



FATF REPORT

# Money Laundering from Environmental Crime

July 2021



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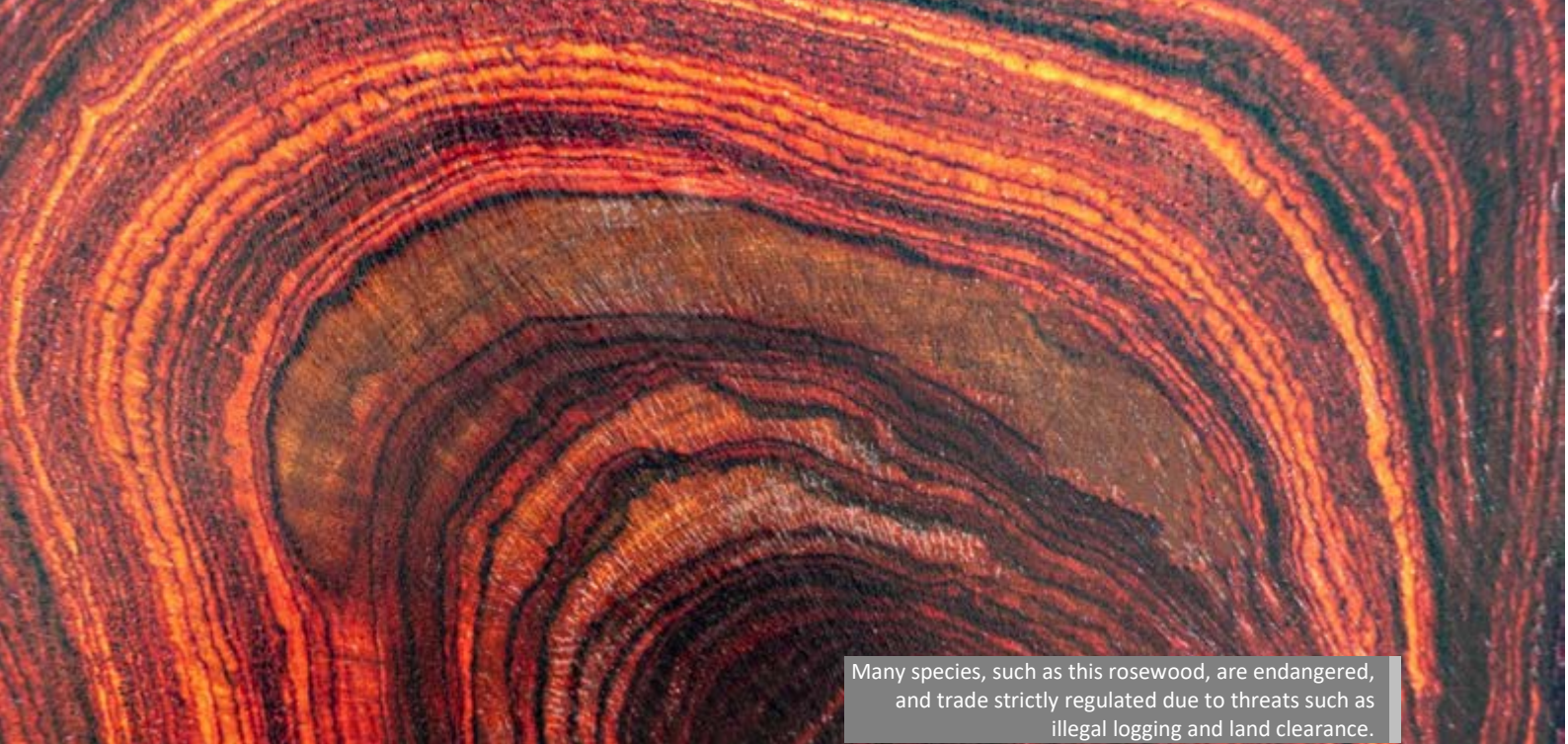
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Many species, such as this rosewood, are endangered, and trade strictly regulated due to threats such as illegal logging and land clearance.

## EXECUTIVE SUMMARY

Environmental crime covers a wide range of activities, from illegal extraction and trade of forestry and minerals to illegal land clearance and waste trafficking. Actors involved in these crimes vary from large organized crime groups to multinational companies and individuals. Perpetrators of environmental crime rely on both the financial and non-financial sector to launder their proceeds.

The ‘low risk, high reward’ nature of environmental crime makes for a lucrative and safe source of revenue for criminals. This is partly due to a regulatory and legal environment that is not always consistent globally and does not fully address the financial aspects and money laundering (ML) risks of these crimes.

The FATF conducted this study to strengthen awareness of the scale and nature of criminal gains and laundering techniques for environmental crimes. This study builds on the FATF’s 2020 report on financial flows from the illegal wildlife trade. It brings together expertise from across the FATF’s Global Network to identify good practices that governments and the private sector can take to disrupt the profitability of environmental crimes. The findings for this report are based on case studies and good practices provided by over 40 countries, alongside expertise from civil society and the private sector.

UN studies show that the proceeds from environmental crimes are in the same order of magnitude as other financial crimes. (UNEP, 2016<sup>[1]</sup>) However, actions by government and private sector to identify, investigate and prosecute related laundering have been limited. This FATF report shows the significant role of trade-based fraud and misuse of shell and front companies to launder gains from illegal logging, illegal mining, and waste trafficking. It also shows that criminals frequently commingle legal and illegal goods early in the resource supply chains to conceal their illicit source. This can make it difficult to detect suspicious financial flows later in the value chain, to an extent not previously examined by the FATF. This highlights the need for anti-money laundering (AML) authorities to build working relationships

with non-traditional partners, including environmental crime investigators and environmental protection agencies, and to establish multi-stakeholder dialogues. This report identifies the following key priorities:

- All Members of the FATF Global Network should consider whether criminals may be misusing their financial and non-financial sector to conceal and launder gains from environmental crimes. This includes countries without domestic natural resources.
- Members must also strengthen their operational capacity to detect and pursue financial investigations into environmental crimes. This includes working with foreign counterparts to share information, facilitate, prosecutions, and the effective recovery of assets that are moved and held abroad.
- Countries should fully implement the FATF standards as an effective tool to combat money laundering from environmental crime. This includes ensuring AML outreach to relevant intermediaries covered by the FATF Standards, such as dealers in precious metals and stones and trust and company service providers.

This study has strengthened FATF's understanding of money laundering risks from illegal logging, illegal mining and waste trafficking. However, it also highlights the need for further work. This includes further understanding the financial flows specific to waste trafficking, due in part, to the lack of existing money laundering cases for this specific crime. In addition, this report highlights the importance and opportunities for further regulatory and policy work.





Forestry crime, which includes illegal logging and illegal land clearing, generates an estimated USD 51 to 152 billion annually.

## Chapter 1. INTRODUCTION

### 1.1. The Issue

Environmental crime is estimated to be among the most profitable proceeds-generating crimes in the world, generating around USD 110 to 281 billion in criminal gains each year.<sup>1</sup> The three focus areas of this study - forestry crime, illegal mining and waste trafficking - account for 66%, or two-thirds of this figure. Environmental crime has far-reaching impacts beyond the financial cost, including for the planet, public health and safety, human security, and social and economic development. It also fuels corruption, while converging with other serious crimes such as drug trafficking and forced labour. (Uhm, 2020<sup>[2]</sup>)

“Proceeds from illegal waste trafficking, forestry and mining account for up to two-thirds of all profits from environmental crimes.”

Government actions to detect and disrupt these financial flows have not been proportionate to the scale of this issue. For example, despite the significant proceeds involved, the focus on environmental crime in relevant risk assessments and financial investigations has been limited to date. In response to an FATF survey, less than half of respondent countries (20) had considered environmental crime in their national or sectoral money laundering (ML) risk assessments. Most countries criminalize at least some aspects of environmental crime either through specific criminal offences (e.g., illegal harvesting of logs) or through more general environmental offences (e.g., illegal exploitation of natural resources), but legislation and regulation are often narrowly drafted and can exclude transnational elements of such offences (e.g., cross-border transport and processing).

<sup>1</sup> RHIPTO, INTERPOL and GI (2018) World Atlas of Illicit Flows. This figure includes proceeds for: forestry crime, illegal mining, waste trafficking, the illegal wildlife trade, illegal extraction and theft of oil, and crimes associated with illegal fishing.

These challenges are compounded by: (i) limited coordination between anti-money laundering and counter-terrorist financing (AML/CFT) authorities, such as financial investigators and supervisors, and actors implementing environmental crime and protection policies, and (ii) a lack of powers or resources for law enforcement to investigate and trace the proceeds from environmental crime. Further, in some countries there is insufficient societal awareness and political will to follow the money for environmental crimes.

The FATF has focused on ML from environmental crimes as a priority area since 2019. In 2020, FATF published a report on money laundering risks from the illegal wildlife trade which calls on countries to review their risk exposure to this illicit trade. (FATF, 2020<sup>[3]</sup>) Under its two-year German presidency (2020-2022), the FATF made it a priority to further strengthen understanding of the scale and nature of laundering from environmental crimes more broadly, and to share good practices on disruption tools. This work also builds on FATF's two past reports on money laundering risks from the gold trade (FATF, 2015<sup>[4]</sup>) and diamonds (FATF, 2013<sup>[5]</sup>) respectively, as well as a study by an FATF style regional body on ML and TF Linked to the Extractive Industry in West Africa (GIABA, 2019<sup>[6]</sup>).

Ensuring access to banking and other financial services is vital for any efforts to combat money laundering. The FATF is aware that several natural resource-rich jurisdictions face issues of access to banking, including for broad segments of their population. These jurisdictions are often in regions that rely heavily on correspondent banking relationships to ensure access to global financial markets. This FATF report recognizes that the same populations that have difficulties to banking services, will undertake legitimate activities that impact the environment as a means of livelihood and family income.

The UN, G7, G20 and other international bodies have recognized the need to address financial flows from environmental crimes. In December 2019, the UN General Assembly Resolution 74/177 of 18 called on all Member States to criminalise illicit trafficking in protected species of wild fauna and flora and other crimes that affect the environment, such as trafficking in timber, precious metals, stones and other minerals, involving organized criminal groups as serious offences (i.e., thereby criminalizing laundering of such crimes)<sup>2</sup>. The need to prevent and tackle money laundering arising from environmental crime was further reiterated in 2019 in the UN Secretary General's *"Roadmap for Financing the 2030 Agenda for Sustainable Development,"* which calls for accelerated action in targeting combatting illicit financial flows, money laundering and environmental degradation. (United Nations, 2019<sup>[7]</sup>)

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<sup>2</sup> (United Nations, 2020<sup>[15]</sup>) A "serious crime" in the UNTOC is defined as criminal conduct subject to at least four years of prison.



## 1.2. Objectives of this Report

This FATF report intends to:





1. Take stock of the current methods that criminals are using to launder their gains from environmental crimes, and the measures that countries are taking to respond.
2. Enhance national authorities' and private sector awareness of the scale and nature of money laundering risks arising from environmental crimes and good practices that they can take to combat them.
3. Identify priority actions at the national and international level to help combat criminal gains from environmental crimes, including potential regulatory or policy considerations.

## 1.3. Relevance of FATF Standards

The FATF Standards currently provide a useful framework for countries and the private sector to address money laundering from environmental crimes.<sup>3</sup> The graphic below provides examples of some of these requirements, which all countries in the FATF Global Network have committed to implement.

**Figure 1.1. Relevance of FATF Standards for Combatting Environmental Crimes**

The FATF Standards require countries to:

	Criminalise money laundering for a range of environmental offences.	(FATF Recommendation 3)
	Identify and assess their money laundering and terrorist financing risks across crime areas, and to take steps to mitigate these risks.	(FATF Recommendation 1)
	Ensure that the private sector is aware of ML/TF risks, and that they introduce preventative measures, such as reporting suspicious financial transactions. Of particular relevance for this study, these obligations extend to, among others: banks, dealers in precious metals and stones, lawyers and trust and company service providers (TCSPs) when carrying out financial transactions.	(FATF Recommendations 9 – 23)
	From the law enforcement perspective, countries should have sufficient powers to investigate, trace and confiscate criminal assets across crime areas.	(FATF Recommendations 29-31)

Note: The FATF obligations apply when precious metals and stone dealers engage in any cash transaction with a customer equal to or above USD/EUR 15,000.

<sup>3</sup> The FATF Standards identify environmental crimes as one of the designated categories of crimes for money laundering. This means that countries should criminalise a sufficient range of environmental crimes for ML in line with their risk environment.

### 1.4. Scope and Definitions

While there is no universal definition of environmental crime, it generally refers to criminal offences harming the environment.<sup>4</sup> This report focuses on money laundering from select environmental crimes, which include **illegal logging, illegal land clearance, illegal mining and waste trafficking** due to the significant criminal gains involved, and their convergence with other serious crimes. Nevertheless, the project team has taken an inclusive approach in defining the scope of each of these crimes to recognize differences in their interpretation across countries.

**Illegal logging** includes the harvesting, processing, transporting, buying, or selling of timber in contravention of domestic and international laws.

**Illegal land clearing** refers to the illegal acquisition and clearing of land either for farming, building or real estate speculation.

**Forestry crime** is an umbrella term to describe criminal activity in the forestry sector covering the entire supply chain, from harvest and transportation to processing and selling, including illegal logging and land clearance.

**Illegal mining** refers to mining activity that is undertaken without state permission (in absence of land rights, mining licenses, and exploration or mineral transportation permits), or mining activity with state permission obtained through corruption.

**Waste trafficking** includes the illegal export and/or illicit disposal of electronic waste (e-waste), plastics, and hazardous substances, among others.

The FATF recognizes that other environmental crimes such as those associated with illegal, unregulated and unreported fishing or illegal carbon trading also generate significant gains. However, these activities are not included within the scope of this report to keep the report sufficiently focused. Similarly, an earlier FATF report covered money laundering from the illegal wildlife trade; this report therefore does not address this issue.

This report focuses primarily on the illicit flows generated by the illegal extraction of the primary commodity - for example, the illicit timber, or precious metals and stones. In the case of waste trafficking, the report focuses primarily on how criminals make a profit by illegally trading and disposing of waste. The report does not focus on the proceeds generated from secondary commodities, such as produce developed on land cleared by illegal deforestation (e.g., soya, beef, palm oil), although FATF recognizes that these are important drivers of such crimes.

Finally, while there is evidence that armed groups and terrorist organizations do, to varying extents, rely on certain environmental crimes to support and finance their operations, this report is focused on the money laundering threats posed by environmental crimes, rather than the human security or terrorist financing risks.<sup>5</sup>

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<sup>4</sup> This definition draws in part on work by other international bodies, including UNEP.

<sup>5</sup> The fact that this report does not focus on these issues in detail does not diminish their significance, nor preclude further work by FATF on these areas in the future.

### **Box 1.1. What distinguishes between the legal and illegal trade for waste, logging and mining?**

There are significant legal markets for waste management, logging and mining, including for precious metals and stones.

These activities often become illegal when: (i) undertaken without state permission, (ii) when contracts and concessions are secured through corruption or intimidation, (iii) when services involve fraud (e.g., false treatment of hazardous waste), and (iv) for logging/mining, when extraction contravenes agreed terms, such as quotas or other requirements. Such illegal activities can have significant impacts on the health and sustainability of local populations and ecosystems.

Often criminals rely on the legal market in environmental goods to launder illegal acquired products and profits. This can even happen to the extent that illegal products surpass those in the legal sector, such as gold and timber. Countries have signed up to several international treaties to limit the illegal trade in protected flora, precious metals and stones and hazardous waste. For example, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement that sets the global standards for the regulation of trade in endangered animals and plants (including wood). Similarly, the Basel Convention is an international treaty designed to reduce the movements of hazardous waste between countries, and particularly from developed to developing countries. These international agreements are implemented through domestic laws and regulations to facilitate legal, sustainable and traceable trade, whilst preventing and addressing illegal trade.

Source: UNODC/RHIPTO.

## **1.5. Methodology**

Experts from Canada, Ireland and UNODC co-led this study. In addition, the following countries have supported this work as part of the project team: Argentina, Brazil, the People's Republic of China, Costa-Rica, Finland, Germany, Indonesia, Ireland, Italy, Madagascar, Netherlands, Norway, Peru, Singapore, South Africa, Turkey, United Kingdom, United States and Zimbabwe. The Project Team also benefitted from inputs from observers and international organisations including the CITES Secretariat, European Commission, the Egmont Group, the International Monetary Fund, the Organisation of American States- Department against Organized Transactional Crime, the Organisation for Economic Co-operation and Development (OECD), the World Bank Group and the World Customs Organisation.



The findings for this study are based on:

- A review of existing literature and open-source material on this topic to further narrow the scope of this FATF report, including identifying specific environmental crimes to focus on, based on size and complexity.
- A request to the FATF's Global Network of over 200 jurisdictions for money laundering cases related to environmental crimes. The project team also circulated a questionnaire covering: country perceptions of risk, national laws and powers for money laundering and environmental crimes, asset recovery and international cooperation. In total, the project team received inputs from around 45 countries.
- Two workshops on the side-lines of the FATF's virtual Joint Expert's Meeting in November 2020, including inputs from public and civil society experts on money laundering trends and challenges across environmental crimes.
- Two virtual consultations in March 2021 with experts from the private sector and civil society to identify indicators of suspicious financial activity for illegal logging, illegal mining and waste trafficking<sup>6</sup>.

