

# Trends in Stakeholder Reporting: Mineral Supply Chains



# Introduction



Risks of contributing to conflict financing, human rights abuses, and financial crime are regularly reported across different mineral supply chains. The OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affect and High-Risk Areas (the “Guidance”) recommends that companies in all mineral supply chains and in all geographies take steps to identify and address these risks.

When the Guidance was developed in 2011, civil society reports, due diligence legislation and industry standards largely focused on tin, tantalum, tungsten and gold (commonly referred to as “3TG”). As companies are increasingly implementing the Guidance, expanding the recommendations to mineral supply chains beyond 3TG, stakeholders need to develop a better understanding of the risk landscape in order to prioritise their due diligence efforts.

To that end, the OECD, supported by TDI Sustainability, collected civil society, media and other stakeholder reports online through automated and desk

research, to provide information on how human rights abuses, conflict finance, and financial crimes in mineral supply chains are reported and what type of information on these issues is publicly available.

Annex II of the Guidance sets forth the risk scope for companies implementing the Guidance. Those risks are:

- Serious abuses of human rights: Including any forms of torture, cruel, inhuman and degrading treatment, forced or compulsory labour, worst forms of child labour, war crimes and other violations of international humanitarian law (IHL), crimes against humanity (CAH), genocide, and other “gross” human rights abuses such as gender or sexual based violence.
- Support for public or private security forces
- Support for non-state armed groups
- Financial crime, including bribery, money laundering, and tax evasion

## Acknowledgements

This paper was authored by Rashad Abelson, under the supervision of Tyler Gillard (OECD Centre for Responsible Business Conduct). Internal review was carried out by Louis Maréchal and Hannah Koep-Andrieu. Data collection was supported by Assheton Carter, Graham Lee, and David Sturmes from TDI Sustainability. Roxana Glavanov and Erica Weathers provided the formatting and illustrations. This paper benefitted from detailed input by stakeholders representing government, private sector and civil society.

## Disclaimer

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**This document and any map included herein are without prejudice to the status or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city, or area.**

**This paper was originally published on 28 April 2021. Adjustments were made to five of the figures (p.17, p.21, p.22, p. 25, and p.29), correcting mislabelled or double listing of certain data points, and the paper was reissued on 9 July 2021.**

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The primary objective of this paper and the accompanying excel document is to provide examples of how these risks are publicly reported, ultimately to help readers of this paper understand and prioritise risks when conducting due diligence. While the numbers of reports, taken alone, are not an accurate measurement of risk associated with a specific mineral or geography, it is an important information input to be considered in light of other contextual information (see section below on “How to use this paper.”)

This information can be useful for governments to better understand where to focus enforcement or development efforts, companies initiating or expanding their due diligence process, and civil society to help focus or re-direct research and campaigning, in order to fill in the gaps in information.

The methodology for data collection has been piloted for the first time with this paper. Moving forward, the OECD plans to prepare future papers periodically (e.g. two years). As feedback is received and reporting on these issues grows, the OECD will further revise the methodology, which would be reflected in future papers.

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## 1 Key Findings and General Observations a) There is a broad distribution of reports across different mineral supply chains

There is a broad distribution of reports across the different minerals types. Although there are clearly biases in reporting (see section b below), all 40 minerals analysed in this study appear in at least one of the reports collected. Likewise, while certain issues are more often reported about certain minerals (e.g. precious metals and stones mentioned in reports about financial crimes), all the broad mineral categories (see Figure 3.27) appear in reports about nearly all the Annex II risks. To demonstrate this point, the paper first illustrates the top five minerals appearing in reports about a particular risk, then further illustrates how the graph would look with those top five removed. When focusing on the number of reports of each risk, there is also a large ‘others’ section in each type of risk, suggesting that many risks are associated with many different minerals supply chains.

## b) 3TG and Cobalt from Central Africa are receiving outsized attention which risks stigmatising and potentially “de-risking” responsible mineral sourcing from the region

Though the Guidance has always been applicable to all mineral supply chains, its development stemmed out of numerous civil society and international organisation reports in the early 2000s establishing direct connection between the production and trade of 3TG and the funding of state and non-state armed groups in the Democratic Republic of the Congo (DRC). Following the passage of the United States Dodd-Frank Act, Section 1502, in 2011, publically listed companies in the United States were required to undertake due diligence in their mineral supply chains to determine if they were sourcing 3TG from the DRC or neighbouring countries<sup>2</sup>. Likewise, industry initiatives developed to provide support to companies implementing the Guidance, including initiatives in Central Africa to help establish supply chain traceability and support the risk management process. The adoption of the EU Responsible Minerals Regulation in 2017 further supported this trend<sup>3</sup>. Further adding to the bias on DRC reporting, civil society reports on child labour in cobalt mining received significant media attention, as well as a

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number of follow up reports on the same issue.

As such, even 10 years later, the biggest focus of civil society, media, government, and industry reporting is still on those five supply chains (3TG+Cobalt) and the DRC, as is reflected in this database. In fact, 929 of the 1233 reports featured in this database make some mention of the DRC. However, the number of reports should not be interpreted as the sole indicator of the level of risk. If anything, this indicates the potential significant gaps in reporting on other mineral supply chains. The issues reported in mining communities in the DRC are certainly not unique to 3TG, nor are they unique to the DRC.

For example, support for non-state armed groups has been reported across multiple countries in North and South America, in Afghanistan, in Myanmar, and in West Africa, and extends beyond 3TG, including iron, jade, and talc. Likewise, child labour is reported to be occurring in mica supply chains from India, coal in Colombia, zinc in Bolivia, and diamonds in Angola and Central African Republic, but the overwhelming amount of attention is currently given to child labour in cobalt mining from the DRC.

Stakeholders reading this report (companies, civil society, and governments) can use this information to refine their risk prioritisation methodologies and to more efficiently focus prevention and mitigation efforts. This will not only help companies better address risk, but it can also promote responsible engagement in mining communities globally. Stakeholders report that the lack of attention on supply chains outside of DRC can lead to “de-risking” strategies by companies, essentially embargoes of DRC minerals in favour of “less risky” materials from other supply chains. Understanding that risk exists globally should encourage companies to stay responsibly engaged and conduct due diligence on supply chains where they normally would not.

## **c) The number of reports about a mineral or country are an indicator of risk that warrant attention, but must be supplemented through further desk research and stakeholder engagement**

This paper does not measure risk, nor does it rate certain countries or minerals ‘riskier’ than others. Counting the number of publically available reports is not an accurate measurement of risk and should not be used as the sole indicator for guiding a company’s

risk assessment. Important additional contextual information should be taken into account, including information gathered through engagement with institutions in the broader accountability environment such as international organisations, industry associations, and local and international civil society.

