specialized equipment, or no verifiable disposal records
- Invoices that are formally compliant but economically implausible when compared to sector benchmarks or regulatory requirements
- Payments for “consultancy,” “logistics,” or “environmental management” that lack deliverables or verifiable outputs.

Cost-avoidance and economic distortion indicators:

- Systematic under-spending on mandatory environmental compliance (waste disposal, emissions control, remediation) in high-pollution sectors
- Companies maintaining competitive pricing or increasing market share despite implausibly low environmental compliance costs
- Absence of environmental-related expenses in balance sheets where such costs are unavoidable by regulation
- Reinvestment or cross-border transfers of “saved costs” without a clear lawful efficiency explanation.

Cross-border outsourcing and pollution-as-a-service indicators:

- Environmental or waste-management services contracted across multiple jurisdictions without economic or logistical justification
- Separation between the location of waste generation, disposal, invoicing, and payment settlement
- Use of intermediaries in countries with weak environmental governance, high corruption risk, or limited treatment capacity
- Payments routed through jurisdictions unrelated to the physical movement of waste or service delivery.

Trade-based money laundering (TBML) indicators:

- Misclassification of hazardous waste as secondary raw materials or recyclable goods
- Repeated cross-border movement of low-value goods associated with high disposal or treatment costs
- Circular trade routes or transport patterns that contradict cost-efficiency or proximity logic
- Discrepancies between declared goods, transport documentation, and payment values.

Facilitator and network-based indicators:

- Recurrent use of the same waste brokers, transport companies, consultants, accountants, or legal entities across unrelated clients
- Environmental service providers linked to other predicate crimes (tax fraud, corruption, customs fraud, TBML)
- Shell companies or newly created entities acting as environmental or logistics intermediaries
- Professional intermediaries appearing in multiple jurisdictions without clear operational justification.

Green finance, subsidies, and ESG abuse indicators:

- Companies receiving green subsidies, environmental grants, or sustainability-linked financing while showing signs of environmental non-compliance
- Simultaneous access to carbon credits or ESG benefits alongside implausibly low compliance costs
- Environmental projects funded on paper but lacking physical implementation
- Use of ESG narratives to justify complex or opaque financial structures.

Jurisdictional and proceeds-placement indicators:

- Pollution occurring in one jurisdiction while profits or financial benefits are accumulated in another
- Absence of financial benefit in the “pollution-disposal jurisdiction” despite clear economic advantage
- Layering of proceeds through multiple countries before integration
- Use of known laundering hubs for environmental-service payments.

Behavioural and contractual red flags:

- Preference for opaque or offshore service providers over compliant domestic alternatives
- Long-term contractual relationships with environmental service providers despite regulatory sanctions or negative intelligence
- Sudden changes in waste-management providers following regulatory tightening
- Resistance to audits, inspections, or transparency requests related to environmental services.

Intelligence and cooperation-driven indicators:

- Environmental crime intelligence repeatedly linked to the same financial channels across cases
- Discrepancies between environmental enforcement findings and financial reporting
- Cross-border intelligence revealing fragmented but complementary parts of the same scheme

RESOURCES:

INTERPOL. *Pollution crime*. https://www.interpol.int/en/Crimes/Environmental-crime/Pollution-crime

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