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<sup>6</sup> This includes inputs from the United for Wildlife Financial Taskforce, representatives of the representatives of global banks and the Wolfsberg Group, the Jeweler's Vigilance Association, the London Bullion Market Association, alongside inputs from the following NGO representatives: Conflict Awareness Project, Environmental Investigation Agency (EIA), Global Financial Integrity, Igarape Institute, Rainforest Action Network, RHIPTO, Royal United Services Institute for Defence and Security Studies (RUSI), Sherpa, The Sentry, TRAFFIC, and World Resource Institute.



## Chapter 2. OVERVIEW OF FINANCIAL FLOWS FROM ENVIRONMENTAL CRIME

### 2.1. Chapter Highlights

Estimates of the scale of financial flows from environmental crimes vary considerably but evidence suggests that proceeds account for hundreds of billions of dollars annually impacting all regions. With the exception of waste trafficking, environmental crimes generally occur in resource-rich developing and middle-income countries, with proceeds coming from larger, developed economies.

Some criminals specialise in one or more environmental crimes, and rely on specialized networks to move the products and facilitate the financial flows. These networks can vary in complexity and range from cash couriers to networks of front and shell companies to move funds. However, environmental crime can also form a part of a broader criminal enterprise engaged in diverse criminal activities. Such groups may engage in environmental crimes, alongside others, such as human trafficking, drug trafficking, corruption and tax evasion. In these instances, the financial flows generated by environmental crime would be integrated within the larger criminal network.

These networks are enabled by corruption, and exploit weak regulatory oversight in environmental resource chains to facilitate their crimes. One of the key themes across environmental crimes is the reliance by criminals on “comingling” (i.e., mixing illegal logs, precious metals and stones, and waste products with their legal counterparts) early in supply chains. This practice makes it difficult to distinguish between legitimate and illicit financial flows which often requires in-depth co-ordination between AML authorities and specially trained environmental investigators, both, domestically as well as across borders. An important role is played by politically exposed persons (often associated with bribery and corruption), the use of complex corporate structures, and intermediaries (e.g., accountants, lawyers, etc.). The use of

offshore jurisdictions, to facilitate placement and/or layering of funds, also underscores the importance of identifying the underlying beneficial owners<sup>7</sup>.

## 2.2. Scale of Financial Flows: Global Estimates

Despite several estimates by various international bodies, it is difficult to know the exact scale of illicit proceeds from environmental crimes. Not all countries collect data by crime type and data that is available is not always comparable. While this is the case for many crime areas, differences in national definitions of environmental crime pose additional challenges for quantification.

Few countries have conducted ML risk assessments to consider their position in the global environmental crime supply chain, and therefore it is not easy to paint an accurate picture of the scale of criminal markets. The size and sophistication across all three crimes included in this report may vary from individual criminals or companies, to sophisticated and well-integrated global criminal enterprises. Most of the proceeds, particularly with illegal mining and illegal logging, are believed to eventually find their way into the international financial system.

**Figure 2.1. Illegally cleared rainforest, often for illegal land use**



### 2.2.1. Forestry Crime

Within environmental crimes, forestry crime (including illegal logging and illegal land clearing) seems to be the most significant by value of criminal gains. INTERPOL's *2018 World Atlas of Illicit Financial Flows* finds that forestry crime generates an estimated USD 51 to 152 billion annually. Beyond the illicit gains, forestry crimes have a

<sup>7</sup> Offshore simply means basing and moving funds in a third-party jurisdiction. However, jurisdictions used to establish corporate structures that facilitate environmental crimes have been observed by the non-profit sector to exist in Asia, Africa, Caribbean Basin, Middle East and Europe.

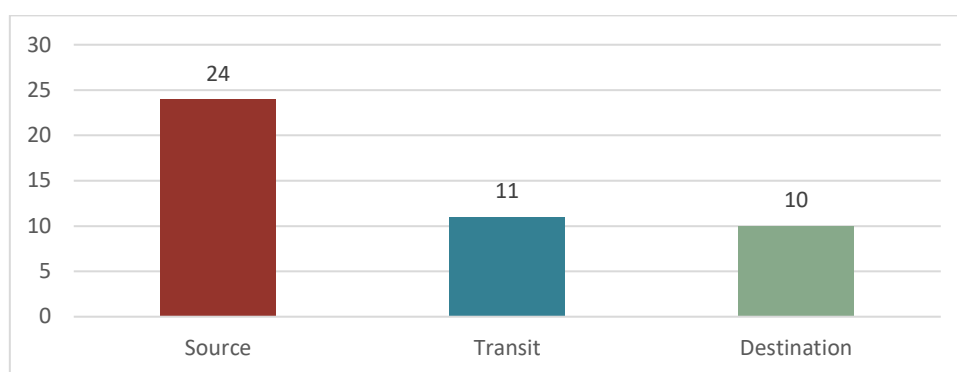


significant negative impact on land use and tenure, human habitation and sustainable livelihoods and cause climate, land, and asset degradation.

The World Bank estimates that governments lose between USD 6 and 9 billion annually in tax revenue from illegal logging alone. (World Bank, 2019<sup>[8]</sup>) Countries can also suffer significant further economic losses from the environmental damage caused by forestry crimes. For example, in Papua New Guinea, recent studies and analysis conducted with UNODC estimate that illicit proceeds generated from forestry crimes exceed the funds earned in the legal timber market<sup>8</sup>.

Based on the country responses for this study, forestry crimes occur across the globe, but appear concentrated in primary rainforests in Central and South America (including in Peru, Colombia, Ecuador, and Brazil); central and southern Africa (including the Democratic Republic of Congo, the Gambia, and Great Lakes region<sup>9</sup>); Southeast Asia (Indonesia, Papua New Guinea, Myanmar); and parts of Eastern Europe (including Russia). Illegally logged wood is also transported through these regions to destinations in East Asia, North America and Western Europe.

**Figure 2.2. Country Profiles for Forestry Crime**



Note: Of the countries that provided questionnaire responses for this study, [24] jurisdictions considered themselves source countries for forestry crimes, [11] as transit jurisdictions, and [10] as destination jurisdictions. These options are non-exclusive, and jurisdictions may consider themselves as both a source and transit jurisdiction, for example.

National authorities use a range of information sources, including credit reports, bank transaction data, export data, and other payment information to identify and estimate illicit financial flows affecting their jurisdiction. However, the availability of increasingly diverse ways of moving money outside the banking system results in illicit financial flows being understated.

<sup>8</sup> Similarly, in the case of the Gambia, estimated illegal exports of rosewood (about US\$100 million, as declared on import) are worth about half of the country's total exports, about 10% of GDP, and more than 20 times the budget of the Ministry of Environment, Climate Change and Natural Resources. (UNODC, nd<sup>[16]</sup>)

<sup>9</sup> This typically refers to Burundi, Malawi, Kenya, Uganda, Rwanda and the Democratic Republic of Congo.

**Figure 2.3. Deforestation due to gold mining wipes out tropical rainforests and contaminates soil with heavy metals**



### 2.2.2. *Illegal Mining*

Illegal mining generates an estimated USD 12 to 48 billion a year in criminal proceeds, with illegally mined gold and diamonds considered to be the most significant source materials. (RHIPTO, INTERPOL and GI, 2018<sup>[9]</sup>) Illegal mining and related environmental crimes occur in all mineral supply chains, in both large-scale mining (LSM) and artisanal and small-scale mining (ASM)<sup>10</sup>. Law enforcement, NGOs (non-governmental organisations) and industry representatives are also aware that recent international increases in gold prices have accentuated the problem and made illegal mining of gold more attractive.

“Jurisdictions in every region identify as transit points for financial flows from illegal mining, underscoring the complexity of the money trail.”

Unlike many other environmental crimes, criminals use the mining sector to both generate criminal proceeds through illegal mining, and to launder proceeds from other crimes using the cash-intensive nature of the industry. The FATF Standards address this risk in part by extending AML/CFT requirements to dealers in precious metals and stones. However, it is important to recognize that precious metals and stones, in their raw (or unprocessed) form, carry an inherent value. As a result, they act as a form of currency that allows for trade/payment for goods outside the formal financial sector. Jurisdictions that play a vital role as a source, transit, or destination

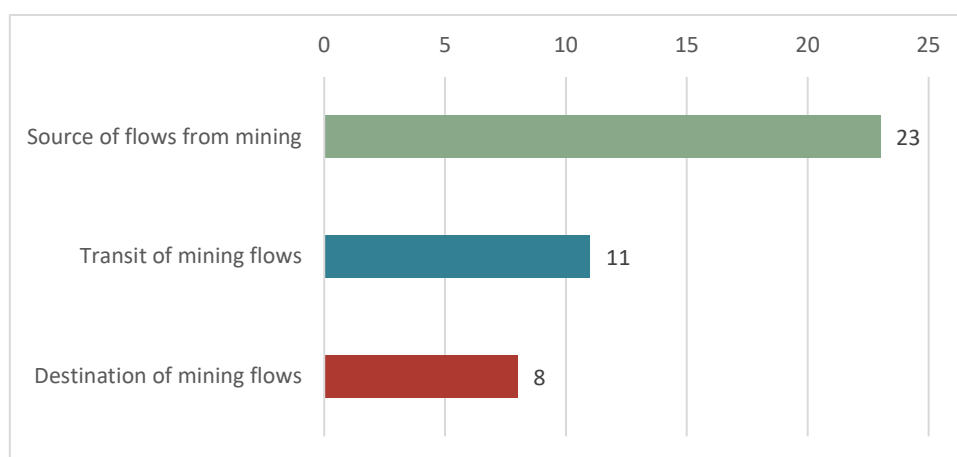
<sup>10</sup>. See relevant OECD reports:  
<http://mneguidelines.oecd.org/trendsin stakeholderreportingmineralsupplychains.htm>

for these kinds of resources, could consider defining these goods as Bearer-Negotiable Instruments (to strengthen awareness of cross-border movement).<sup>11</sup>

Several countries have attempted to quantify the illicit financial flows generated by illegal mining in their jurisdiction. For example, in Peru, the value of illegal gold production grew from an estimated USD 84 million in 2005 to over 1 billion in 2014. While there was a subsequent decrease in flows in 2015, the authorities consider that the threat from these flows continues to increase based on a marked increase over the last three years in suspicious transaction reports (STRs) that identify illegal mining as a predicate offence.

Based on questionnaire responses, South America and Africa are the principal sources of illegal mining activity with materials primarily destined for large precious metal and stone markets located globally. However, these regions also possess other mined metals that are important in global production. These mined metals are often moved to centralized points (e.g., refiners, smelters, etc.) in global markets.<sup>12</sup>

**Figure 2.4. Country Profiles for Illegal Mining**



Note: Of the countries that provided questionnaire responses for this study, [23] jurisdictions considered themselves source countries for illegal mining, [11] as transit jurisdictions, and [8] as destination jurisdictions. These options are non-exclusive, and jurisdictions may consider themselves as both a source and transit jurisdiction, for example.

Jurisdictions in every region are transit points for illegal mining financial flows, underscoring the complexity of the money trail and supply chains for illegally mined materials. This can be attributed to the complexity of global supply chains, the role

<sup>11</sup> Bearer negotiable instruments (BNIs) includes monetary instruments in bearer form such as: traveller's cheques; negotiable instruments (including cheques, promissory notes and money orders) that are either in bearer form, endorsed without restriction, made out to a fictitious payee, or otherwise in such form that title thereto passes upon delivery; incomplete instruments (including cheques, promissory notes and money orders) signed, but with the payee's name omitted.

<sup>12</sup> With respect to Gold, the London Bullion Market Association identified China, Hong Kong, India, Japan, Russia, Singapore, South Africa, Switzerland, Turkey, United Arab Emirates, the United Kingdom and United States of America as major centres. These jurisdictions operate important market infrastructure for bullion trading activities including trading exchanges, storage facilities, processing, recycling and refining facilities; and consumption.



that transnational organized crime groups play in these activities, and the methods used by these actors to commingle illicitly mined materials with licit materials. As a result, it is not surprising that illicit financial flows associated with illegal mining are global in nature.

**Figure 2.5. Illegal tyre dumping in nature, which can cause environmental degradation, releasing toxins into the soil as they decompose**

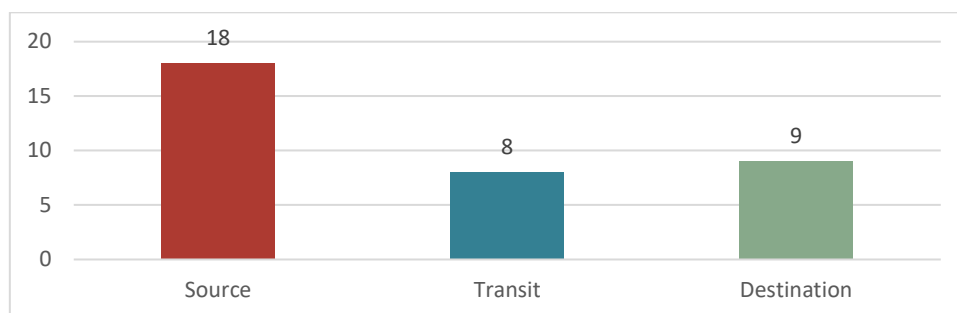


### **2.2.3. Waste Trafficking**

While illicit waste trafficking generates an estimated USD 10-12 billion annually, the clean-up costs for governments from such crimes are often far more significant, as well as generating threats to public health and safety. Within waste trafficking, countries highlighted the particularly organized nature of illegal trade in hazardous waste. Hazardous waste includes e-waste containing cadmium or lead, arsenic compounds or asbestos, or residue from processes in the chemical industry.

“Criminal syndicates play a significant role in waste trafficking in many advanced economies.”

Based on the responses received, North America and Western Europe are the principal source and transit countries for illicit waste trafficking, while parts of sub-Saharan Africa, Southeast Asia, and Central and South America appear to be the primary destinations. However, in some instances, there is no destination country, when the trafficked waste is simply be disposed of locally, or at sea.

**Figure 2.6. Country Responses for Self-identified Roles in Waste Trafficking**

Note: Of the countries that provided questionnaire responses for this study, [18] jurisdictions considered themselves source countries for illicit waste trafficking, [8] as transit jurisdictions, and [9] as destination jurisdictions. These options are non-exclusive, and jurisdictions may consider themselves as both a source and transit jurisdiction, for example.

Criminal syndicates play a significant role in waste trafficking in many advanced economies. This includes organized crime groups owning or operating legitimate front companies in waste management, but which do not operate as stated. Instead, they often use sub-standard disposal or storage processes. These companies may engage in fraud to secure contracts for waste disposal and then illegally dumping, resulting in illicit proceeds – while also costing the government millions in clean-up costs.

## 2.3. Characteristics and Geographic Trends of Illicit Financial Flows

### 2.3.1. Characteristics of Waste Trafficking Flows

Countries generally provided fewer inputs on waste trafficking for this study than for illegal logging and mining. However, the inputs received suggest that financial flows from waste trafficking may be transnational, regional or even domestic. In some instances, they are transnational when it involves the illegal export of containers filled with hazardous or non-compliant waste, mis-classified as recycled materials and often shipped to developing or middle-income countries. However, in other cases, the waste may never leave a jurisdiction or region, and is disposed of/stored illegally. For this reason, compared to illegal logging and illegal mining, waste trafficking and the associated financial flows seem to be more regional, and even domestic.

“Unlike extracted materials from forestry or mining, waste has a **negative value.**”

Like the other crimes examined in this study, the proceeds from waste trafficking are often comingled with gains from legal waste trade. Further, the criminal groups perpetrating it on a large scale will need to be capable of transporting massive quantities of physical materials.

The characteristics of waste trafficking present unique challenges for disruption. Unlike extracted materials from forestry or mining, waste has negative value. This liability provides businesses with an incentive to dispose of its waste as cheaply and easily as possible, whether legal or illegal. This provides criminal groups with many potential customers and opportunities. As there are few immediate financial incentives for jurisdictions to combat illicit waste trafficking, and as potentially

significant repatriation costs are borne by governments, there is often little motivation for jurisdictions to tackle this illegal activity. While waste trafficking may be more difficult to detect and investigate through financial flows, the importance of parallel financial investigations should not be underestimated, and are a vital tool to identifying the larger criminal networks.

One method of bypassing regulations in the waste sector is to simply declare waste, such as electronics, as second-hand goods which are simply dumped or else exported to destination countries where the shipping containers simply remain indefinitely without a collection or disposal plan. Similarly, the export of household waste is rarely permitted; however, it is frequently comingled with toxic chemicals or other hazardous waste and dumped domestically as inspections tend to be limited.