One of the most enlightening findings was on the gaps in reporting. These gaps need to be supplemented with further desk research at the broader country and mineral supply chain level. Likewise, research on mineral supply chains (e.g. data on production, trade, reserves and prices) will help contextualise other risk indicators and further inform risk prioritisation, mitigation, and prevention measures. Sections 4 and 5 of this introduction provide a list of helpful sources of information that can be consulted to supplement desk research.

## **d) Individual company reporting on risk is still not sufficiently detailed nor easily found through desk research**

The data gathering was limited to publically available reports from public organisations (national, regional, and international organisations), industry reporting (e.g. annual due diligence reports), civil society reports, and press reports (local and international). Of the 1 233 reports identified, an overwhelming number of reports came from press (71%) and civil society (20%), with industry and company reporting making up only 3% of total reports.

The specific methodology on how this was done is described in the section below and the data entry instructions given to the consultants is described in the Annex to this document. Relevant here, the web-scraping tool used to gather reports was limited to links available in the first ten pages of search results. Likewise, consultants were asked to filter reports that did not contain useful detail on the issue described (e.g. the location of the alleged incident, the date it occurred, or the parties involved). While the methodology is not perfect and still very much in a pilot phase, these results suggest a lack of visibility and lack of sufficient detail on risk identification in company reporting on due diligence efforts, as recommended by the Guidance.

This observation is reaffirmed in an accompanying study conducted by the OECD on company uptake

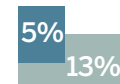
## **Companies Demonstrating Guidance Uptake (at least 1 dimension) (n=503)**

Data from 2014      Data from 2018

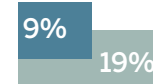
### Step 1



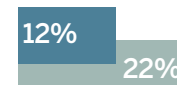
### Step 2



### Step 3



### Step 4



### 5-Step Framework (overall)



### Annex II Risks



Source: OECD Study of Global Uptake of the Due Diligence Guidance for Responsible Mineral Supply Chains from Conflict-Affected and High-Risk Areas Based on Corporate Disclosure (forthcoming 2021)

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which similarly found a lack of detailed reporting by most companies. In that study, the OECD analysed the public reporting of 503 companies. Specifically, the study measured how the public reporting described the company due diligence efforts according to each of the steps of the Guidance. Steps 2 and 3 of the Guidance focus on company risk identification and risk mitigation respectively. The authors of that study found that Steps 2 and 3 score particularly low because company reporting focuses mostly on policies rather than the specifics or risk identification of mitigation. That said, the graph demonstrates overall improvement in company uptake of the Guidance and quality of reports from 2014 to 2018.

**2 Methodology for data collection and analysis**  
TDI Sustainability conducted the data gathering in four distinct phases; an automated search with a customised data scraping tool in April 2019, a manual search from September to October 2019 to augment the completeness of the automated search, a further automated search in January 2020 to capture more recent reports, and a final manual search in May 2020 to spotlight specific web domains as sources of information.

The automated search phases were powered by TDI's in-house allegation identification and monitoring system, TDIsearch360, which applied a list of 50+ Annex II-related keywords to the set of commodities specified by the OECD. The TDIsearch360 system compiles reports from the top ten pages of search results, and outputs a high volume of search results in the form of Excel spreadsheets, which were then manually filtered for relevance by TDI and the OECD and categorised and summarised according to the framework built jointly with the OECD. This process, and the corresponding categorisation framework, are described in Annex: Guide to Data Entry. The data gathering and analysis were performed in English, French, Spanish, Portuguese, Chinese, and Russian. Native speakers were used to conduct the analysis in each of these languages. Analysts with native written English skills then performed quality control on each report summary and categorisation featured in the database.

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## Minerals

### PRECIOUS STONES

[Diamonds](#)

[Jade](#)

[Ruby](#)

### INDUSTRIAL MINERALS

[Potassium/Potash \(K\)](#)

[Mica](#)

[Talc](#)

[Fluorite](#)

[Phosphate](#)

[Zirconium \(Zr\)](#)

[Silicon \(Si\)](#)

[Graphite](#)

### PRECIOUS & PLATINUM METALS

[Gold \(Au\)](#)

[Iridium \(Ir\)](#)

[Osmium \(Os\)](#)

[Palladium \(Pd\)](#)

[Platinum \(Pt\)](#)

[Rhodium \(Rh\)](#)

[Ruthenium \(Ru\)](#)

[Silver \(Ag\)](#)

### ENERGY RAW MATERIALS

[Coal \(anthracite\)](#)

[Uranium \(U\)](#)

### INDUSTRIAL METALS (FERROUS AND NON-FERROUS)

[Aluminium/](#)

[Copper \(Cu\)](#)

[Lead \(Pb\)](#)

[Zinc \(Zn\)](#)

[Nickel \(Ni\)](#)

[Iron \(Fe\)](#)

[Tin \(Sn\)](#)

### MINOR METALS

[Tungsten \(W\)](#)

[Tantalum \(Ta\)](#)

[Niobium \(Nb\)](#)

[Molybdenum \(Mo\)](#)

[Cobalt \(Co\)](#)

[Manganese \(Mg\)](#)

[Antimony \(Sb\)](#)

[Vanadium \(V\)](#)

[Titanium \(Ti\)](#)

[Lithium \(Li\)](#)



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The stakeholder reports collected were published between 1 January 2017 and 31 December 2019. Additionally, a very small number of reports predating 2017 were also added to the database in cases where such reports served as the 'primary' source<sup>1</sup> for several reports from January 2017 or later, and were therefore of demonstrable contemporary relevance. Reports from this timeframe may be in reference to events that allegedly took place before this timeframe. The criteria for including reports to the database focusses on the date the report was published, not the dates the alleged events occur.

It is worth reiterating that this data is not an indicator on the level of risk of the Annex II issues, rather it is an indicator on the level of stakeholder reporting, which is critical for due diligence efforts. The inverse is also true; the lack of reporting of a particular issue is not an indicator of lack of risk, but may instead reveal a gap in information that should be noted by all stakeholders.

As is explained in the Annex, the volumes of reports on specific issues could be the result of an echo chamber effect, which the data collection methodology attempts to control for by labelling the number of 'primary' reports on a specific topic. One often observed reason for a large volume of data points on a particular issue is that a major news agency or an international civil society organisation will launch an investigation and a number of other organisations will build on this reporting, and also a number of industry bodies will issue responses.

## 3 How to use this paper

The purpose of this paper is to provide readers with a quick snapshot of how civil society, media and other stakeholders report on risks in mineral supply chains across a variety of minerals and countries. This is important to different stakeholders for a variety of reasons. Primarily, for companies conducting due diligence, particularly downstream companies with multiple mineral inputs (e.g. cellular phones contain roughly 45 different minerals), this information, when considered in light of other contextual information on country and supplier risk, is important as a specific input to help prioritise risk assessment towards supply chains, risks, and geographies that might not have been adequately considered before. This is especially

critical now that major industry standards are expanding beyond 3TG and into base metals<sup>4</sup>, as well as mineral specific due diligence initiatives taking greater shape (i.e. in mica, coal and precious stones<sup>5</sup>).