Some companies bearing a legitimate permit for handling waste may import much larger amounts of waste than their permit allows and either export it or simply dispose of it. This method appears to be most common in Europe, due to the lack of internal border controls.

Further to this, some otherwise legitimate enterprises may employ illegal methods of waste disposal as a cost saving measure. The funds that would have been spent by the company on (more expensive) legal waste disposal instead, serve to increase the company's profit margins. While the unique characteristics of waste can present some challenges,<sup>13</sup> this should not inhibit country efforts to investigate and prosecute for money laundering and related offences.

### **2.3.2. Characteristics of Illegal Mining and Illegal Logging Flows**

Flows from illegal mining and illegal logging are more similar than those from waste trafficking. Therefore, they are considered concurrently in this section. Criminals involved in these activities rely on similar techniques to hide financial flows from other predicate crimes (e.g., trafficking of guns and drugs, etc.). This means using informal and formal financial sectors, moving money through various accounts and financial institutions and the use of intermediaries that may, or may not, be associated with the original criminal activity. The overall intent is a deliberate effort to create as many layers as possible between the commission of the environmental crime and the account holder where the funds are placed following the sale of the illegal good.

As noted in other FATF reports, intermediaries such as lawyers, accountants and trust and corporate service providers play an important role in enabling illicit financial flows, and illegal logging and mining is no exception. However, intermediaries such as freight forwarders, insurers, and customs brokers also play a significant role. Further, it is important to consider the role of freight forwarders and customs brokers when examining the role of trade-based money laundering (TBML) and trade-based fraud in environmental crime, as discussed later in this report.

In some resource rich jurisdictions, the regulatory oversight of resource extraction, and the issuance of concession licenses can be opaque and highly exposed to corruption. These types of crimes are often committed in remote areas where the presence of authorities for monitoring and enforcement can be limited. Further, when conducted in border regions, it can be easier for criminals to conceal illegal smuggling

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<sup>13</sup> If a company commits a serious offence by illegally disposing or treating waste, any proceeds generated for this contract would be criminal gains, which may need to be concealed or laundered.

for labour as well as cash couriers for concealment of cash flows. To ensure that the product can physically leave the country, organized networks will use corrupt custom officials or exploit porous points in the border to through which export the goods.

This in turn creates a permissive environment that enables the issuance of concession licences to persons connected to the issuer. Such corrupt public officials are key to facilitating complex money laundering schemes. Consequently, it is important to know who the true beneficial owner is, and appropriately screen for politically exposed persons (PEPs).<sup>14</sup>

As with other crime areas, criminals will exploit offshore jurisdictions with less developed AML/CFT standards. This is a form of arbitrage that allows actors to conceal payments and gains from environmental crimes more easily.

The below graphic demonstrates how complex corporate structures with connections to PEPs, or their family members, present challenges for combatting illegal mining and illegal logging.<sup>15</sup> These PEPs will often act as the local representatives for multinational mining ventures or as nominee directors of corporations.

As shown in the graphic below, criminals often establish companies operating in source countries for precious metals and stones (e.g., gold, coltan, and other minerals) that have varying degrees of association with a subsidiary or shareholding companies located in a third-party jurisdiction. This subsidiary is often further separated from the ultimate parent (see country A below).

Funds are then transferred through third countries, including offshore centres, to hide the beneficial owners (see Country B). These criminal actors exploit the low level of communication between jurisdictions, and the weaker controls in place to determine beneficial owners and identify suspicious transactions. In addition to the challenges in separating legitimate and illicit financial flows due to comingling, the placement of funds in a different jurisdiction from where then underlying crime was committed creates an additional barrier to identification and prosecution while also facilitating a secondary crime of tax evasion.

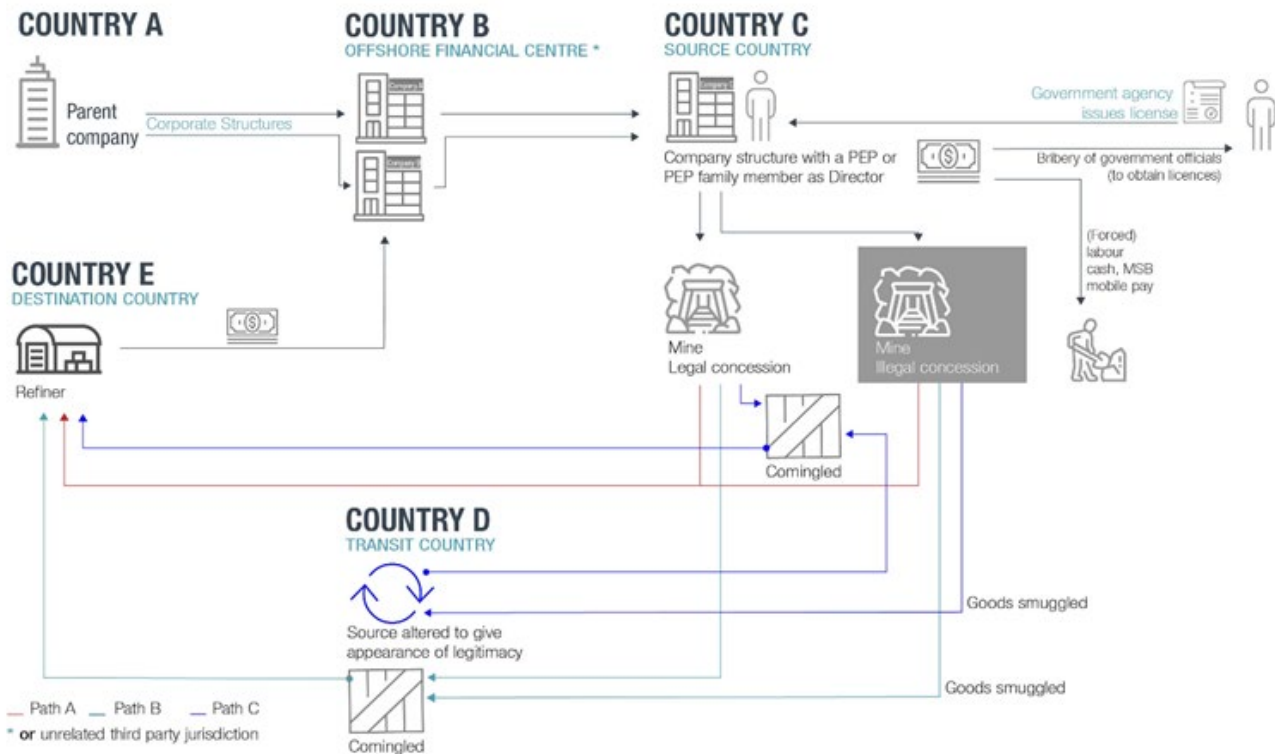
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<sup>14</sup> There have been efforts undertaken by FATF partners, like the World Bank, to help resource rich regions understand this risk by developing guidance to strengthen risk assessments and the screening of PEPs in an effort to combat both environmental and wildlife crime.

<sup>15</sup> These cases were most dominantly seen in Africa. There was some evidence that they played in a role in South America as well, however as noted in Figure 2, other means exist as well.



Figure 2.7. Example of Criminal Supply Chain for Illegal Mining



While this study observed a convergence in financial flows from environmental crime and other crime areas, it also identified specialized networks and supply chains (particularly with illegal mining and illegal logging). For example, one such supply chain is illegal mining of gold in the Democratic Republic of Congo which is then moved into neighbouring jurisdictions like Rwanda and Uganda (through smuggling networks) for export to a refiner in the Middle East or for onward smuggling to Asia. The payment would then be made either by the intermediary to the smuggler, or would come later once the intermediary got the gold to a refiner in the Middle East.<sup>16</sup> Where there is onward smuggling to Asia, criminals often rely on informal remittance networks such as hawalas, in an effort to avoid the scrutiny of the formal financial sector. (IMPACT, 2019<sup>[10]</sup>)

Regardless of the product, those entities involved in its refining may not be fully aware that the product was sourced illegally. While the aforementioned example highlights the flows faced in the gold market, it is only an example of networks that exist and support criminal activity. It is reasonable to assume that other precious metals, such as copper, coltan and cobalt, may follow similar trends.<sup>17</sup>

<sup>16</sup> It is worth noting that similar patterns have been observed in South America where gold sourced from Peru and Venezuela is moved through neighbouring countries in the continent or the Caribbean Basin.

<sup>17</sup> It is important to remain aware that the movement of precious stones and metals is undertaken for legitimate purposes. However, observed pathways for:

In the case of illegal logging and illegal mining, one of the common characteristics of financial flows is the significant movement of funds towards rural areas with cash based economies instead of into urban/financial centres. This is inconsistent with financial flows associated with formal or foreign direct investment and the result of payments for labour and equipment associated with illegal logging and illegal mining. This could result in financial flows from large financial institutions towards rurally integrated regional financial institutions, and onward through unregulated and regulated Money Value Transfer Services (MVTs) to compensate workers in the area (many of whom may not have registered bank accounts) and to procure necessary equipment for extraction and transport out of the rural zones. Those labourers employed to undertake the illegal logging or illegal mining are paid in cash, or they may elect to send the money to a third party (e.g., family) through an MVTs network for a fee.

Overall, in the mining sector there appears to be a prevailing view that small scale (often referred to as ‘artisanal’) miners represent the largest segment of risk, and consequently have challenges being integrated into the formal financial sector. This presents an opportunity for criminal or informal actors to enter into the mining sector to finance, take over, or extort these kinds of operations which are often the sole source of financing for small-scale actors.

However, it is equally important to point out that large-scale mining operations can present an equivalent, but distinct set of risks. As noted by the Organisation for Economic Co-operation and Development (OECD), the risks presented by larger operators reflect the scale of their operations and their complexity. Large scale mining operations present a greater risk of engagement in corruption or extracting resources from illegal concessions as well as tax evasion through complex corporate structures in jurisdictions outside the one in which the parent company is based. (OECD, nd<sup>[11]</sup>)

## 2.4. Regional Trends

In **South America**, criminals involved in environmental crime can be a part of a broader criminal ecosystem, drawing on existing smuggling and laundering networks used for other crimes that will make use of numerous transit countries, bulk cash shipments, corruption and trade fraud as well as supported by a web of complex corporate structures. Consultations demonstrated that criminals in the South American region often establish corporate entities in the Caribbean islands that

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**Diamonds:** Russia, Botswana, Canada, DRC, Australia and South Africa are top source jurisdictions for diamonds; however, the Jewellers Vigilance Association indicate that companies in Thailand and India are the primary destinations for cut and polishing.

**Cobalt:** The DRC mines over half the world’s cobalt, with companies in China playing the dominant role in refining.

**Copper:** Chile, Peru, China and DRC are the major mining countries for copper. Companies in Japan and Chile do play an important role in smelting, however the world’s primary smelter of copper is China.

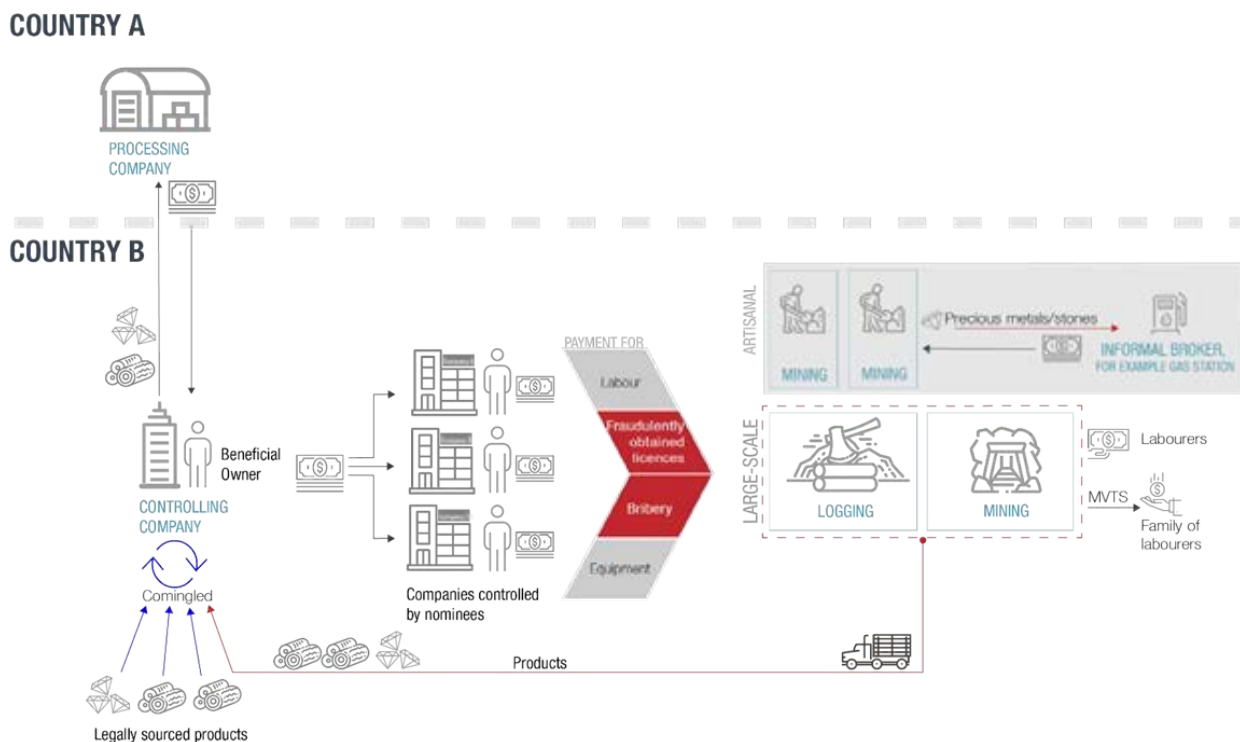
Data source [WMP 2015 2019.pdf \(bgs.ac.uk\)](#) and supported by: <https://iea.blob.core.windows.net/assets/24d5dfbb-a77a-4647-abcc-667867207f74/TheRoleofCriticalMineralsinCleanEnergyTransitions.pdf>

**Coltan:** The DRC mines approximately 80% of the world’s coltan and is believed to be smuggled out to neighbouring jurisdictions, like Rwanda, for export. ([coltan | Earth Sciences Museum | University of Waterloo \(uwaterloo.ca\)](#))

directly interface with prospective buyers involved in the refining of the product. All funds would then pass through these corporate structures. These funds would either remain in these transit jurisdictions as a means of placement or would find their way back to the source country.

However, as shown in Figure 1.5 below, one jurisdiction in South America observed that flows move in a manner that did not involve offshore corporate structures. This jurisdiction noted that the product and funds would move directly from the source country (country B below) to the destination (country A) and flows returned directly to the source country. While there was not an offshore component, it was no less complex as the funds were obscured through a web of domestic shell companies that had been established by Designated Non-Financial Business and Professions (DNFBPs), (primarily accountants) without identifying the true beneficial owner. These DNFBPs would identify a beneficial owner for the register, but the named individual on the registry would be a nominee with only a loose connection to the ultimate underlying owner. These efforts were made possible by the fact that the DNFBPs and business registries did not have the capacity or appreciate the importance of the information and how they could be enabling money laundering associated with environmental crime.

**Figure 2.8. Example of Criminal Supply Chain for Illegal Mining and Logging**



In both **Africa** and **South America**, it was noted that many individuals employed in natural resource extraction are likely to operate outside the formal financial system (e.g., unbanked). Flows would move from major financial centres to rural areas to support cash payments.

The Republic of Congo noted that they have observed mobile payments as a means of compensation. Further, South Africa noted the use of pre-paid and gift cards as tools

used in the illegal wildlife trade, and believe it is possible that they are used to facilitate other environmental crimes, especially given the interrelationship that exists. This study highlights the key role of the formal banking sector to move and transfer financial flows associated with environmental crimes. Consultations have shown that large financial institutions with a global presence will provide financial services in some regions to entities and individuals involved in forestry and mining. However, there is a preference to maintain banking relationships with the larger actors involved in this activity. Civil society has observed a growing trend for international banks to view the provision of financial services to individuals or small to medium sized enterprises involved in business sectors with an environmental impact (e.g., mining of any level, timber, etc.) as outside their risk appetite.

This has created an opportunity for smaller and regional financial institutions to step in and provide access to banking services for these types of businesses. However, this opportunity may also create a vulnerability that could potentially be exploited by illicit actors. Smaller financial institutions have fewer resources to dedicate to AML/CFT controls relative to their larger counterparts. This makes it less likely that they can detect or thoroughly investigate illicit activity. Further, the exit of larger financial institutions and entry of smaller and/or regional institutions have the added benefit for illicit actors, of creating additional layers between the originator and the beneficiary. Nesting the activity within a correspondent banking relationship obscures the ultimate beneficial owner and decreases the risk of transactions associated with environmental crime being identified. It has also created an opportunity for the entry of larger commodity trading firms and trade finance investment funds, which may have limited AML/CFT obligations.

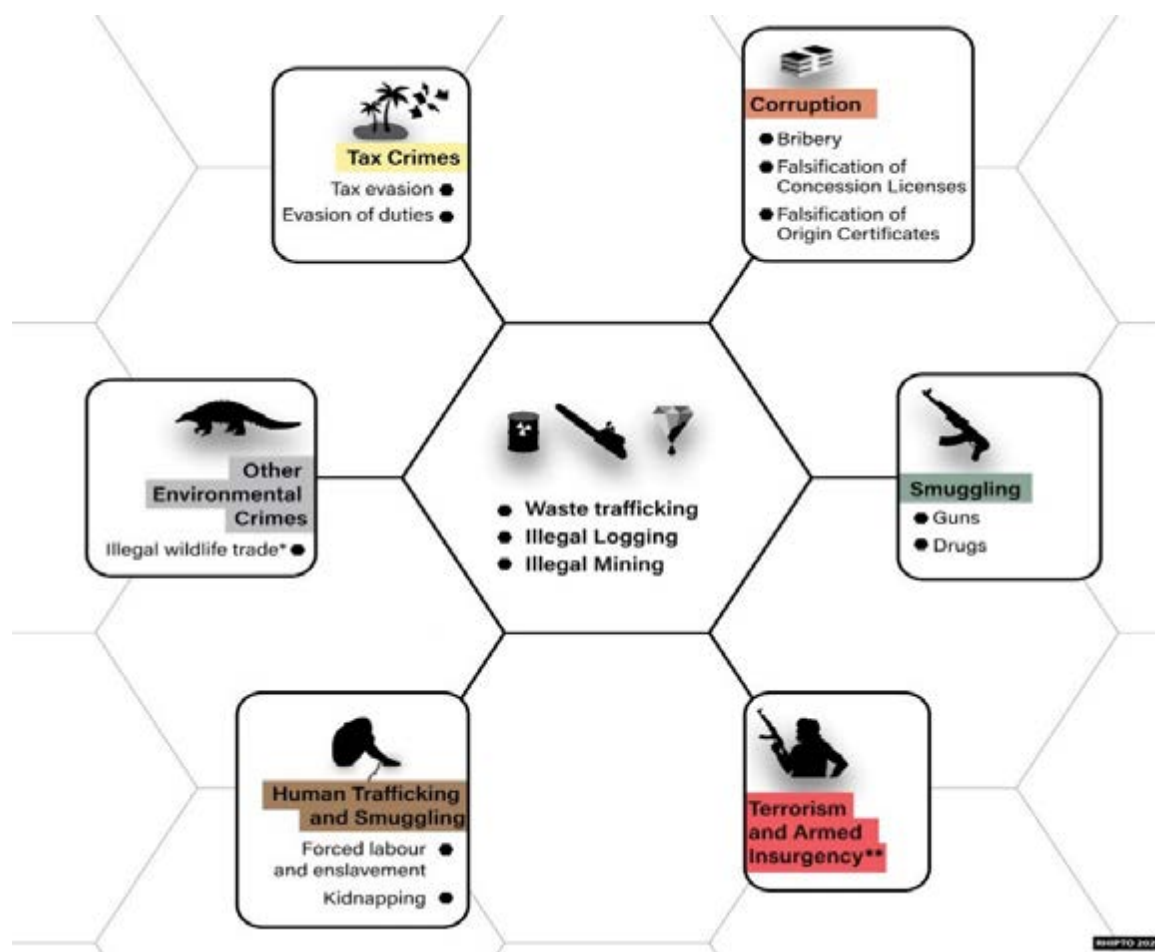
Furthermore, based on technical assistance in Southeast Asia and South America on illegal logging investigations, the UNODC has observed that most cases involve the use of the banking sector and DNFBPs. Consultations and geological data suggest that both the Asian and Middle East regions play a significant role at the intermediate stage of production and refining of precious metals, stones and timber. Following this, these products are distributed broadly to destination markets in **Asia, Europe, and North America**.

## 2.5. Convergence with other Crime Areas

Environmental crime does not occur in a vacuum and the financial flows it generates can often be associated with other criminal activities. Due to the depth and breadth of these issues, this report does not fully explore all these elements; however, the below figure and case study describe some of the areas of convergence, including reliance on human trafficking for forced labour and support for armed conflict. Further details on the convergence between environmental crime and broader criminality can be found in Annex B of this report.



**Figure 2.9. Possible Convergence across Crime Areas**



Source: UNODC/RHIPTO.

\*For more information, please refer to the FATF paper on Money Laundering and the Illegal Wildlife Trade (FATF, 2020<sup>[3]</sup>)

\*\* While recognized as an important issue, it is not covered in detail in this paper.

**Box 2.1. Case Study: Laundering from Illegal Gold Mining, and other Serious Crimes**

In recent years, South Africa prosecuted 21 individuals for a wide range of offences. These offences included participating in the activities of a criminal enterprise, managing a criminal enterprise, money laundering, theft, acquired, possessed, or disposed and transported unwrought gold or gold bearing material, possession of explosives, illegally trafficking immigrants, and attempted murder.

This group conspired to commit offences pertaining to illegal mining of gold bearing material at a contained, unused level of a mine, as well as the underground selling of the unwrought gold after the extraction processes. During investigations, 16 illegal gold processing plants were discovered which processed gold to the value of USD 6 million. Authorities used cell phone evidence, analysed 3 500 documents which indicated that the criminals sold approximately USD 307 553 of refined gold, used evidence provided by a qualified geologist, and tracked properties and vehicles purchased by one member. These efforts secured convictions on racketeering, money laundering and offences in relation to the Precious Metals Act. A least one member of the group was a former mine worker.

During the police operation, the group detonated an improvised explosive device and “booby trapped” several other areas. Living quarters and personal items were found underground. All accused were convicted on numerous charges as indicated above, including to 15 years’ imprisonment on the Money Laundering charges.

Source: South Africa.





Workers in a gold mine shaft. Deforestation to make way for mining causes catastrophic damage to ecosystems, and un-regulated conditions pose considerable health and safety risks for workers.

## Chapter 3. ANALYSIS OF MONEY LAUNDERING FROM ENVIRONMENTAL CRIME CASES

### 3.1. Chapter Highlights

This study shows that criminals often rely on cash intensive sectors (frequently linked to the export sector) and trade-based fraud to launder proceeds from environmental crimes. In the case of illegal logging and illegal mining, countries identified a heavy reliance on front companies located in offshore centres, third party transactions and complicit intermediaries (lawyers, refiners) to both conceal payments and launder gains.

Due to the irregular financial flows associated with environmental crimes, regional financial centres located in all regions of the world seem to play an important role in making funds available for these illicit activities as well as laundering the proceeds from these crimes. They may also act as trade intermediaries to facilitate comingling, especially for mining goods. Countries did not submit any case with financial investigations involving new technologies (such as virtual assets, or peer-to-peer transactions). However, the absence of case information on the use of new technologies does not mean those criminals are not using such technologies.

### 3.2. Use of ‘Front’ Companies to Co-mingle Illegal and Legal Proceeds

Across many cases reviewed for this study, criminals used front companies to co-mingle gains from illegal mining, logging and waste trafficking into their legitimate business accounts. In many cases these front companies were related to natural resource markets (e.g., logging, mining and waste companies), and engaged in large numbers of transactions with low individual profit margins. The sophistication of such front companies varied from simple schemes with clear anomalies, to sophisticated companies with large legitimate operations. This can present



challenges for law enforcement and the private sector to distinguish between legitimate and illegal activities.

In some cases, criminals relied on front companies in other cash intensive sectors not linked to natural resources. For example, in one case provided by Madagascar (see below), criminals manipulated the prices of the domestic vanilla trade to help integrate the illicit proceeds from rosewood trafficking. One common theme is that such front companies frequently have ties to the import-export sector to facilitate the appearance of legitimate invoices, and payments to suppliers. Similarly, for illegal logging and mining, such front companies typically operate out of rural areas. Other indicators of potential criminality include output that is at lower levels than suggested by the official production capacity, the production capacity of similar companies in their sector, or the number of employees.

### Box 3.1. Case Study: Misuse of Cash-intensive Export Sector to Laundering Proceeds from Rosewood Trafficking

Madagascar is home to two varieties of rosewood that are threatened with extinction. Authorities note that illegal logging is intrinsically linked to corruption and political stability, and that trafficking techniques are becoming increasingly sophisticated, and organized. From 2009 to 2020, the total amount involved in the illicit financial flows identified in 76 cases referred to the court is approximately USD 160 million.

In terms of key payment mechanisms for illegal logging, Madagascar identified a common use of bank transfers, physical transportation of cash (out of Madagascar to country of sellers); and repatriation of foreign currency relating to export earnings. For **money laundering, criminals typically integrate illicit gains with funds from legitimate business (import of basic goods, exploitation, and export of mining products, etc.)**. Specifically, authorities identified laundering from illegal logging through the vanilla sector, which is the main export product of the country, and is very cash intensive. In 2014, individuals would bulk buy vanilla to drive the prices up to conceal co-mingling and integration of criminal gains, presented as legitimate earnings from vanilla. This modus operandi was detected by law enforcement and was verified by prices within the vanilla sector stabilizing after an export ban on rosewood was enforced in 2019.

Source: Madagascar.

### 3.3. Use of Shell Companies to Hide Beneficial Owners

In addition to front companies, cases show that criminals often rely on shell companies to simulate legitimate services and payment linked to forestry, mining or waste markets. For example, in the case provided by Italy below, a criminal network established a waste disposal company with no apparent legitimate business activities. They relied on shell companies located overseas to move funds back and forth under

the guise of invoices for processing their waste. This scheme highlights the importance of regulatory outreach to gatekeepers (e.g., lawyers and trust and company service providers), and identifying the individual beneficial owners behind related companies.

### **Box 3.2. Case Study: Organised Crime Network Operating through Front Company in Waste Sector**

This investigation began with a suspicious transaction report (STR) that described financial flows of a company operating in the metals and waste disposal sector without an adequate organizational structure or any reported economic activity. Other anomalies included: that the previous shareholders had been investigated by the Public Prosecutor in 2015, that the new shareholders had purchased the company at a significantly lower price than the market value and had limited knowledge and skills to operate in the highly regulated industry.

Investigations identified company account statements showing bank transfers, justified as advance payment of invoices by Italian companies active in the same sector that had previously been investigated for tax crimes, illegal metal waste disposal and laundering of the Mafia's illicit proceeds. Some of these companies had been involved in an investigation conducted by the Public Prosecutor of Salerno for criminal association aimed at the international traffic of waste with East Asian countries. Shipping documents were falsified to state that the cargo consisted of goods and raw materials, as opposed to waste.

Analysis by the Italian FIU showed that the beneficial owners of these companies were involved in a wide network of natural persons who exchanged financial flows on prepaid cards and withdrawn cash. This was discovered by spotting that the main debit transactions in the reported company account statements concerned withdrawals of cash and bank transfers arranged in favor of foreign entities. The volume of financial flows involved totaled approximately USD 14.2 million (EUR 12 million).

Source: Italy.

### **3.4. Reliance on Trade-based Fraud and Money Laundering**

Another characteristic across all three environmental crimes is the reliance on trade-based fraud to conceal movement of money across borders. This includes falsification of documentation, particularly as it relates to the import and export of goods, and false invoicing and trade transactions to justify moving money across borders (see case from Italy below). For environmental crimes specifically, this could include mislabelling of hazardous waste or protected wood to conceal their real value. As the FATF has previously explored in its work on trade-based money laundering (TBML), the trend to over or under declare goods being shipped and the use of false descriptions are common threads of both trade fraud and TBML activity. On a large

scale, comparing trade data can provide insights on risk exposure (such as comparing whether a facilities' production matches its declared exports, or another jurisdiction's imports).

The common trend for environmental crimes to comingle legal and illegal goods can create challenges in distinguishing between TBML and trade-based fraud. An individual/group is more likely to undertake the trade-based fraud when seeking to mask the origin of illegally sourced goods by moving them through transit countries with the intent of integrating/comingling them with legitimately sourced goods. For TBML, the primary objective is to use the trade system to clean the proceeds. The complex and significant volume of transactions in the sector can allow criminals to use trade as a guise to move money across countries. In the case below, a Brazilian organized crime group relied on a trade-based scheme to launder proceeds from illegal mining through local hair salons.

### Box 3.3. Case Study: Emeralds, Hairdressers, and Mining

The following is a Brazilian case involving an underground exchange market scheme for emeralds facilitated by shell companies and Trade-Based Money Laundering:

The Brazil FIU received suspicious transaction reports (STRs) that a group of hairdressers in Brazil were transferring funds not in line with their expected financial capabilities from locations outside of their expected business range. The funds received were immediately transferred to natural persons known to be illegal emeralds miners in the northeast Brazil. These hairdressers imported hair through a TBML scheme run by the illegal miners and a professional criminal group, with the criminals invoicing the hairdressers for importing on their behalf.

This discrepancy initiated a closer inspection of the miners and linked the group to a previous investigation had uncovered that some of the miners involved were paid by importers from South-East Asia through a scheme controlled by a network of underground exchange market dealers. It was uncovered that large mining companies in Brazil bought emeralds from illegal miners and exported to South-East Asia using false invoices and other fraudulent export documentation. The miners and mining companies exported the stones directly to the foreign mining companies and were later compensated through the network of underground exchange market dealers. While the case is ongoing, financial flows involved are estimated to be around USD 120 million.

Source: Brazil.

### Box 3.4. Case Study: ML, Waste Trafficking and Tax Audits

Italy detected and dismantled a transnational criminal group perpetrating illicit waste trafficking, tax crimes (false invoicing), money laundering and self-money laundering, originating from a tax audit. Guardia di Finanza carried out the audit on a company operating in the metal scrap industry, which highlighted irregularities in waste origin, accompanying documents and invoices connected. The false invoices summed to USD 68 million. **Proceeds of crime were laundered by simulating false trade transactions with other countries, moved abroad and later repatriated.** Another laundering technique used was to simulate sports sponsorship.

Analysis of 90 Suspicious Transaction Reports (STRs) and 1 report from a foreign FIU helped to identify 44 companies involved in the illicit scheme. The case led to 14 arrests, one of which was an accountant, and 58 reported to the Judicial Authority. USD 9.5 million worth of assets, including real estate, cars, and shell companies were seized. The case is ongoing.

Source: Italy.

### 3.5. Use of Regional and International Financial Sectors

This study finds that criminals are using the formal financial system to launder proceeds from all three environmental crimes. This includes integrating proceeds through third party wire transfers under the guise of payments for goods and services, but also investments and sponsorship. As mentioned above, regional financial centres as well as commodity trading and trade finance firms located in all regions of the world seem to play an important role due to the irregular financial flows associated with environmental crimes. In some cases, the investment was created for shell companies that were registered with national authorities but did not engage in any significant economic activity, further obscuring the ultimate beneficial ownership. In the case below provided by the US, an organised crime network relied on a complicit refiner who bought illegal gold and transferred proceeds back to a cartel based in Chile via wire transfer.

Finally, as with other financial crimes, cases show the important role of underground money value transfer services (MVTs)<sup>18</sup> to facilitate laundering from environmental crimes, and particularly illegal mining. These trends are often regionally specific and reflect local informal transfer systems (e.g., “hawala”).

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<sup>18</sup> Money or value transfer services (MVTs) refers to financial services that involve the acceptance of cash, cheques, other monetary instruments or other stores of value and the payment of a corresponding sum in cash or other form to a beneficiary by means of a communication, message, transfer, or through a clearing network to which the MVTs provider belongs. Transactions performed by such services can involve one or more intermediaries and a final payment to a third party, and may include any new payment methods.



### Box 3.5. Case Study: ML and Gold Refining

The FBI's Illegal Mining Initiative to disrupt Transnational Criminal Organizations (TCO) uncovered a conspiracy responsible for the importation of over USD 3.5 billion of gold derived from numerous illicit activities in 2017.

Operation Diez Condores, initiated in January 2016 as a joint FBI and Investigations Police of Chile investigation, disrupted a Chilean TCO involved in smuggling illicit gold. The Chilean-based operation procured gold from various illicit sources and conspired with disreputable businesses to generate fraudulent paperwork about the gold's true origin and composition. TCO couriers' hand-carried the gold on commercial aircraft from Chile to the United States and delivered it to a U.S. refinery, NTR Metals Miami (NTR), which paid for the gold via wire transfer back to Chile. NTR Metals applied a commission model, creating an incentive for employees to import as much gold as possible as quickly as possible. While some of their business was legitimate, the vast majority was from the TCO activities.

In August 2016, the members of the TCO were arrested in Chile after the investigation documented USD 80 million in gold shipments that moved through multiple shell companies established in Chile and Miami, Florida with the assistance of NTR. The TCO was charged with racketeering, smuggling, customs fraud, and money laundering in Chile. Intelligence obtained during debriefs of the Chilean TCO members by U.S. law enforcement helped to identify inconsistencies in NTR's practices and that the Miami executives were aware that the gold that they were purchasing involved TCOs in multiple Latin American countries linked to gold smuggling, illicit mining, and narcotics trafficking activities.