Readers can first review this paper and search through the accompanying excel to get a helpful initial understanding of where to direct further research. These reports provide important threads for companies to pull and raise specific due diligence questions. For example:

- Is my company causing, contributing, or directly linked to the situation alleged in the report?
- Was the incident previously identified in my own due diligence process?
- Is my company appropriately considering and addressing the risks reported on?

Readers can then accompany their research with a review of the country-level and supply chain information linked below to fill in gaps in public reporting. For example, it is possible that a review of the country-level information reveals that child labour exists in Country X, despite a low volume of reports that appear in this analysis. Similarly, a review of the mineral supply chain information might reveal that Country X is a significant producer of minerals used in the reader's supply chain, leading to further due diligence considerations.

For governments committed to promoting implementation of the Guidance by companies operating in or from their jurisdiction, this information can also help prioritise where to direct efforts to maximise impact and achieve policy goals. This can include awareness raising, law enforcement, distribution of foreign aid and development funds, and, where applicable, regulatory reform. For example, regulations in the United States and the European Union foresee that the mineral scope can be expanded beyond 3TG if the authorities assess that it is necessary.

For civil society and media, this information can also help focus or re-direct attention to where there are gaps, as well as better inform existing activism, research, and campaigns. Importantly, this can help donors better scope out priorities for technical assistance and development projects on the ground, led by civil society organisations that are reporting on these issues.

“In addition to this report and the Guidance, the OECD also provides useful research and tools to help companies identify and address risks in mineral supply chains that should be consulted to complement company due diligence efforts.”

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**4 Other helpful sources of risk information**  
As part of the development of this report and related projects, the OECD convened an expert group made up of representatives from government, industry (upstream and downstream), and civil society to help put together a list of sources of country-level risk information. The sections below provide a non-exhaustive list of resources useful to both contextualise the reports captured in this study as well as fill in gaps of missing information. Section (a) provides country-level sources of information and section (b) provides sources for supply chain information.

In addition to this report and the Guidance, the OECD also provides useful research and tools to help companies identify and address risks in mineral supply chains that should be consulted to complement company due diligence efforts.

## A) COUNTRY-LEVEL RISK INFORMATION

### General Country Information

#### [Index for risk management \(INFORM\)](#)

INFORM is a global, open-source risk assessment for humanitarian crises and disasters. It can support decisions about prevention, preparedness and response. INFORM country profiles contain more in-depth information on each country. In addition to the results in the global list, country profiles show trends, comparisons with countries with similar risk, regional and income-group averages and more information at the indicator level. Country profiles can be used to provide more in-depth information on risk in a particular country. It combines around 50 different indicators that measure hazards (events that could occur), vulnerability (the susceptibility of communities to those hazards) and capacity (resources available that can alleviate the impact). IINFORM covers 191 countries and territories and includes both natural and human hazards. All the individual indicators, index components and calculations are open and transparent. The closer the value is to 10, the higher the risk.

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This section provides a non-exhaustive list of resources useful to both contextualise the reports captured in this study as well as fill in gaps of missing information

#### [World Bank: World Governance Index](#)

The Worldwide Governance Indicators (WGI) project reports aggregate and individual governance indicators for over 200 countries and territories over the period 1996–2019, for six dimensions of governance: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption.

#### [European Union list of conflict-affected and high-risk areas \(CAHRAs\) \(as defined under Regulation 2017/821\)](#)

The website presents an indicative, non-exhaustive, and regularly updated list of conflict-affected and high-risk areas (CAHRAs) (as defined under Regulation 2017/821). This website and its underlying project are to be understood in the broader context of the European Commission's work on trade in general and responsible sourcing of minerals in particular. The objective of this project and of the CAHRAs list presented on this website is to facilitate due diligence efforts of European



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Union importers of minerals and metals falling under Regulation (EU) 2017/821. Information available through this website should be seen as indicative, not exhaustive, and as constituting only a part of, and is not intended to substitute and cannot replace, the broader due diligence efforts required to be conducted by relevant organisations and companies.

## [Control Risks: RiskMap](#)

The RiskMap is Control Risks' forecast of the global risk landscape in 2017. The colouring reflects the security risk rating and the letter tiles denote the level of political risk.

## **Serious human rights abuses**

### [Amnesty International Country Profiles](#)

Amnesty International is a global non-governmental organisation investigating and publically campaigning against human rights abuses.

### [UN Committee Against Torture](#)

The Committee Against Torture (CAT) is the body of 10 independent experts that monitors implementation of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment by its State parties.

## **Child labour or forced labour**

### [United States Department of Labor: List of goods produced by child labour or forced labour / Findings on the Worst Forms of Child Labour](#)

The US Department of Labor publishes three annual reports on international child labour and forced labour that serve as resources for research, advocacy, government action and corporate responsibility. These reports are The Department of Labour's Findings on the Worst Forms of Child Labor; the List of Goods Produced by Child Labour or Forced Labor; and the List of Products Produced by Forced or Indentured Child Labor. Each of these reports has a distinct mandate, focus and set of implications, but taken collectively, they document the current situation of child labour, forced labour and forced child labour around the world.

### [International Labour Organisation \(ILO\): Statistics and indicators on forced labour and trafficking](#)

The linked ILO portal connects country information and data on labour laws, standards, policies and statistics. Country profiles below provide also relevant information on ILO projects and programmes, publications and good practices.

## **Sexual violence**

### [UN: Global Database on Violence against Women](#)

This database was created by the UN and is designed to provide easy access to comprehensive and up-to-date information on measures undertaken by governments to address all forms of violence against women; Increase opportunities for exchange of experiences in addressing violence against women; strengthen the knowledge-base for effective policy responses to prevent and address violence against women; and encourage the further collection, availability, use and dissemination of data on violence against women, as well as analysis of such data.

## **Conflict and Security**

### [Institute for Economics and Peace: Global Peace Index](#)

The index gauges global peace using three broad themes: the level of safety and security in society, the extent of domestic and international conflict and the degree of militarization. Factors are both internal such as levels of violence and crime within the country and external such as military expenditure and wars. A value closer to 5 is "less peaceful" and a value closer to 1 is "more peaceful".

### [Heidelberg Institute for International Conflict Research: Conflict Barometer](#)

The Conflict Barometer has been published since 1992 and is our annual analysis of the global conflict events. Non-violent and violent crises, wars, coup d'etats as well as peace negotiations are observed in it. Countries are rated on a scale from 1-5, with the most intense conflict being 5.

Readers can then accompany their research with a review of the country-level and supply chain information linked below to fill in gaps in public reporting.