The investigation resulted in the conviction of seven subjects, restitution of approximately USD 16 million in the United States and USD 25 million in Chile, and the disruption of a major international precious metals smuggling and money laundering operation. In addition, in November 2017, four members of a Peruvian TCO linked to the investigation were indicted.

Source: United States.



## Chapter 4. CHALLENGES AND GOOD PRACTICES IN DISRUPTING ML FROM ENVIRONMENTAL CRIMES.

### 4.1. Chapter Highlights

Countries face a range of challenges in identifying and disrupting environmental crimes. This includes gaps in effective understanding and awareness of financial flows connected to environmental crimes; internal and inter-agency co-ordination gaps; low levels of international co-operation on the financial flows; insufficient -awareness of risk-indicators to develop red-flags; and inadequate private sector capacity to implement successful preventive measures.

To overcome these challenges, countries highlighted a number of good practises. These include:

- a. coordinated risk assessments involving environmental and AML agencies;
- b. clear and coherent legal frameworks (including criminalisation of ML for environmental crimes that occurred abroad);
- c. guides for domestic co-operation;
- d. joint taskforces and information exchange to follow and repatriate the money for environmental crimes from overseas; and
- e. consultation with the private sector to develop red-flags.

### 4.2. Understanding and awareness of ML risks.

#### 4.2.1. Challenges

As outlined in the introduction of this report, across countries there is a need to strengthen understanding of ML risks from environmental crimes. Under half, or just 20 out of 44 responding countries for this FATF's study, indicated that they had considered ML risks from environmental crimes in their national or sectoral risk

assessments. Of the jurisdictions that had considered the ML risks, most focused on logging and mining crimes, whereas fewer countries had consider ML risks from waste trafficking. Most jurisdictions that responded considered themselves to be source countries for environmental crimes<sup>19</sup>. Fewer countries in Europe and North America seemed to have considered ML risks from environmental crimes.

There is an erroneous assumption in some countries that a lack of domestic natural resources or environmental crimes means that there is no apparent need to assess potential ML threats from such crimes. This general lack of risk understanding means that environmental offences are currently assessed as lower risk against other serious and organised crime types. As a result, this affects the allocation of resources and inter-agency collaboration to tackle these crimes.

While several countries recognize their geographic or general risk exposure from environmental crimes (as either source, transit, or destination economies for illicit financial flows), a key challenge is a lack of sufficient and accurate information on illicit financial flows related to such crimes to inform accurate risk assessments. Countries cited a lack of information on typologies and risk factors for environmental crimes, but also inaccurate and manipulated data (e.g., inaccurate data for resource exports). Countries commonly indicate that while they are aware of sporadic or individual cases of illegal mining, logging or waste dumping, there is limited understanding of the risk or role in a wider known illicit supply chain (i.e., “big picture” understanding).

#### **4.2.2. Good practises: Increasing the understanding of ML risk**

Recommendation 1 requires governments to identify, assess and understand their country’s ML/TF risks. Even countries with limited domestic natural resources should consider the risk that criminals could use their financial and non-financial sector (e.g., lawyers, TCSPs) to facilitate laundering from such crimes. This is particularly relevant for financial and company service hubs.

When assessing ML risks from environmental crime, competent authorities should consider the convergence with corruption risks, organized crime, trade fraud and TBML. Jurisdictions should ensure that they consider all sources of relevant information on risks, and develop a “top down” approach. They could start with assessing the role of the country as a producer or purchaser of goods at risk of environmental crimes. In terms of specific data sources, countries highlight the value of:

- a. crime statistics (number of offences, volume of damages, conviction rates),
- b. financial flow data on import/export (comparing domestic production and consumption data with export data),
- c. analysis by the financial intelligence unit (FIU), and
- d. tax and company ownership information.

It is important that any efforts to consider money laundering threats involve inputs from domestic agencies responsible for environmental crime and protection. This

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<sup>19</sup> These jurisdictions are in Central, Eastern and Southern Africa, Central and South America, and Southeast Asia.

study also shows the benefit of engaging with civil society, which often holds valuable information on the broader risk environment and financial flows.

Developing a sufficient understanding of the ML risks associated with environmental crimes is an essential first step in developing a broader strategy to tackle this type of criminality. **Any efforts to respond to laundering from such crimes should be integrated into wider AML/CFT and environmental crime strategies.** For relevant authorities this means having a broader understanding of the countries role within environmental crime supply chains (e.g. whether as a source, transit or destination country for goods or financial flows), and determining relevant domestic risk factors.

The private sector plays a vital role in supporting national understand of ML risk. They can increase awareness of their group-wide exposure to environmental crime, not only linked to their direct clientele, but also understanding the risk generated by their correspondent banking relationships. This helps provide an understanding of financial flows (volume, value, methods, pathways, etc) from which authorities can better understand their jurisdiction's role in environmental crime. Further, given the role of intermediaries in resource supply chains, DNFBPs (e.g., such as lawyers, TCSPS, and dealers in precious metals and stones) have much to contribute to a comprehensive understanding of risk.

Below is a selection of good examples where jurisdictions are taking positive steps to increase awareness of ML risks from environmental crimes, to enrich their operation response:

#### Box 4.1. Case Study: Italy and ML from Waste Trafficking

Waste trafficking is listed in Italy's 2014 and 2019 NRAs. (MEF, 2014<sup>[12]</sup>) (MEF, 2019<sup>[13]</sup>) In both cases, the risk is ranked as a "rather significant" threat. The risk assessment is based on authorities' operational experience and from some input from the private sector. The inherent threat from waste trafficking underscores the fact that proceeds of such activities can be reinserted into the economic-financial circuit. The presence of the illicit waste trafficking threat that enhances the level of ML risk implies that obliged entities are requested to take this into consideration in conducting their financial/professional activity and in the conduct of their AML obligations.

Source: Italy.

#### Box 4.2. Case Study: Papua New Guinea

Recent studies and analysis conducted together with UNODC under the Law Enforcement Assistance Programme (LEAP) to reduce tropical deforestation, estimated that illicit financial flows originated from



forestry crimes in Papua New Guinea amount to more than 100% of the licit timber market on average (ranging from about 80% up to about 130%).

Papua New Guinea carried out its first Money Laundering and Financing of Terrorism National Risk Assessment (NRA) in 2017 which identified strong indicators of large-scale corruption and illegal logging in the country's forest sector.<sup>1</sup> In line with the findings of the NRA, the 2017-2022 National Anti-Money Laundering and Counter Terrorist Financing Strategic Plan requires the Papua New Guinea Forest Authority (PNGFA) to conduct a sectoral risk assessment. The NRA identified that environment crime covers a wide range of offences and does not limit it to mining related crimes and waste trafficking.<sup>2</sup>

The NRA also found that there is illegal mining such as alluvial gold mining and failures to comply with various conditions relating to mining and production activities which are designed to protect Papua New Guinea's environment and breaches of environmental conditions with waste dumping.

Source: Papua New Guinea.

(1) Bank of Papua New Guinea (2017), *Money Laundering and Financing of Terrorism National Risk Assessment*, [www.bankpng.gov.pg/wp-content/uploads/2019/04/Money-Laundering-and-Financing-of-Terrorism-National-Risk-Assessment-4.pdf](http://www.bankpng.gov.pg/wp-content/uploads/2019/04/Money-Laundering-and-Financing-of-Terrorism-National-Risk-Assessment-4.pdf)

(2) The environment crime identified in the NRA includes: Illegal logging; Illegal fishing; Illegal dumping/polluting; Illegal mining; Other illegal extraction; Illegal trading in endangered species; and Illegal construction.

#### Box 4.3. Case Studies: Donor support to NRA-environmental crime initiatives

Together with the German GIZ bilateral programme "ProAmbiente II" in Peru, the GIZ Global Programme "Combating Illicit Financial Flows" (GP IFF) assisted the Peruvian authorities to conduct a sectoral risk assessment in the mining and timber sector and helped integrate the results into a new national anti-money laundering strategy.

In Côte d'Ivoire, GP IFF has provided technical and financial assistance to the national authorities to conduct a similar sectoral risk assessment with a focus on illicit financial flows linked to gold and diamond mining. Moreover, in 2017, GP IFF financed a comprehensive study on global "Financial Flows linked to Artisanal and Small-Scale Gold Mining", focusing (amongst others) on the potential of formalising gold mining regarding its compliance to sustainability standards.

Germany BMZ also co-financed the publication of the Global E-Waste Monitor 2017 and 2020 which compile data on the global e-waste challenge. They also co-financed the UNU Person in the Port Project in



2017, which estimated that 19% of the imported Used Electrical and Electronic Equipment (UEEE) on arrival into the port of Lagos, Nigeria, were in fact e-waste (and therefore illegal).

Source: Germany.

### 4.3. Legal Frameworks

#### 4.3.1. Challenges

This study shows that there are gaps in legal frameworks for environmental crimes are related laundering across countries, which inhibit the scope of country responses and international cooperation for these crimes.

Most countries that responded to the FATF's survey have criminalized at least some aspects of environmental crime either through specific criminal offences (e.g., illegal harvesting of logs) or through more general environmental offences (e.g., illegal exploitation of natural resources). However, criminal offences in some jurisdictions are too narrowly drafted to address the actual range of environmental criminality that may be occurring, which impacts how countries can respond (e.g., do not extend to the importing, exporting or trafficking of natural resources).<sup>20</sup>

Similarly while most countries have criminalised ML for a range of environmental crimes, in almost half of all countries this is due to an "all crimes" approach for the ML offence, rather than a decision based on identified risk. An "all crimes" approach means that all proceeds generating crimes (including environmental offences) with a sentence above a minimum threshold would automatically be considered as predicate offences to ML.<sup>21</sup>

As the chart below illustrates, 26% of the responding countries indicated that the forms of environmental crimes covered in this report are designated specifically as predicates for ML. A small number of countries (9%), including several major economies with globally significant financial sectors have not designated environmental crimes as predicate offences.

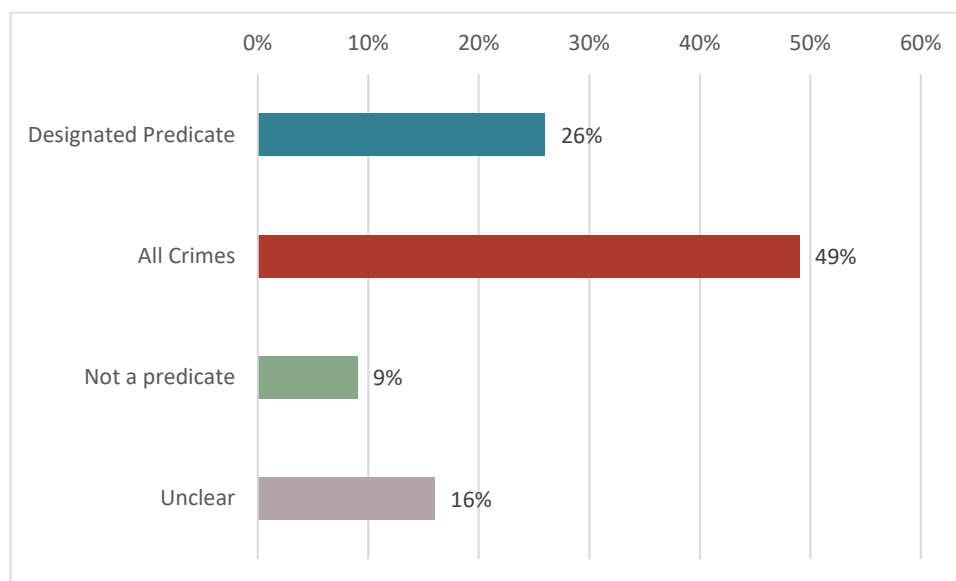
The FATF heard cases where countries without natural resources did not criminalise related activities (e.g. countries without mining reserves did not criminalise illegal mining). This can have a negative impact of the scope of related ML investigations and assistance for countries where proceeds are located in the jurisdiction but the environmental offence occurred abroad, particularly where dual criminality requirements apply.<sup>22</sup>

<sup>20</sup> This is notwithstanding gaps in regulatory frameworks pertaining to the predicate offence.

<sup>21</sup> While these jurisdictions could potentially rely upon associated crimes that facilitate environmental crimes (e.g., fraud, corruption, smuggling, theft) to pursue money laundering charges, based on the cases reviewed for this report, few jurisdictions do so in practice.

<sup>22</sup> Dual criminality for international cooperation requests requires the criminal conduct be considered criminal under the laws of both the surrendering and requesting nations for cooperation to take place.

Figure 4.1. Coverage of ML for Environmental Crimes



Even in jurisdictions where there are comprehensive legislative provisions in place, there are significant differences in the sanctions for these offences. Moreover, several countries acknowledged that the penalties available in their jurisdiction in relation to environmental offences were grossly inadequate (e.g., fines equivalent to only a few hundred USD) and disproportionate to the criminal proceeds and environmental damage that they cause. It is therefore possible that a wide range of environmental crimes is below certain thresholds to fall within the “all crimes” approach for ML and proceeds generating crimes. The low penalties also lead to the perception of environmental crimes as **‘low risk, high reward’** for criminals.

Economic crime is not often part of the public policy dialogue on environmental protection. However, the considerable damage that such crimes have and the significant criminal gains highlight the important role of anti-money laundering in tackling crimes that harm the environment.

In addition, the regulatory and legal environment for environmental crimes is not always globally consistent. Criminal networks therefore exploit weak legislative and operational controls to exploit natural resources, and move the illicit proceeds across borders. Source countries submitted numerous case studies detailing how a permissive regulatory and legal environment increases the risk of criminal activity, and how such activity could succeed once it occurs. In some jurisdictions, this becomes a vicious cycle as governments are deprived of much-needed tax revenues, thus exacerbating their capacity to combat criminal activity over time.

#### 4.3.2. Good Practises: legal frameworks

The case below highlights one instance where the legal frameworks in place cover the widest possible range of offences related to environmental crimes. This includes environmental crimes committed outside of this jurisdiction by nationals or residents, and without application of dual criminality.

Through consultations FATF also heard the importance of transparent and closely monitored licencing regimes for extraction of natural resources. This includes

regimes where authorities have clear roles, responsibilities and enforcement powers to help mitigate against corruption of public officials as well false documentation.

#### Box 4.4. Case Study: Netherlands Jurisdiction on Environmental Crimes Committed Abroad

Dutch law recognizes jurisdiction over a ML offense where the predicate offense is committed abroad, which does not require the element of double criminality. There is also no requirement for a prior conviction of any predicate offense, or even evidence of a predicate offense.

The legal possibility of stand-alone ML investigations began in 2010 when the Dutch Supreme Court agreed with reasoning that evidence could indicate criminal origin as the only conceivable explanation for funding through the process of elimination, even if the specific origin could not be convincingly established. In 2013, the Court laid down the framework for an ML conviction without a known underlying offence. The framework can be summarised as follows:

1. No direct evidence of a specific predicate offence.
2. Whether the alleged facts and circumstances are contributing to a suspicion of ML, based on general understanding and ML typologies.
3. Statement by the suspect on the origin of the funds or goods suspected to be criminal (or lack of statement).
4. The suspect's statement should be concrete and verifiable. The flow of funds or goods must also be explained clearly, not just the legal origin.
5. Court decision on investigation of suspect's statement by the Dutch public prosecutor.
6. Court decision on whether, based on the investigation of the statement, it can be **excluded** with sufficient certainty that the funds or goods to which the suspicion relates have a legal origin, and therefore that a criminal origin has to be considered as the only reasonable explanation.

Source: Netherlands.

## 4.4. Domestic Co-ordination

### 4.4.1. Challenges

Limited cooperation between AML/CFT authorities and environmental crime and protection agencies in most countries presents a major barrier to effectively tackle ML from environmental crimes. The FATF Standards require that policymakers, FIUs, law enforcement authorities, supervisors and other relevant authorities have

effective mechanisms in place to co-operate, coordinate and exchange information domestically to combat ML. However for environmental crimes, relevant agencies often include authorities outside of traditional AML/CFT agencies, which requires countries to proactively establish coordination channels. Such agencies include those responsible for resource licencing and oversight, and environmental crime and protection experts.

A crucial factor underlying this challenge is the non-conventional and specialized nature of environmental crime detection and investigation. In many countries environmental agencies are the leading body responsible for tackling environmental crime. While these bodies have expertise in environmental issues, they often have adequate expertise or powers to identify and disrupt complex organised crime conspiracies, (which include ML schemes). Environmental agencies are often non-traditional law enforcement partners, and do not receive resources or training to conduct financial investigations, which means that important financial evidence may be overlooked. On the other hand, traditional AML agencies, such as financial intelligence units and law enforcement agencies typically do not recognize environmental crimes as a priority area, and rarely engage with counterparts in environmental agencies to assist in or pursue cases.

Since environmental crime involves smuggling of goods over borders and may rely on TBML or other fraud schemes, domestic co-ordination on environmental crimes between FIUs and customs agencies is also fundamental to building a successful prevention, detection, investigation, and prosecution regime. Border checks and cross-referencing trade data against financial transactions for environmentally sensitive goods is a valuable tool in detecting the financial flows that run parallel to environmental crimes. However, many countries do not appear to have these capabilities and few customs administrations have reported collecting financial and trade data on potential environmental crimes for investigations. Customs authorities also have a lack of technical expertise in the targeting and identification of illegally shipped forestry, mining and waste products which is further exacerbating the problem.