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## [Geneva Academy: Violations of International Law](#)

The Rule of Law in Armed Conflicts project (RULAC) is an online portal that identifies and classifies situations of armed conflict, provides information on the parties to these conflicts, and applicable international law. It aims to provide classification of situations of armed conflict in the world based on open source information.

## **Financial crime (corruption, money laundering, tax evasion)**

## [Transparency International Country Profiles FATF: List of high-risk and non-cooperative jurisdictions and country reports](#)

The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist

These reports provide important threads for companies to pull and raise specific due diligence questions

financing and other related threats to the integrity of the international financial system. The FATF has developed a series of Recommendations that are recognised as the international standard for combating of money laundering and the financing of terrorism and proliferation of weapons of mass destruction. The FATF monitors the progress of its members in implementing necessary measures, reviews money laundering and terrorist financing techniques and counter-measures, and promotes the adoption and implementation of appropriate measures globally. In collaboration with other international stakeholders, the FATF works to identify national-level vulnerabilities with the aim of protecting the international financial system from misuse.

## [Natural Resource Governance Institute \(NRGI\): Resource Governance Index](#)

The NRGI is an independent organisation dedicated to improving countries' governance over their natural resources to promote sustainable and inclusive development. NRGI provides tools to help those working in the resource governance field to perform quantitative and qualitative analysis and assessments.

## [Extractive Industry Transparency Initiative \(EITI\) country profiles](#)

The EITI is a global standard for the good governance of oil, gas and mineral resources. It seeks to address the key governance issues in the extractive sectors. The EITI assess country efforts towards meeting the EITI Standard.

## **B) SUPPLY CHAIN INFORMATION**

## [European Union Raw Materials Information System: Mineral Profiles](#)

## [German Federal Institute for Geosciences and Natural Resources](#)

## [United States Geological Survey, National Minerals Information Center](#)

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# Overview of data collected

**Graphs on total number of reports** [1233 in total]  
 When reports are collected and added to the accompanying database, they are subsequently categorised according to the relevant minerals, geographies, and risk types described in the report. They are also further divided by the language of the report and the type of source. The following graphs (Figures 2.1-2.5) represent how all of the reports collected (1 233 in total) are divided along those main categories; risk, geography, mineral type, language, and type of source. Further sections of the paper dive more deeply into each of these categories and parse them out even further.

**Figure 2.1. Number of reports according to type of risk.** As described in the section above, the Guidance is primarily a tool for risk prioritisation. Annex II of the Guidance sets out the most salient risks in minerals supply chains and is the basis of the parameters used to categorise reports for this database. This figure represents the number of reports related to each of the Annex II risks. Reporting on child, forced, or compulsory labour featured most prominently, possibly due to media and civil society attention on cobalt, particularly during the time period focussed on for this report (2017 – 2019).

**Figure 2.2. Number of reports according to relevant geography.** The Guidance applies to all mineral supply chains and all supply chain actors. Reports were categorised according to the geography where the alleged risk is taking place, but also relevant countries where businesses/individuals described in the report are from. For example, if a report was about an incident involving a Canadian mining company operating a mine in Chile, then both Canada and Chile would be tagged as relevant geographies. This figure represents the number of reports according to the relevant countries described in the report. It is clear, that much of the reporting on these issues is linked to mining and minerals trading activity in Africa. This is likely due to several factors, including the focus on Central Africa in due diligence legislation (United States Dodd Frank Act, Section 1502) and the focus on cobalt mining linked to the “green transition”, with most of the world’s cobalt coming from the DRC.

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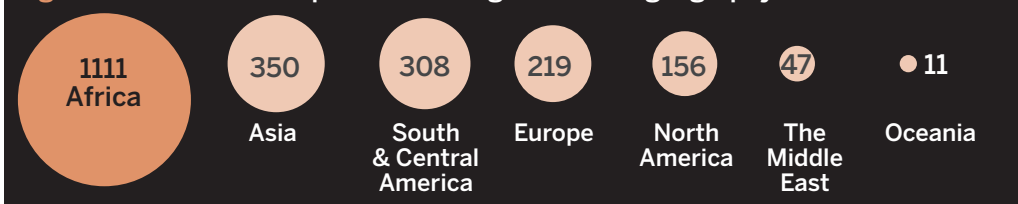
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**Figure 2.1. Number of reports according to type of risk**

The worst forms of child labour	451
Forced or compulsory labour	265
Torture, cruel, inhuman and degrading treatment	90
War crimes/IHL/CAH/Genocide	20
Other gross human rights violations	307
Direct or indirect support to non-state armed groups	308
Issues with public or private security forces	173
Money Laundering	80
Bribery and Corruption	271
Non-payment of taxes, fees and royalties due to governments	181
Fraudulent misrepresentation of the origin of minerals	144

**Figure 2.2. Number of reports according to relevant geography**





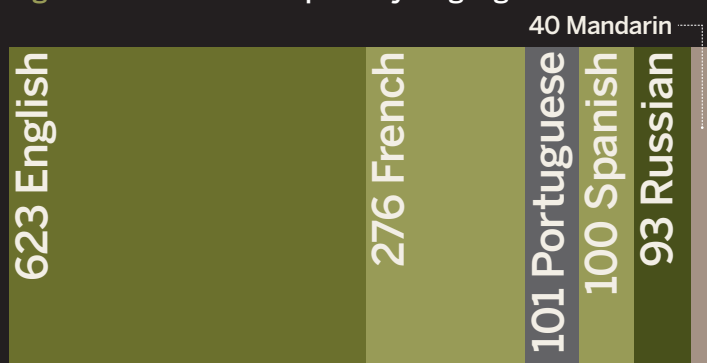
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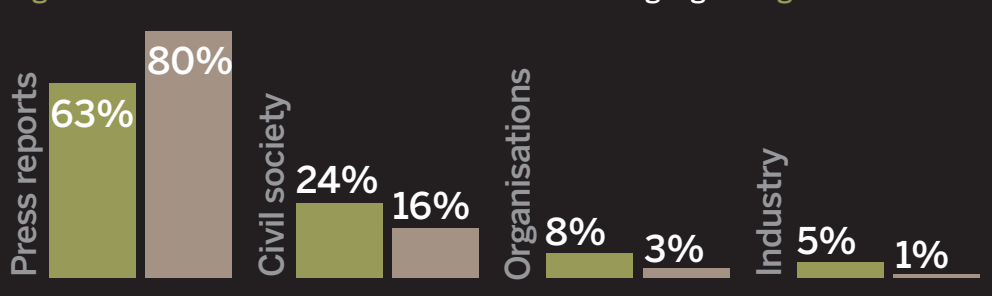
**Figure 2.3. Number of reports according to mineral grouping**



**Figure 2.4. Number of reports by language**



**Figure 2.6. Source of information in the two main languages: English v French**



**Figure 2.5. Number of reports according to type of source**



**Figure 2.3. Number of reports according to mineral grouping.** The reports cover 40 different mineral supply chains, listed on page 5. The minerals scope was established with input from a multi-stakeholder group of experts. These can be grouped into the following broad categorisations; minor metals, precious stones, energy raw materials, industrial & construction minerals, precious & platinum group metals, and industrial metals (ferrous and non-ferrous).