Domestic co-ordination and co-operation are important challenges in developing countries, many of whom suffer particularly from environmental crimes to vital timber and mineral extraction sectors. Environmental crimes often occur in isolated rural, and resource-dependent regions, which are often geographically distant from administrative and financial centres. Important levels of isolation and gaps in traceability not only prevent the identification of predicate offences, but also create novel challenges for understanding and tracing the financial flows linked to environmental crimes. For example, transactions that occur far from financial centres in a de-centralized manner to pay for labour and exchange against illegally produced goods<sup>26</sup>. This represents an important challenge for detection among relevant authorities and requires in-field expertise to relay information on risks and typologies to investigators.

#### ***4.4.2. Good Practises: Collaboration between Environmental Agencies and Relevant Financial Investigators and Intelligence Agencies***

Several submissions highlighted the importance of domestic (and international) cooperation; highlighting that some environmental crimes could have been prevented had authorities co-operated more effectively or acted more rapidly.

In particular, countries noted the importance of establishing communication channels and dialogue between AML/CFT authorities, including FIUs and law enforcement, and environmental crime and protection agencies. This could include involving environmental crime experts within broader national AML/CFT taskforces or committees and the formation of specialized multi-agency teams for environmental crimes. In particular, it is important that countries assign clear authority for conducting parallel financial investigations for environmental crimes, and provide guidance to authorities in key detection points (e.g. customs) about what financial information to collect. Several selected cases below illustrate how countries can deploy national strategies, investigation guidance and create task forces to enhance collaboration and co-ordination.

#### **Box 4.5. Case Study: Cooperation between Financial Investigators and Customs in Madagascar**

Madagascar has identified the fight against money laundering associated with environmental crimes (forestry, wildlife, etc.) as one of the priorities in its national AML / CFT strategy. As a source country for illegal timber, Madagascar highlighted key sources of information for financial investigations which were readily available to counterparts in customs agencies. These include data on exports and imports; data regarding timber cargo loading from private companies which may be contracted to manage ports and / or the container terminal; mining administration database on permits granted, authorizations for transport and export of mining products issued, declarations of exported products.

Source: Madagascar.

#### **Box 4.6. Case Study: Domestic Cooperation on Intelligence in the Netherlands**

The Netherlands has incorporated environmental crime into its national intelligence framework. This framework acts as a standardised approach for gathering, coordinating, and disseminating intelligence. The framework is used for formulating strategic directions, making tactical decisions on investigations, and managing resources and risks, and is the working plan for intelligence gathering and analysis. The framework highlights a list of specific subjects for which it is necessary to gather and analyse intelligence.

The Netherlands' Strategic Environmental Chamber (SMK) was created in 2012 to formulate the strategic direction for addressing environmental crime. The main enforcement agencies and Inspectorates for environmental crime sit in the SMK. In 2018, all organisations that



are members of the SMK committed to a programme which determines the priorities and goals on specific subjects and phenomena on combating environmental crime. The priorities are derived from the identified threats in the National Threat Assessment on Environmental Crime. The priorities and goals of the programme drive the decision making concerning which cases should be investigated and on which subjects and issues intelligence needs to be gathered.

Source: Netherlands.

## 4.5. Detection and Investigation of ML

### 4.5.1. Challenge:

To detect and disrupt ML threats, relevant authorities must use financial intelligence and all other forms of relevant information appropriately to support financial investigations and prosecute offenders. However, as highlighted earlier in this report, the number of financial investigations reported for environmental crimes is very low in most jurisdictions. This is in part due to gaps in relevant authorities' detection capabilities.

Countries reported only a small number of STRs in relation to environmental crimes, reflecting the perception of risk by national authorities or reporting entities. In one country with one of the highest deforestation rates, less than 1% of all STRs received by the FIU between 2015 and 2019, related to illegal logging and illegal land clearance. The FIU of another country reported that for the period from 2019-2020, only 0.04% of its suspicious activity reports related to environmental crime. However, between 2018 and 2020 the country had seen an estimated tenfold increase in the number of environmental crime cases under investigation.

Consultations among countries revealed that most FIUs and relevant authorities have not developed relevant red flags, training, typologies or analysis tools to assist in identifying the financial activities associated with illegal mining, illegal logging or waste trafficking. FIUs do not have many cases or insights on successful analysis on information received from financial institutions or other reporting entities that may pertain to environmental crimes. Private sector respondents (FIs and NPOs) also echoed this view, with several participants noting that those transactions related to environmental crimes are difficult to identify.

Respondents from financial institutions also noted a lack of feedback from FIUs and requests for information from other competent authorities, which may suggest that STRs related to environmental crimes do not receive as high a level of attention compared to other crimes (such as fraud, drug trafficking and others)<sup>23</sup>.

### 4.5.2. Good practices for the Detection and Identification of ML

Several jurisdictions with varied levels of FIU capacity identified promising opportunities for using red flags to detect ML from environmental crime. They

<sup>23</sup> For example, for more sensitive industries or activities associated with ML and financial crime priorities, governments will often set up hotlines or direct contact points for financial institutions. This is not the case for environmental crime in most countries.

recognised the potential insights from analysing data from supply chain actors, namely at supply-chain choke points, e.g., refineries and mills, or shipping and trade hubs.

The USA highlighted how it considers their national-level sanctions regimes as a useful tool to alert the private sector on individuals engaged in organised environmental crimes, and provide an administrative freeze on assets pending judicial proceedings. For further details on potential red flags, see Annex A below.

#### **Box 4.7. Case Studies: Detection through Media Monitoring and News Coverage**

Several FIUs commented that the majority of their STRs were initiated by media articles, which involved NPO investigations. In one major global financial centre in Southeast Asia, the majority of its STRs relating to environmental crime (under 100), had been the result of adverse news coverage.

One FIU highlighted that it had forwarded a case involving over USD 110 million to its national prosecutors relating to illegal deforestation. It had initially detected the case using information released to the media by an NGO investigating a professional money laundering network in an offshore financial centre.

One European country has received STRs detailing company ownership and activities relating to waste management, and which were prompted by news articles regarding potential illegal activities by those entities.

Source: multiple countries / FATF Survey Responses

#### **Box 4.8. Case Studies: Use of STRs to Better Understanding Broader Criminal Network**

In a case investigated by the Italian Guardia di Finanza, STRs were used to discover false invoicing chains and to identify the criminal network involved in illegal waste disposal. Italian investigators in one case considered that it was a key challenge for financial investigators to differentiate between the use of invoicing to avoid/evade taxes and use of invoicing to hide illegal activity (extraction/deforestation/dumping) itself. They found that the main challenge was to understand when the financing activities, which was a form of false invoicing was intended to facilitate the illegal disposal of waste and when, instead, they are carried out exclusively for tax evasion purposes.

Source: Italy.

**Box 4.9. Case Study: Parallel Financial Investigation in Brazil**

The Brazilian Operation Archimedes detected an unexplainable increase in timber products passing through Manaus Port. This triggered an investigation into the inspection process, which led to identifying illegality in the extraction of the timber. A parallel financial investigation resulted in the identification and subsequent freezing of USD 10 million in criminal proceeds in complicit company accounts as well as the seizure of 80,000m<sup>3</sup> of timber.

Source: Brazil.

**4.6. Effective International co-operation****4.6.1. Challenge**

The financial flows from environmental crimes are often global in nature. Criminal groups will look to exploit the absence of cooperation between jurisdictions. These networks will attempt to transfer funds or goods via jurisdictions where there is limited practical co-operation and communication between authorities. This is shown through the below case study by INTERPOL, UNODC and RHIPTO (a Norwegian NGO and Centre for Global Analysis) which outlined how a promising initial investigation was derailed through lack of co-operation with foreign counterparts once funds had moved abroad. The complex flow of money across borders, through transit countries and via offshore financial centres using formal and informal channels shown earlier in the report highlights the complexity of investigating and prosecuting these crimes. It also shows the need to leverage various forms of international cooperation among competent authorities.

**Box 4.10. Case Study: Forestry Crime and International Co-operation**

Country A participated in a regional training exercise organized by INTERPOL, UNODC and RHIPTO aimed at enhancing the use of financial investigations against money laundering and other financial crimes for reducing forestry crimes. They briefed the organizers and the participants about a major criminal investigation concluded in 2018 against a criminal syndicate responsible for illegal logging, processing, trade and smuggling of protected rosewood. A lack of proper use of international cooperation or INTERPOL Notices were noted amongst the investigative gaps.

The investigation was initiated following information provided to police by local communities. Joint teams of police officers and rangers raided wood-processing plants and a warehouse, where illegally logged rosewood with an equivalent value of over USD 1.2 million (EUR 1 million) was seized. Four suspects were arrested during the operation,

and it was ascertained that one of them had already been detained in 2012 for illegal logging, but at that time he was released due to lack of evidence. In 2012, his former wife, a national of Country B, was detained in Country A for illegal logging and then released due to a lack of evidence and was subsequently deported from Country A. Despite this, she managed to live undisturbed in Country A under a fake identity and became a broker in the timber and wood industry through several established businesses in Country A and Country B.

An analysis of the financial transactions related to the suspects and companies was conducted. The financial analysis facilitated the identification of the network and the nominees used to disguise the beneficial ownership of bank accounts and front companies as well as at least three more suspects based in Country B. Additionally, the financial analysis assisted in the identification of the modus operandi used by this criminal network.

In 2018, an arrest warrant was issued in Country A against the kingpin of the criminal organization, however she is believed to have escaped Country A ever since and is still at large to date. In a separate operation in 2019, two suspects were arrested in Country A for possession of a significant amount of timber that was illegally logged. In this case, both suspects belonged to a criminal network headed by the same kingpin.

The authorities in Country A appeared to put significant emphasis on the financial investigation aspect of the case, leading to uncovering of entities related to the kingpin and the criminal organization. However, the lack of international cooperation resulted in an incomplete financial analysis. The investigators analyzed the financial data they obtained from their country and did not 'follow the money' by analyzing foreign accounts using mutual legal assistance or otherwise. This was despite establishing evidence that the criminal organization's network extended beyond the borders of Country A. Further, the recommendation for the authorities to issue an INTERPOL Red Notice against the kingpin has not been pursued to date. In this case, the absence of international cooperation halted the possibility of tracing illicit financial flows internationally as well as the suspects at large.

Source: UNODC, INTERPOL, and RHIPTO.

Consultation among countries for this project suggests that while authorities are aware of the global nature of transactions and the need to exchange information across borders, there are few practical examples of successful co-operation on ML cases for environmental crimes on a regular basis. Countries have indicated that they have sent requests for information, but responses to requests are un-common and that exchanges are insufficient. As a result, effective international co-operation on the financial flows remains rare and insufficient.

At an international level, there is a need to strengthen dialogue between source, transit and demand countries for environmental crime supply chains and related laundering. In destination countries, financial flows from environmental crimes are not clear and easy to distinguish from legitimate transactions. This is likely because

criminals co-mingle illegal environmental products early in the supply chain (often in country of origin or in neighbouring jurisdictions).<sup>24</sup> When countries use a limited scope to review specific financial flows from specific imports, they will likely appear legitimate. Importers of the products and their trade financiers may then plausibly deny knowledge of their illicit origin, or may not be aware at all of their illicit origins. For competent authorities in importing countries investigating such cases, awareness of environmental crime risks is often low, with no apparent crime being committed.

#### **4.6.2. Good Practices: International co-operation**

Despite these challenges, several countries did highlighted examples of successful co-ordination and collaboration. These included how structures such as Egmont, Interpol, and regional initiatives and prosecutor networks have supported the exchange of information and evidence, which directly assisted with financial investigations. Other countries noted the support offered by external donors in supporting international co-operation and advocating and raising awareness among destination countries on the risks and scale of financial flows from environmental crimes.

As the cases below demonstrate, these exchanges often take place between higher and lower capacity jurisdictions. This highlights the importance of strengthening co-ordination capacities through capacity building initiatives and training programmes. These training programmes and exchanges are mutually beneficial. Lower capacity jurisdictions increase their capacity to request and provide information. Higher-capacity jurisdictions can increase their awareness of environmental crime activities and associated ML activities, while engaging with counterparts in source countries who are more familiar with these crimes.

#### **Box 4.11. Case Study: Peru – US MOU on Environmental Crime**

The U.S. signed a Memorandum of Understanding (MOU) with the governments of Peru and Colombia, in 2017 and 2018 respectively, to expand bilateral cooperation to combat illegal mining and minimize its negative impacts. The Peru MOU supports over 40 activities that build the Peruvian government's capacity to fight Transnational Crime Organisations, eradicate illegal mining from protected areas, support the development of transparent and traceable supply chains for small-scale gold, and eliminate the use of mercury from artisanal and small-scale gold mining. Support from the Department of State aims to disrupt criminal networks that smuggle migrants, narcotics, illegal gold, and controlled chemicals, as well as to prevent illegally mined gold from entering the U.S. and the international market. Within the framework of the MOU, other U.S. government agencies and the Government of Peru

<sup>24</sup> Entities involved in illegal logging bring products to the same mills as legal ones, and illegal minerals are processed among legitimately sourced material within the jurisdiction, or after being smuggled into nearby countries before export for processing, refining and sale.



work together to train the police, prosecutors, judges, auditors, and others responsible for investigating these crimes and convicting perpetrators. The U.S. provides capacity building and mentoring to Peru's Financial Intelligence Unit, for them to identify money-laundering risks in the mining sector and to take steps to raise scrutiny on suspicious transactions linked to illegal mining. The U.S. also trains customs authorities at ports and airports on how to recognize fraudulent documents to increase seizures of illegal gold before it leaves Peru.

Source: United States.

#### **Box 4.12. Case Study: Norway donor support to strengthen international cooperation**

In 2018, Norway's International Climate and Forestry Initiative provided a multi-year grant to a consortium made up of Interpol, UNODC and RHIPTO. The Law Enforcement Assistance Project to reduce tropical deforestation (Project LEAP) has had the overarching aim to disrupt illegal deforestation in rainforests with an initial focus on South east Asia and South America. At the outset, Norway's International Climate and Forest Initiative identified that AML could be a vital component to the project which also included support for organised crime investigations, international cooperation, and detection of abuse of containerised transport. The donor approved the grant which supported the inclusion of financial investigation specialists and their respective unique capabilities within all three consortium members to develop into one trading space to support the achievement of the project's objectives. The AML element of the project was highlighted in an independent evaluation as playing a crucial and often leading role in the identification and disruption of illegal deforestation.

Source: Norway/UNODC/Interpol/RHIPTO

#### **Box 4.13. Case Study: OAS and donor supported initiatives against illegal mining.**

In August 2019, the U.S. established a three-year project with the OAS to strengthen the national and regional systems that combat illegal mining financial structures and to enhance regional collaboration. The Organisation of American States (OAS) Department against Transnational Organized Crime (DDOT) has been promoting a project regarding illicit gold, which aims to strengthen the capacities of the agencies in charge of all stages of the fight against the finances of illegal mining. This project is active in the following countries: Brazil, Colombia,

Ecuador, Guyana, Peru, and Suriname; it focuses on including the prevention, detection, processing and intelligence analysis, persecution, seizure, confiscation, administration, and disposition of the assets produced or used in these crimes.

The objectives of the project have been to enhance regional collaboration, to increase investigations and convictions of crimes related to illegal mining, to increase the quantity and value of seized and confiscated assets linked to TCOs. The project has sought to achieve these objectives through, training courses focused on financial intelligence units, customs and immigration authorities, and agencies responsible for the administration of seized and confiscated assets.

Source: U.S; Organisation of American States.

## 4.7. The Role of the Private Sector

### 4.7.1. Challenge

Financial institutions and DNFBPs are important actors at the forefront of tackling financial crime, including environmental crimes. Under the FATF Standards, financial institutions and DNFBPs have certain AML/CFT obligations<sup>25</sup>, from due diligence to record keeping, to reporting of suspicious activities. Together, these requirements are designed to reduce banks and other institutions' exposure to ML risks associated with a wide range of predicate offences and provide useful information to law enforcement agencies.

By executing transactions on behalf of clients and providing financing and loans for projects, financial institutions could unwittingly facilitate movement of funds connected to environmental crimes. For this reason, CDD for preventive action and suspicious transaction reports for detecting illegal activities are an invaluable tool in the fight against environmental crimes.

Nevertheless, there are challenges for private sector to detect anomalies. This includes information gaps in CDD for extractive projects (where information on land ownership or licencing may be inadequate). Often, banks must verify information provided by customers in jurisdictions where public registries may have to be verified manually at a regional level, and are not subject to adequate levels of risk-based verifications (particularly in rural, low-population zones). Consequently, private sector entities face an important challenge in piecing together a picture of risks from unreliable registries, publicly available information, reports, and reference checks from reliable third-party sources, NGOs, geographic analysis, and other forms of information to determine whether projects pose criminality risks.