This figure demonstrates the number of all reports related to the various groups of metals. The relatively high number of reports on minor metals is due to recent attention on cobalt, as well as tungsten, and tantalum.

**Figure 2.4. Number of reports by language**

This figure represents the number of reports by language. The primary tool to gather the reports was a custom designed web-scraper, which was then supplemented by desk research. Given that English and French are the official working languages of the OECD, most research hours allocated were spent on those two languages, hence the higher number of reports in those two categories. It is worth noting that many of the Mandarin reports are translations of civil society reports from North America and Europe, rather than primary reporting in local-language press.

**Figure 2.5. Number of reports according to type of source.**

The web-scraping was limited to publically available reports from public organisations (national, regional, and international organisations), industry reporting (e.g. annual due diligence reports), civil society reports, and press reports (local and international). This figure breaks down the number of reports according to the type of source.

**Table 2.6. Source of information in the two main languages.**

Focusing on English and French, this figure shows the percentage distribution of the sources of information. They are roughly consistent across both languages: primarily press reports, followed by civil society reports, public organisations, and industry.

## Quick links

+ [Introduction](#)

+ [Overview of data collected](#)

+ [Trends](#)

+ [Deep dive](#)

+ [Guide to data entry](#)



# Trends

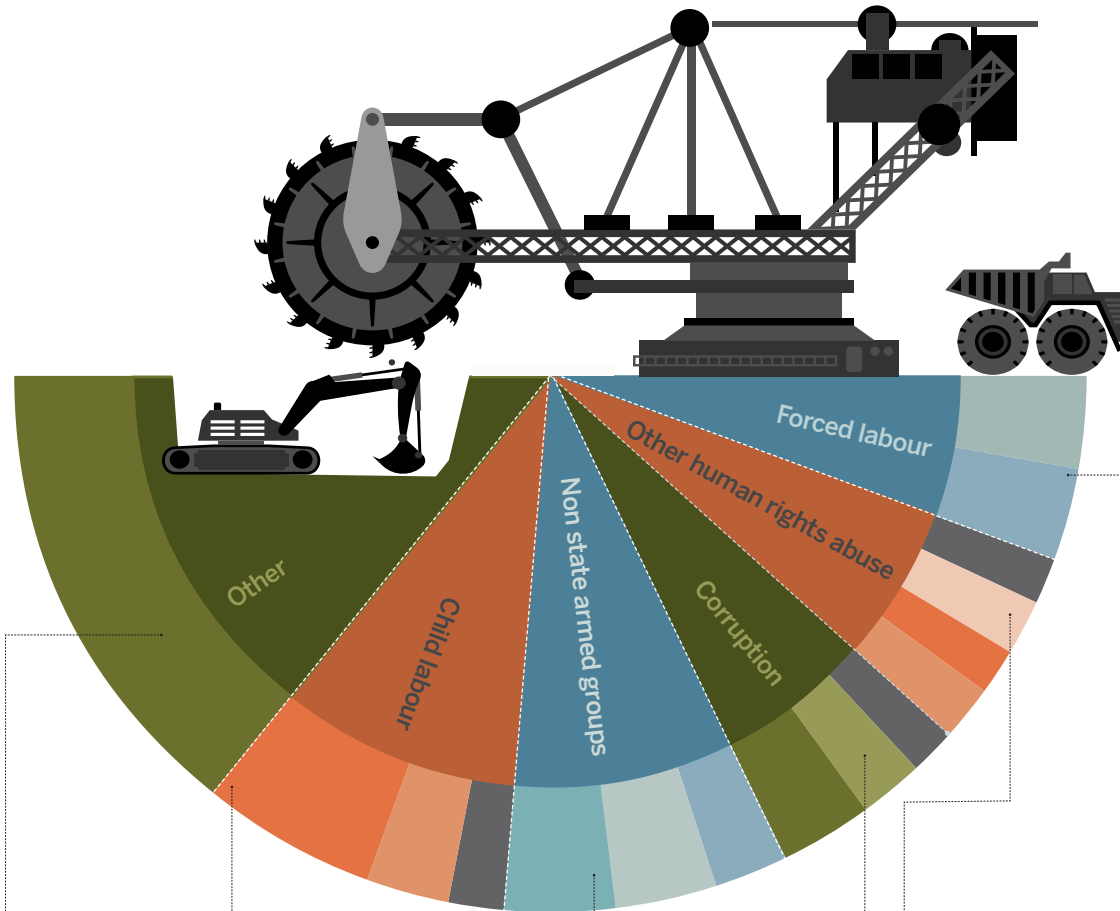


## Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin



# Trends



**Other**  
All metals 1103

**Child labour**  
Minor metals 393  
Other 187  
Precious and Platinum 126

**Non state armed groups**  
Other 255  
Minor metals 235  
Precious & Platinum 171

**Corruption**  
Other 215  
Minor metals 138  
Industrial metals 119

**Other human rights abuse**  
Minor metals 120  
Precious & Platinum 116  
Precious stones 114  
Energy materials 104

**Forced labour**  
Minor metals 198  
Other 225

## Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

**Figure 3.1. Most reported risks associated with each metal type**

This figure shows the most reported risk types and further subdivides them by the most reported on mineral grouping for each of those risks. Minor metals is the most reported type of material in each of the sub-categories.

## Top 5 most reported minerals for each Annex II risk

The below series of graphs demonstrate the five most reported mineral supply chains linked with each of the Annex II risks.

Cobalt features highly in reports about “Child Labour” and “Forced or Compulsory Labour”. For “Money Laundering” and “Non-payment of taxes”, gold is the most reported on mineral. Generally, gold, tin, tantalum, and tungsten (3TG) also receive significant attention likely due to the focus on these minerals as part of legislation in the United States and the European Union. For other types of Annex II risks, the spread of minerals is much more even, and the ‘others’ category, for minerals that are not in the top 5, takes up a large proportion of each chart. This indicates that a wide range of minerals are identified as linked to Annex II issues – not just 3TG. Of note, precious stones (diamond, ruby, and jade) also regularly feature in the top five.

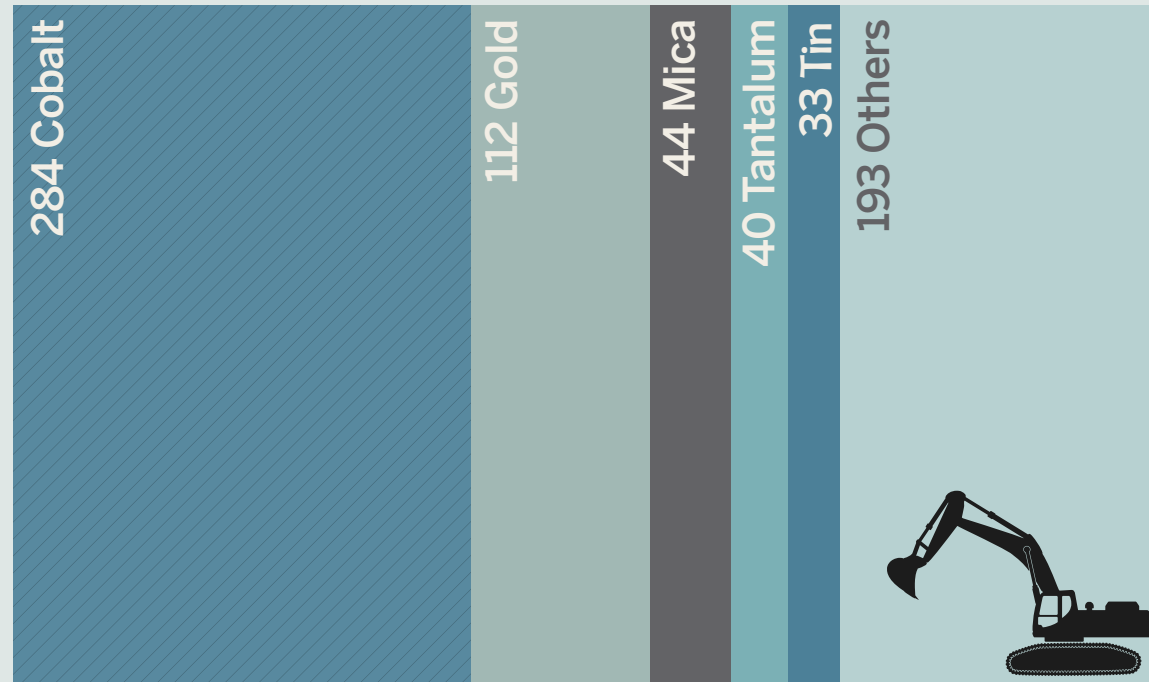
Once the top five minerals for each category are removed, it becomes even more apparent that reporting is well spread among the 40 minerals profiled. The ‘others’ category for minerals outside the top 10 predominates in all the charts except “Fraudulent Misrepresentation”, where niobium scores highly, which seems primarily attributable to reports of overland smuggling from the DRC.

# Trends

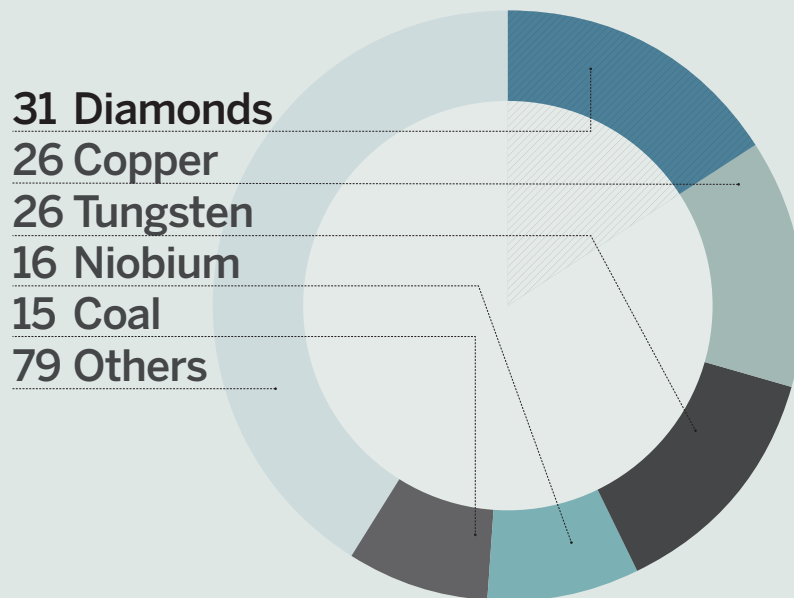
## Child Labour

- Trends links**
- + [Child Labour](#)
  - + [Forced Labour](#)
  - + [Inhuman Treatment](#)
  - + [IHL/CAH/Genocide](#)
  - + [Other Human Rights](#)
  - + [Non-State Armed Groups](#)
  - + [Security Forces](#)
  - + [Money Laundering](#)
  - + [Bribery & Corruption](#)
  - + [Non-Payment of Taxes](#)
  - + [Fraudulent Origin](#)

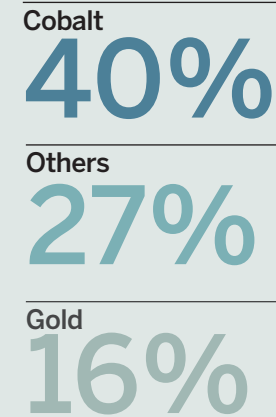
Child Labour Top 5 most reported



Child Labour after removing top 5



Top three reported



### Description

Annex II of the Guidance refers to International Labour Organisation (ILO) Convention No. 182 on the Worst Forms of Child Labour for clarity on what constitutes the “worst forms of child labour.”<sup>6</sup> The mere presence of children on mine sites is not necessarily an adverse impact, and the Guidance specifies that companies should focus on the worst forms of child labour as set out by the ILO. Unfortunately, public reporting on this issue generally fails to capture the nuance between child labour and worst forms of child labour. Accordingly, for the purposes of this database, all articles or reports alleging any type of child labour were taken into account.

Common examples of worst forms of child labour in mineral supply chains include working underground or under water, work with dangerous machinery and tools, carrying heavy loads, crushing rocks, and work that exposes miners to hazardous substances.<sup>7</sup> Children who work for third-party adults have a high risk profile when it comes to other issues such as child trafficking or the risk of sexual abuse and prostitution on mine sites or in mining areas, especially for girls. Sexual and physical abuses – also covered under the definitions of worst forms of child labour – are also seen in mining work.

### Observations

This figure shows the five most mentioned minerals in reports on child labour. Cobalt is the most reported on mineral in this category. The ‘others’ section includes reports on nearly all of the minerals covered under the scope of this study. Interestingly, reports of mica supply chains linked to child labour features among the top 5 in addition to the often reported on 3TG.