Another challenge is that without in-depth expert-led review and analysis of underlying contracts and activities, forestry crime, illegal mining, and waste

<sup>25</sup> The FATF Recommendations do not place reporting obligations on companies involved in the trade chain in the extractive industries (e.g., non-bank private investment funds, shipping companies and metals and mining processors). The OECD has recommendations to companies in precious metals supply chains to report on their efforts to undertake due diligence.

trafficking can hide in plain sight as legitimate economic activities. As noted earlier in this report, the early comingling in the supply chain as well as the use of multiple front-companies with relationships to various financial institutions in a range of jurisdictions occurs frequently with environmental crimes. Additionally, the use of corruption and reliance on PEPs can make detection difficult too. The early dissimulation of underlying criminality therefore makes it particularly difficult for financial institutions to identify finances with potential links with environmental crime and limits their ability to detect discrepancies.

Financial institutions and DNFBPs also face the global lack of government recognition of the importance and impact of environmental crime. FIs reported that few governments appear to pursue these types of crimes with enforcement actions.

#### **4.7.2. Best Practises related to Private Sector**

As noted earlier in this chapter, relevant authorities must be sufficiently aware of the risks from ML related to environmental crimes. Countries must also communicate these risks to relevant private sector institutions, ensuring that environmental crime is considered within a broader financial crime response. In terms of good practices, this report highlights the importance of proactive dialogue between public and private sector on risk environment, ensuring that the private sector understand key risk indicators, and particularly for customers operating in resource supply chains.

One example of risk mitigation is the use of the correspondent banking due diligence questionnaire developed by the Wolfsberg Group; an association of global banks which aims to develop frameworks and guidance for the management of financial crime risks. This is a detailed questionnaire that can be used as a tool for respondent institutions to assess their correspondent's activities and exposure to environmental crime. Similarly industry-led initiatives such as the United for Wildlife Financial Taskforce, help share good practices across the private sector.

#### **Box 4.14. Case study – Public Private collaboration to raise AML/CFT awareness**

Singapore's Precious Stones and Precious Metals (Prevention of Money Laundering and Terrorism Financing Act (PSPM) Act came into effect on 10 April 2019, and subjected the PSMD sector to a full AML/CFT regulatory and supervisory regime. The PSPM Act requires applicable PSMDs to be registered with the AML/CFT Division of the Ministry of Law (ACD), which was set up to implement the necessary regime for the sector.

As this is a newly regulated sector and the level of ML/TF risk awareness and AML/CFT controls of PSMDs may not be as robust, ACD has been working with Industry Associations (IAs) and other partners to continue to educate and raise the PSMD's sector ML/TF risk awareness. The IAs represent diverse sub sectors within the PSMD sector, such as the jewellery retailers, watch dealers, diamond dealers and bullion traders. ACD has partnered and consulted with IAs to elevate the sector's ML/TF

risk awareness, AML/CFT standards and capabilities and co-developed educational materials and guidance for the sector.

ACD provides guidance to PSMDs to assist them in complying with their obligations under the PSPM Act. The guidelines include red flag indicators to consider filing suspicious transaction reports where the suppliers show suspicious behaviour or transactions. (ACD, nd<sup>[14]</sup>) e.g., the supplier's stated origins of the precious stones or precious metals appear to be fictitious, doubtful or cannot be explained; the supplier is traced to negative news or crime and (for rough diamonds only) rough diamonds are not accompanied by the valid Kimberley Process (KP) certificate.

Source: Singapore.

#### **Box 4.15. Strengthening Risk Awareness within a Financial Institution**

During the outreach for this study, one financial institution based in Africa mentioned that they have begun updating their internal controls and risk awareness to address illicit financial risks from environmental crimes, and specifically the illegal wildlife trade and illegal logging. This includes strengthening awareness of such risks with trade operations staff looking at how customer due diligence can help detect potential cases.

The institution found that one of the key challenges is being able to distinguish between the legal and illegal trade, which often requires collating diverse data from different sources. To address these challenges, institutions could look out for customers that are engaged in trade in raw materials operating between source and demand countries for illegal logging/mining products; and obtaining further supporting documentation for trade in protected raw materials i.e. CITES permits or a customer attestation confirming that the timber is legally harvested and traded etc.

Source: FATF Consultations.



## Chapter 5. CONCLUSIONS AND PRIORITY ACTIONS

### Conclusions:

While some parts of the Global Network have previously considered aspects of environmental crime, there is a general need for greater awareness of exposure to ML arising from environmental crime across the FATF Global Network. This is especially the case for countries that have not detected environmental crime within their borders.

Anti-money laundering is often not part of the public policy dialogue on environmental protection. Despite the significant proceeds involved in many cases, jurisdictions are mostly addressing environmental crime as a conservation issue rather than a serious financial crime.

Across countries there also appears to be a clear need to delineate roles between public sector authorities when environmental degradation is tied to a serious criminal offence that is linked to money laundering and requires investigation. This may also help establish a clearer set of roles and responsibilities between conservation efforts, law enforcement and investigation, and criminal prosecution. There is a need for more effective working relationships and feedback loops between law enforcement and environmental protection authorities.

This study shows that those involved in environmental crimes frequently rely on comingling of legal and illegal goods to hide their illicit origin and mask the nature of the proceeds. This report highlights the reliance on trade-based fraud and cross-border smuggling to conceal goods and assets from illegal logging, illegal mining and waste trafficking. Further, enabled by corruption, actors involved rely on corporate structures, third party transfers and offshore jurisdictions to obfuscate the beneficial owners.

This underpins **the critical importance for countries to fully implementing the FATF Standards as a tool to combat ML from environmental crimes.** In particular,



this study highlights the need for greater transparency of beneficial ownership requirements and outreach and engagement to DNFBPs as crucial factors in combatting ML from environmental crimes. Across countries, AML/CFT outreach and coverage of dealers in precious metals and stones and trust and company service providers is particularly low.

Countries may also need adapt the FATF standards to address specific ML risks from environmental crimes in line with the FATF's risk based approach. This consider involve considering expanding cross-border declaration or disclosure systems to cover precious metals and stones, depending on the country risk profile and position within criminal supply chains. Similarly, it could include AML/CFT outreach to sectors not covered by the FATF Standards, such as key intermediaries along environmental supply chains (e.g. refiners, logging, mining companies etc). When undertaking FATF mutual evaluation, assessors will also need to understand the assessed countries' risks of ML from environmental crimes. This could occur during the scoping phase of evaluations, where assessors consider whether countries effectively implement the FATF standards commensurate with ML/TF risks.

### Priority Actions:

Most countries have not considered the ML risks posed by environmental crimes within their national risk assessments, including those occurring abroad. However, the trafficking of precious metals, stones, timber, and waste occurs on a global scale. As a priority, **countries should ensure that they consider the ML threats posed by environmental crimes, even for countries that do not have domestic natural resource industries.** This may require inputs from non-traditional AML/CFT stakeholders, such as environmental crime and protection agencies, or authorities responsible for forestry or mining concessions. These risks should be considered holistically alongside domestic vulnerabilities such as propensity of corruption or dialogue with relevant stakeholders that may not be traditional AML/CFT "reporting entities."

Secondly, countries should ensure full implementation of the FATF standards as an effective tool to disrupt laundering from environmental crimes. **This includes ensuring that AML/CFT authorities, including financial intelligence units, have sufficient powers and operational capacity to investigate and trace assets from environmental crimes.** This should ideally be done in partnership with environmental crimes investigators to similarly raise operational capacity to detect and pursue relevant financial intelligence.

Thirdly, **countries should consider establishing and strengthening public-private sector dialogue to share risk information, and organization or industry-led initiatives to strengthen due diligence of supply chains and their financial flows**<sup>26</sup>. These initiatives can play a significant role in raising awareness about suspicious financial activity and addressing comingling by finding means to demonstrate the legitimate source of goods.

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<sup>26</sup> In this regard, the OECD's recommendations assist companies involved in precious metals and stones supply chains to undertake due diligence and identify risks of illicit activity, strengthening public/private dialogue and cooperation.

## Annex A. Potential Risk Indicators Related to ML from Environmental Crimes

### Uses of Risk Indicators

As noted in the report, several suspicious financial activities, or behaviours, as well as patterns could be associated with several types of environmental crimes. This section provides some examples for illegal mining, illegal logging and waste trafficking. This principal audience is financial institutions and government authorities.

A risk indicator demonstrates or suggests the likelihood of the occurrence of unusual or suspicious activity. The existence of a single indicator in relation to a customer or transaction may not alone warrant suspicion of an environmental crime, nor will the indicator necessarily provide a clear indication of such activity, but it should prompt further monitoring and examination, as appropriate. Similarly, the occurrence of several indicators should also warrant closer examination. The indicators identified below should be taken in context with, and updated according to, an institution and country's unique risk environment. This could include a consideration of geographic location, business lines, products or services that an institution offers; and how it interacts with its customers.

These risk indicators are intended to compliment those provided in past FATF reports, including in the FATF's study on money laundering from the gold sector (FATF, 2015<sup>[4]</sup>) and diamonds (FATF, 2013<sup>[5]</sup>).

### Detection of Financial Flows from Mining and Logging:

#### *Transaction and Cash Flows*

- Companies operating in the logging sector with frequent transactions to offshore financial centres.
- Large cash withdrawals from financial institutions operating in rural areas that may be in proximity to illegal mining or logging areas.
- Receiving deposits and wire transfers from several origins without economic or financial grounds. This includes transactions from regions without a logical connection to the individual or company's main site of operations or domicile.
- Transfers from country where the gold smelters are located to source countries for gold, and almost immediate cash withdrawal of majority of the transfer.
- Frequent payments from companies in the extractive sector to suppliers or beneficiaries unrelated to the legal person's activity or business.
- Increase in transactions between entities or individuals not registered in mining/logging sector (i.e., non-license-holding) and equipment leasing companies and equipment sales companies<sup>27</sup>.

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<sup>27</sup> This could include payments for imports of goods and products for use in logging and mining, for example chainsaws for illegal logging, mercury or explosives for illegal gold mining.

- Large volume and value of cash transfers from cash-intensive businesses (such as petrol or gas stations) to beneficiaries in areas known as a source of gold mining and illegal logging and illegal land clearing.<sup>28</sup>

#### ***Economic Activities:***

- Sudden and unexplained increases in economic activity (formal and informal) in rural or isolated zones, particularly in source countries for illegal logging and mining. This may include not only value but volume and frequency of transactions involving banks, money service businesses and remitters (including mobile payment processors and/or electronic money), or unusually high volume of business turnover in cash transactions at businesses providing consumer goods and services in proximity to at-risk zones.
- Recently created companies that register gold exports for significant amounts and noticeably brief period of operations.
- Aberrations/anomalous bank activity (i.e., sudden, or unexplained changes to cash flows) or corporate revenues of company operating in natural resource supply chains (e.g. processing, harvesting).

#### ***Customers***

- Unexplained wealth, cash transfers involving senior officials, politically exposed persons (or family members of) with a position of responsibility related to the management or preservation of natural resources (e.g. forestry or mining officials).
- Individuals and entities are cited in newspapers, NPO investigative reports or reports by international organizations (public and confidential) as being involved in bribery, corruption, environmental or other organised crimes.
- Customers with mining licenses operating in or around active conflict zones. PEPs may have interests in these companies, but it is not required.
- Individual identified as a manager or director of several companies linked to environmental extraction.
- Frequent buying and selling of shares in companies holding agricultural or logging permits, especially transactions involving shareholders in third party jurisdictions.
- Companies such as refineries or timber processing facilities that pay their employees exclusively in cash and/or on a commission basis, creating the potential of a direct incentive for investment into illicit activities.
- Companies generating minimal income (or it is below what would be expected for its stated activity) with sales below market prices to a company where there is a direct relationship, such as a parent. This can sometimes be followed by the declaration of bankruptcy following completion of extraction.

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<sup>28</sup> A company engaged in illegal mining may have a standing arrangement with a petrol (or gas) station to pay by invoice versus at the pump.

- Companies operating illegal mining or forestry holds contracts with provision of another un-related government service or activity (corruption risks for licenses).
- Cash payments or transfers to client/customer accounts operating in the timber/mining industry from foreign nationals (or companies owned by foreign nationals) where there is no clear business relationship. Funds may be paid into the client's accounts which are then either withdrawn in cash or transferred to the benefit of natural persons who are suspected of being involved in illegal logging, mineral or natural resources extraction.
- Clients that are unable to provide evidence of compliance with local environmental requirements (e.g., proof of permit for environmental activity, export, land purchase/lease agreements, etc.)
- Clients stated business is to export environmental materials but the volume/value is in excess of what is available in the region.
- PEP or public official with responsibilities for environment management/protection or land/tenure rights travelling to offshore jurisdictions for undisclosed business activities.
- Client is a recently activated dormant companies which undertakes resource extraction with income inconsistent with the activity being undertaken, where the primary customer or beneficiary is a related corporate entity.

### ***Supply Chain Choke Points***

- Intermediaries, such as timber processing facilities, sawmills and metal refineries are a known chokepoint where illegally extracted natural resources enter the legal supply chain. Red flags could include: apparent co-mingling of income from diverse sources with links to mining or logging sectors. Sawmills or gold refineries may also be associated with unique identifier data (bank account/transactions, company data, tax codes, specialist equipment orders/import) which can be merged with other red flags to highlight suspicious activity.
- National precious metals aggregators sometimes portraying themselves as refiners. This is an important trend now in Africa.

### ***Export & transfer pricing***

- Trade transactions to finance extractive business involving high-risk jurisdictions – e.g. that have a proven risk of corruption, conflict and/or illegal resource extraction.
- False or questionable statements on bank loans, letters of credit, customs and shipping documents associated with the timber trade.
- Trade transactions linked to environmentally sensitive goods (e.g., round logs) when there is a moratorium, or this has been banned by national authorities.
- Co-mingling of funds through related businesses and export/sale of undervalued products, using back-to-back invoicing suggesting ongoing illegal transfer pricing scheme.

- Inconsistence – import/export documentation & permit/concession. Export/import documents show significant inconsistency in amount of timber permitted in the concession/permit document and the amount shipped. It is common for timber, processed lumber, or gold, to be exported at below market prices, change ownership and Bill of Lading en route, often in a customs free trade zone, and is imported at recipient countries at higher declared values.

***Lack of experience/background in a complex sector***

- Purchases of companies by persons lacking adequate knowledge and experience in the waste sector to manage entities operating in a highly regulated sector.
- High volume/value of cash deposits and withdrawals by waste management sector companies.

***Metals and Waste Sector – activity inconsistent with usual operation***

- Large international funds transfer between local waste management sector companies and known source countries for waste trafficking.
- Large international funds transfer between local waste management sector companies and known major importer / destination for waste trafficking.
- Company operating in the metals and waste disposal sector shows one of the following characteristics or behaviours:
  - Lacks an adequate organizational structure,
  - Holds an address that is not linked to any economic activity,
  - Has shares sold at lower than book value, and
  - Has high withdrawals of cash recorded on bank accounts held by waste management sector companies.
- Waste management sector companies with payments or trade invoices for types of waste unaligned with those they are authorised to process.

***Economic Activities***

- Sudden and unexplained investment in waste facilities from entities with unclear beneficial ownership information.
- Unexplained investment or sponsorship in entities that are not associated with waste.
- Costs are lower than expected industry standards.



## Annex B. Further Detail on Convergence of Environmental Crime with other Crimes

### Tax Crimes

Consultations highlighted the commonality of tax crime and environmental crime; particularly when pertaining to larger and more sophisticated actors. Tax crimes may be associated directly with trade based money laundering (e.g., duties and taxes on goods traversing borders) and taxes owed to authorities for the use of public land. However, the tax crimes referenced also appear to highlight the use of offshore banking as well as the use and maintenance of corporate structures outside of the jurisdiction where the environmental crime was committed for the purposes of tax evasion.

### Smuggling of other illicit goods

Organized crime groups and loose networks of transnational criminals networks have well established global pathways to move goods associated with other controlled goods (e.g., guns and drugs). Due to this scale, the integrated networks that these group have in place make it easy to support the addition of illegally sourced environmental products to what might otherwise be their core businesses. Furthermore, it is difficult discern whether goods being moved are illegally sourced at the point of import, which makes the use of illegally sourced (and often co-mingled) products (which are often benign in appearance to customs officials) an attractive means of hiding other illicit products within shipments. Criminal networks employ trade fraud, corruption (see below) and corporate structures to minimize risks of interception and detection.

Gold itself can be laundered into the global markets via several methods: acquiring fake documents, through bribery or threats, opening front companies, selling the gold to dishonest brokers, smuggling the gold through countries with lax export laws, or simply by paying individuals with legitimate authorization to sell gold.

### Corruption

The success of environmental crime is strongly linked to corruption. It facilitates the access to resource as well as the global movement of the resource and the success of criminal groups can be heavily reliant on corruption.