# Trends

## Forced or compulsory labour

### Description

Forced or compulsory labour is defined in the guidance as work or service which is exacted from any person under the menace of penalty and for which said person has not offered himself voluntarily. This description was taken directly from the ILO's Forced Labour Convention No. 29.<sup>8</sup>

According to the ILO, the concept of forced labour covers a wide range of coercive labour practices, which occur in all types of economic activity and in all parts of the world.<sup>9</sup> The US State Department offers several examples of coercive behaviour that may occur on a mine site including force or physical threats, psychological coercion, abuse of the legal process, deception, withholding passports, and debt bondage.<sup>10</sup>

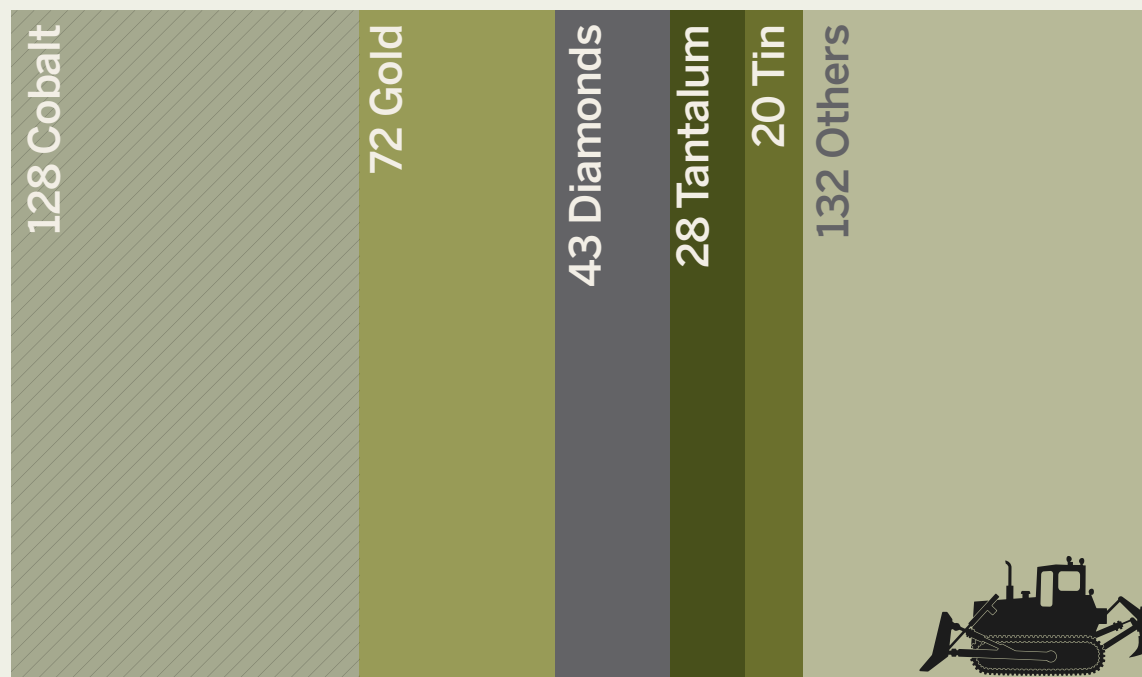
### Observations

This figure shows the five most mentioned minerals in reports on forced or compulsory labour. Cobalt is the most reported on mineral in this category followed by gold and diamonds. The 'others' section includes reports on nearly all of the minerals covered under the scope of this study.

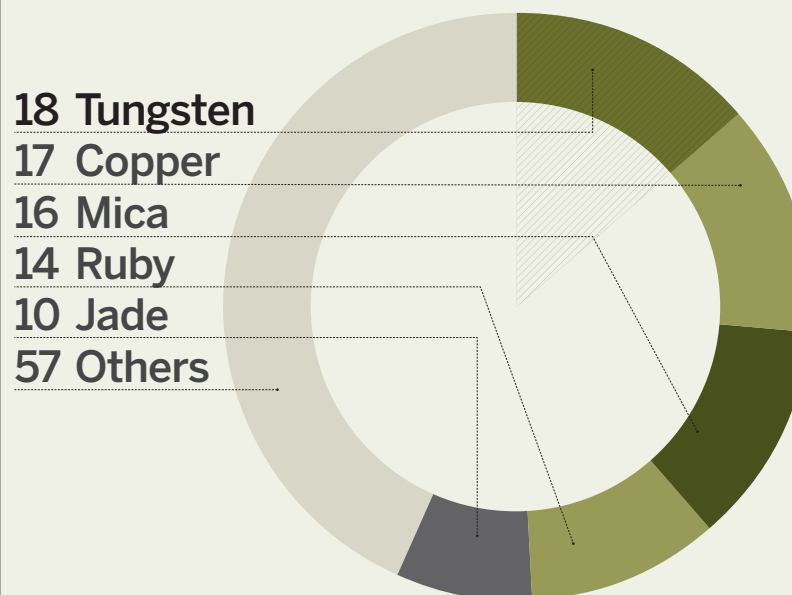
### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

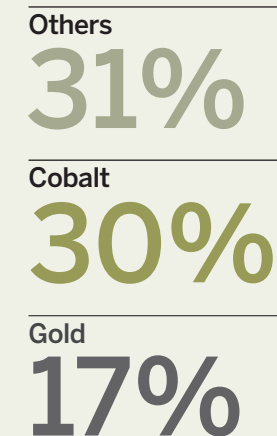
### Forced or compulsory labour top 5 most reported