Corruption facilitates the access to environmental products through falsified concession papers and permits which enable the conduct of environmentally degrading activities on what should be protected land. Unlawful documentation is also used to establish premises for extracting materials or storing waste.

Further, corruption enables the falsification of origin certificates to give the semblance of legitimate origin for the environmental material being exported at the source country and/or imported in the destination country. Where that is not possible (or necessary) networks allow for the smuggling of goods through porous, poorly resourced, or corrupted border points to reduce the chances of interdiction. Unlawfully obtained documents as well as mis-invoicing and fraud may be used to

move extracted goods by road, ship, courier, or postal services. This may include ports for TBML, airports or courier services for directly transporting minerals, or financial institutions for wire transfers. Some case studies noted that detected criminal groups engaging in bribery were often known to law enforcement for other white-collar crimes.<sup>29</sup>

### Human Trafficking

Environmental crimes, especially illicit harvesting of timber or precious stones, are labour-intensive and rely on a considerable number of actors, potentially unwitting. As such, there are tangible links with significant human rights violations (e.g., human trafficking, slave labor,). These acts are undertaken both to generate money, but also to produce the necessary workforce to undertake the mining and logging activities. Criminal networks and loose networks of transnational criminals may carry out recruitment drives in regions with low employment opportunities and provide an alternative to the legitimate economy. Otherwise, they may engage in human trafficking or child labour to ensure a workforce to carry out the extraction. Criminal groups can take advantage of a lack of economic opportunity at regional level to perpetrate both. Furthermore, environmental crimes can also be time consuming. Criminal groups may engage in false imprisonment, indentured servitude, or other techniques to ensure that those recruited or trafficked do not leave the operation.

### Migrant Smuggling

Frequently, the same transportation routes are used to smuggle forest resources, minerals, fish, wildlife, and migrants. While human trafficking and migrant smuggling are distinct crimes, migrants are vulnerable to becoming victims of human trafficking and migrant smuggling may evolve into human trafficking, and, in such cases, the migrants will be recognized as victims of human trafficking.

### Other Environmental Crimes

Jurisdictions in Africa have noticed a congruence across environmental crimes, including illegal logging and wildlife trafficking. South African authorities shared with the project team that payments for wildlife products can also flow through timber trading companies along with other small- to medium-sized businesses, often commingling legal and illegal funds. Further, that criminal groups will seek to diversify their criminal activities. As noted with other predicate crimes like gun and drug trafficking, the knowledge they glean from the commission of those predicates (e.g., weak border checkpoints, corruption, smuggling routes, concealment methods, etc.) facilitate both environmental and wildlife crimes.<sup>30</sup>

### Terrorism and Insurgency

The FATF also observed the fact that environmental crime, particularly mining, is a profitable tool for insurgent groups in conflict with the central government authority and terrorist organizations operating in resource rich jurisdictions where there is instability. Public reporting by governments and NGOs have noted these groups will

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<sup>29</sup> For further detail see the FATF's paper on corruption (FATF, 2013<sup>[17]</sup>)

<sup>30</sup> For further detail see the FATF's paper on the Illegal Wildlife Trade (FATF, 2020<sup>[3]</sup>).

undertake environmental crime as a means of raising revenue or as a direct means of value transfer/payment for goods (e.g., guns and drugs). The precious metals and stones generated through this activity represents a portable, non-cash based alternate source of funding and the attraction is not surprising given the challenges in moving money through the formal financial sector.<sup>31</sup>

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<sup>31</sup> For further detail see (FATF, 2015<sup>[4]</sup>) and (GIABA, 2019<sup>[6]</sup>)

## Annex C. Compilation of Additional Cases and Examples

### Box A C.1. Case Study - Illegal Rosewood trafficking and lessons learned.

Madagascar has numerous varieties of precious woods, such as rosewood and ebony, which are threatened with extinction. Due to their quality and rarity, these two varieties are in great demand on the world markets and have been the subject of illicit traffic since the beginning of this century. This illicit trafficking has taken on the dimension of transnational organized crime. Various investigations determined that most of the rosewood and ebony wood subject to special authorisation for collection and export came from logging in protected areas, as opposed to having been felled by cyclones (a technical exemption). The illegally extracted wood is then trafficked through networks involving corrupt elected officials, policy makers, law enforcement authorities, and banking institution officials.

Early efforts to combat this crime, such as the ban on the logging and export of rosewood introduced in 2011, did result in traffic declining. However, this resulted in criminal groups formulating new strategies, such as laundering the proceeds of trafficking through the vanilla sector. However, lessons were learned and implemented by various national stakeholders, resulting in a continuous decrease in proceeds from illicit rosewood trafficking since 2014.

Firstly, authorities have had a valuable experience of working with civil society organisations and has identified that they have a role to play. In 2009, Madagascar established the Alliance Voahary Gasy (AVG) which is made up of thirty associations, NGOs, and environmental foundations. The AVG is committed to preserving the country's natural resources and fighting illicit trafficking of those resources through networking, environmental justice, advocacy, lobbying, and general communication. Furthermore, it collaborates both formally and informally with a variety of public entities, including the FIU, court system, and customs authorities. It has established various commissions, including one that dealt specifically with illegal rosewood trafficking. The AVG has grown to include approximately 7,000 informants and investigators across Madagascar. It has set up a system for monitoring information and rewarding environmental activists. It has made both political and strategic achievements, such as including rosewood and ebony wood in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and providing information on hidden stocks of rosewood to the national authorities, respectively.

Finally, SAMIFIN (Madagascar's AML agency that encompasses the FIU) adopted flexible approaches to data collection and analysis during periods of political and institutional instability and proliferating corruption. This included outreach to financial institutions to strengthen

and adapt their vigilance measures about operations related to collection, logging, and export of rosewood, which are considered as high risks of ML. Furthermore, data collection was a persistent issue with analysing STRs concerning rosewood. The data held centrally often differed from that produced at local or regional level. This led SAMFIN to make use of the data held and produced by the private sector, including organizations working in the protection of the environment and natural resources, the private company in charge of the management of the port of Vohémar, and shipping companies. This approach permitted the discovery of different operating modes of criminals and strengthened the databases on people involved in illicit trafficking.

Source: Madagascar.

### Box A C.2. Case study – Money Laundering from High-level Corruption in Mining Sector

In 2018, US imposed sanctions on Dan Gertler, and 14 affiliated entities<sup>1</sup>. Gertler has used his close friendship with DRC President Joseph Kabila to act as a middleman for mining asset sales in the DRC, requiring some multinational companies to go through Gertler to do business with the Congolese state. Specifically, Fleurette Properties, one of Gertler's companies, has been accused of buying mining assets below market value from Gécamines, and then selling them for a profit with award payments being made to top Congolese officials. Gertler and his company, Fleurette Properties, used offshore companies to facilitate such deals, and to hide the proceeds. As a result, between 2010 and 2012 alone, the DRC lost over USD 1.36 billion in revenues from the underpricing of mining assets that were sold to offshore companies linked to Gertler. The case is ongoing, with the US gathering information from business associations of Gertler, including international mining companies.<sup>2</sup>

Source: United States.

(1) US DoT (2018), *Treasury Sanctions Fourteen Entities Affiliated with Corrupt Businessman Dan Gertler Under Global Magnitsky*, <https://home.treasury.gov/news/press-releases/sm0417>

(2) WSJ (2018), *U.S. Probes Ties Between Glencore, Diamond Merchant Under Sanction*, [www.wsj.com/articles/u-s-probes-ties-between-glencore-diamond-merchant-under-sanction-1530827597](https://www.wsj.com/articles/u-s-probes-ties-between-glencore-diamond-merchant-under-sanction-1530827597)



### Box A C.3. Case study – Money Laundering from High-level Corruption in Mining Sector

In January 2021, Switzerland convicted Israeli billionaire Beny Steinmetz to five-year imprisonment and a CHF50 million (almost USD 56.5 million) fine over corruption charges related to mining sector in Guinea.<sup>1</sup> Steinmetz was alleged to have paid bribes to secure mining rights in the African country at a fraction of their fair value, and falsifying documents. The Prosecutors argued that Steinmetz moved the proceeds from the illegal mining deals through offshore companies and the banking sector to conceal their illegal origin. The case is under appeal.

Source: Switzerland.

<sup>(1)</sup> Swissinfo (2021), *Swiss court hands diamond magnate five-year prison sentence*, <https://www.swissinfo.ch/eng/swiss-court-hands-diamond-magnate-five-year-prison-sentence-/46309514>

### Box A C.4. Case Study: Combating Conservation Crimes initiative to identify areas of convergence

The U.S. government leads an initiative to combat conservation crimes through the Department of State's Bureau of Oceans and International Environmental and Scientific Affairs. This initiative covers wildlife trafficking, illegal logging and associated trade, crimes associated with illegal, unreported, and unregulated (IUU) fishing, and the illegal extraction of and illegal trade in gold and other minerals, precious metals, and gemstones. Together, conservation crimes generate hundreds of billions of dollars in illegal proceeds for transnational criminal organizations (TCOs) every year, undermining legal private sector industries and robbing governments and local communities of their natural resource bases. They pose money laundering risks and are known to converge with other illegal activities including drugs, weapons, and human trafficking.

The interagency group of experts under the Combating Conservation Crimes initiative works to identify areas of crime convergence, target approaches and policy responses to where these activities are known to overlap, and leverage existing resources for greater effectiveness, efficiency, and economies of scale.

Source: United States.

**Box A C.5. Case study: Successful ML conviction in China from illegal mining**

A gang led by Mr. L and his three brothers perpetrated illegal mining in China for more than ten years, starting in 2006. Mr. L used his family's influence to monopolise the local mining industry. Ms. C, Mr. L's wife, used a variety of means to conceal the illegality of the mining proceeds, knowing fully that the funds were from illegitimate sources. Multiple bank accounts and wire transfers were used to obfuscate the origin of the funds, while they were also laundered through mis-invoicing for lawyer fees and insurance.

The People's Bank of China (PBC) originally flagged Ms. C as suspected of money laundering by uncovering a number of the bank accounts and inexplicable transfers while assisting a local public security agency with a parallel investigation into the predicate offence. The PBC also received STRs from an insurance company flagging Ms. C's insurance purchases, and disseminated the STRs to the local public security agency.

Ms. C was convicted of Money Laundering on 18 February 2021 and was sentenced to imprisonment for 5 years and 6 months, along with a fine of RMB 400,000 (USD \$62,700). Illicit proceeds of RMB 3.01 million (USD \$47 million approximately) were recovered. Mr. L, his brothers, and 30 other gang members had been previously convicted for illicit mining and other organised criminal activity in 2019.

Source: People's Republic of China.

### Box A C.6. Case Study: Illegal Gold Mining and Forestry in Peru

Peru has conducted a Sectorial Assessment of the Risks of Money Laundering and Terrorism Financing of the mining sector (Mining ESR) and the timber sector. To develop these assessments, the government of Peru consulted a range of public, private and international sector entities, as well as specialists and academics.

On illegal mining, the sectorial assessment lists illegal gold mining as one of the largest sources of illicit financial flows. Peru assesses this sector to have had significant growth in the last decade. According to a study conducted in 2015, the value of illegal gold production has risen from USD 84 million in 2005 to an average of USD 1.7 billion per year between 2012 and 2015. Peru currently considers that the threat of financial flows has increased over the past 3 years. STRs received with a predicate offense of illegal mining has increased an average of 182%. According to the Sectoral Risk Assessment on the timber sector, one of the main sources of illicit assets was illegal logging, in three main departments (Loreto, Ucayali and Madre de Dios), which together account for 76% of the total hectares of Amazonian forests in Peru. In the assessment, it was estimated that the illegal flows associated with illegal timber production amounted on average to USD 455 million per year between 2007 and 2016 – the equivalent of 0.6% to 0.3% of GDP during that period. Since 2016, illicit flows may be decreasing since the amount of STRs has also decreased (they went from 11 in 2016 to 3 in 2019).

Source: Peru.

## References

- ACD (nd), *Red Flag Indicators for Precious Stones and Metals Dealers (PSMDs)*, [14]  
[https://www.police.gov.sg/~media/Spf/Files/cad/stro/2015-may/industry-layout/precious-stones-and-metals-dealers/PSMD Red Flag Indicators.](https://www.police.gov.sg/~media/Spf/Files/cad/stro/2015-may/industry-layout/precious-stones-and-metals-dealers/PSMD%20Red%20Flag%20Indicators.pdf)
- FATF (2020), *Money Laundering and the Illegal Wildlife Trade*, [3]  
<https://www.fatf-gafi.org/publications/methodsandtrends/documents/money-laundering-wildlife-trade.html>.
- FATF (2015), *Money laundering and terrorist financing risks and vulnerabilities associated with gold*, [4]  
<https://www.fatf-gafi.org/publications/methodsandtrends/documents/ml-tf-risks-and-vulnerabilities-gold.html>.
- FATF (2013), *Best Practices Paper: The Use of the FATF Recommendations to Combat Corruption*, [17]  
<https://www.fatf-gafi.org/publications/corruption/documents/bpp-fatfrecs-corruption.html>.
- FATF (2013), *Money laundering and terrorist financing through trade in diamonds*, [5]  
<https://www.fatf-gafi.org/publications/methodsandtrends/documents/ml-tf-through-trade-in-diamonds.html>.
- GIABA (2019), *Money Laundering and Terrorist Financing Linked to the Extractive Industry/Mining Sector in West Africa*, [6]  
[https://www.giaba.org/media/f/1104\\_pkbat\\_41745%20ENG-ML%20-%20TF%20IN%20EXTRACTIVE.pdf](https://www.giaba.org/media/f/1104_pkbat_41745%20ENG-ML%20-%20TF%20IN%20EXTRACTIVE.pdf).
- IMPACT (2019), *A Golden Web - How India Became One of the World's Largest Gold Smuggling Hubs*, [10]  
[https://impacttransform.org/wp-content/uploads/2019/11/IMPACT\\_A-Golden-Web\\_EN-Nov-2019\\_web.pdf](https://impacttransform.org/wp-content/uploads/2019/11/IMPACT_A-Golden-Web_EN-Nov-2019_web.pdf).
- MEF (2019), *Italy's national money laundering and terrorist financing risks assessment drawn up by the Financial Security Committee*, [13]  
[http://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti\\_en/prevenzione\\_reati\\_finanziari/prevenzione\\_reati\\_finanziari/Italyxs\\_national\\_money\\_laundering\\_and\\_terrorist\\_financing\\_risks\\_assessment Summary x5x.pdf](http://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_en/prevenzione_reati_finanziari/prevenzione_reati_finanziari/Italyxs_national_money_laundering_and_terrorist_financing_risks_assessment_Summary_x5x.pdf).
- MEF (2014), *Italy's National Assessment of Money Laundering and Terrorist Financing Risks*, [12]  
[http://www.dt.mef.gov.it/modules/documenti\\_en/prevenzione\\_reati\\_finanziari/prevenzione\\_reati\\_finanziari/NRA Synthesis 11 01 2017.pdf](http://www.dt.mef.gov.it/modules/documenti_en/prevenzione_reati_finanziari/prevenzione_reati_finanziari/NRA_Synthesis_11_01_2017.pdf).

- OECD (nd), *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*. [11]
- RHIPTO, INTERPOL and GI (2018), *World Atlas of Illicit Flows*. [9]
- Uhm, D. (2020), “The convergence of environmental crime with other serious crimes: Subtypes within the environmental crime continuum”, *European Journal of Criminology*. 10.1177/1477370820904585. [2]
- UNEP, I. (2016), *The Rise of Environmental Crime*. [1]
- United Nations (2020), *Conference of the Parties to the United Nations Convention against Transnational Organized Crime*, [https://www.unodc.org/documents/treaties/UNTOC/COP/SESSION\\_10/Website/CTOC COP 2020 L.9/CTOC COP 2020 L.9 E.pdf](https://www.unodc.org/documents/treaties/UNTOC/COP/SESSION_10/Website/CTOC COP 2020 L.9/CTOC COP 2020 L.9 E.pdf). [15]
- United Nations (2019), *Roadmap for Financing the 2030 Agenda for Sustainable Development*, <https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/UN-SG-Roadmap-Financing-the-SDGs-July-2019.pdf>. [7]
- UNODC (nd), *West and Central Africa - Wildlife Crime Threat Assessment*, <https://cites.org/sites/default/files/eng/prog/enforcement/E-CoP18-034-Threat-Assessment.pdf>. [16]
- World Bank (2019), *Illegal Logging, Fishing and Wildlife Trade: The Costs and How to Combat It*, <https://pubdocs.worldbank.org/en/482771571323560234/WBGReport1017Digital.pdf>. [8]







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## **MONEY LAUNDERING FROM ENVIRONMENTAL CRIME**

Environmental crime is one of the most lucrative criminal activities, generating around USD 110 to 281 billion in criminal gains each year.

This report looks at the methods that criminals use to launder the proceeds of environmental crime. When properly implemented, the FATF Recommendations provide effective tools to go after these illicit financial flows.

The report highlights the need for countries to assess whether their financial and non-financial sector may be misused to conceal or launder the profits from environmental crimes.