### Forced or compulsory labour after removing top 5



### Top three reported



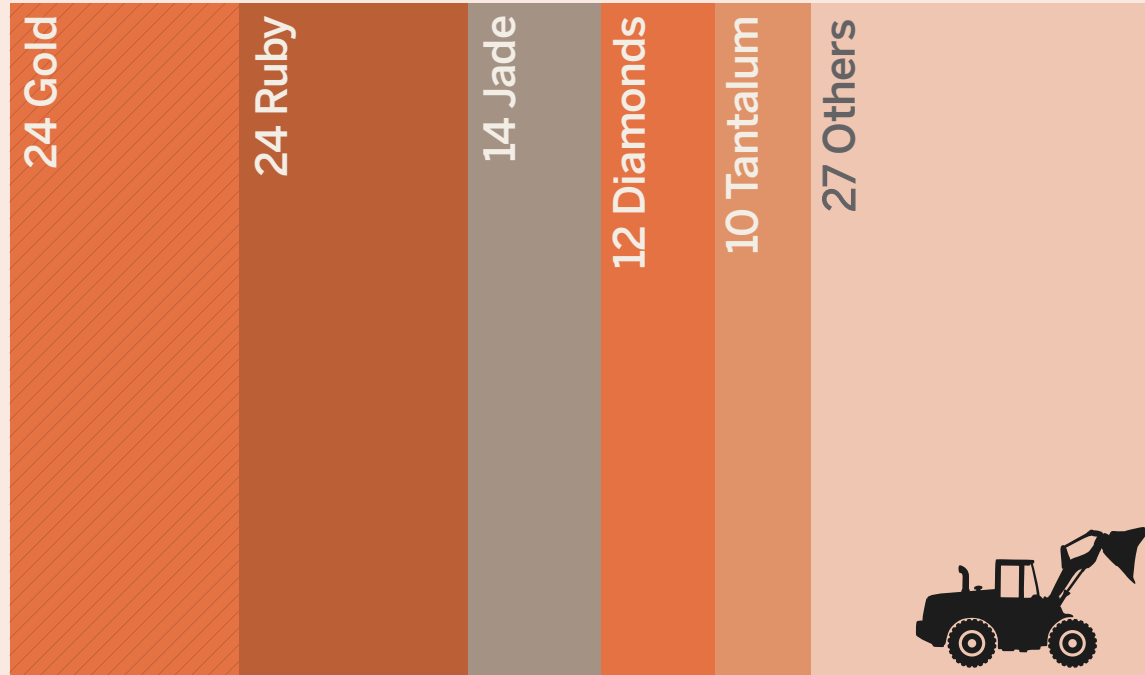
## Trends

# Torture, cruel, inhuman and degrading treatment

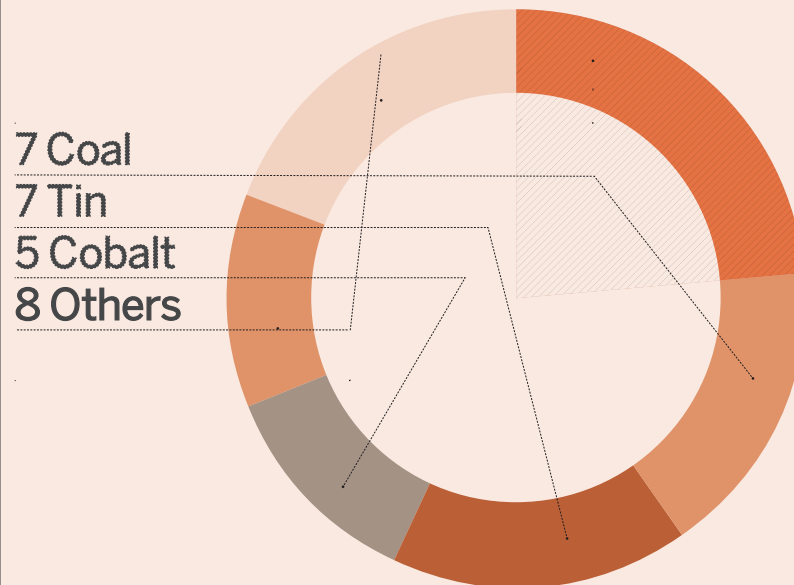
### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

Torture, cruel, inhuman and degrading treatment top 5 most reported



Torture, cruel, inhuman treatment after removing top 5



Top three reported

### Others

33%

### Gold

19%

### Ruby

19%

### Description

The most precise and widely cited definition comes from the 1984 UN Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment.<sup>11</sup> While many other international and domestic standards exist and may differ in terms of scope of application, they are all generally consistent in their description of what constitutes torture, inhuman, or degrading treatment.

For the purposes of this database, torture, inhuman, or degrading treatment is defined as the intentional infliction of severe pain or suffering, whether physical or mental, for a specific purpose, such as to obtain information, as punishment or to intimidate, or for any reason based on discrimination. Torture constitutes an aggravated and deliberate form of cruel, inhuman or degrading treatment or punishment. Reports on all manners and degrees of this type of treatment are covered in the database.

Examples include physical torture such as beatings, rape, and sexual assaults as well as psychological forms of torture such as threats, mock executions, witnessing the torture of others, and humiliation, may occur in mining areas. Acts of torture may be perpetrated, for example, by mine site managers, pit-bosses, or armed groups in control of the mine site. According to the International Rehabilitation Council for Torture Victims (IRCT)<sup>12</sup>, some of the most common methods of physical torture also include submersion, suffocation, and burns.

### Observations

This figure shows the five most mentioned minerals in reports on torture, cruel, inhuman and degrading treatment. Gold is the most reported mineral, followed by precious stones (ruby, jade, and diamonds), then a relatively even or low distribution for the remaining minerals.



# Trends

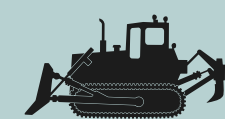
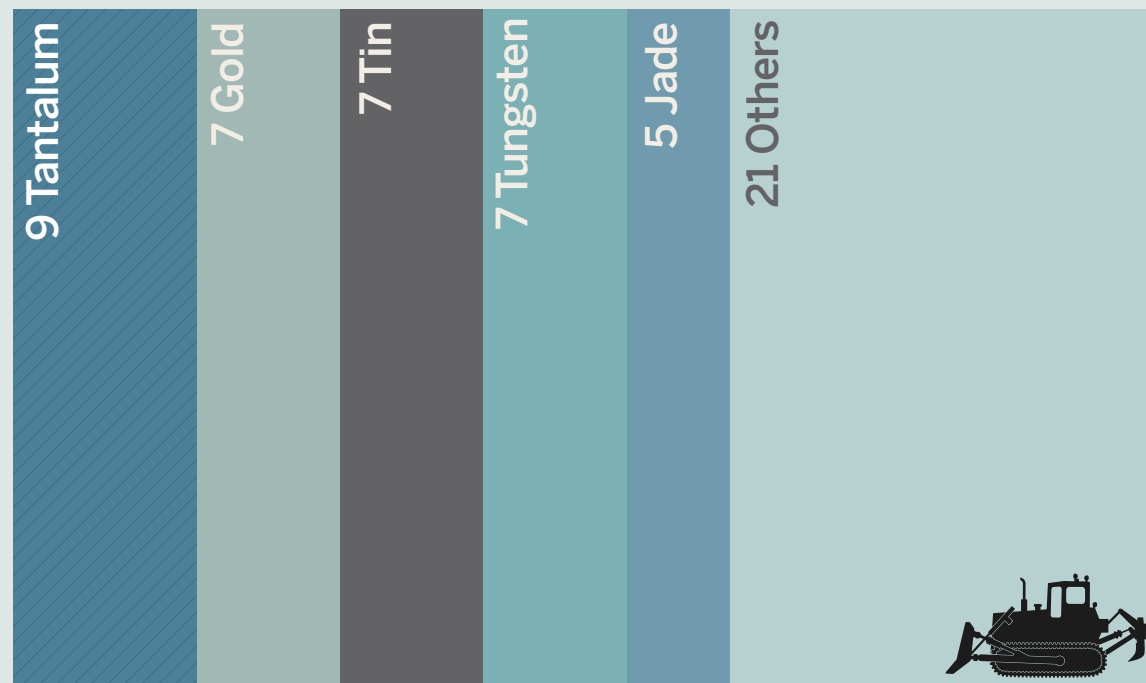
## War crimes, IHL, crimes against humanity, and genocide

**Description**  
 War crimes, other violations of international humanitarian law, CAH, and genocide are all described in thorough detail in the Rome Statute of the International Criminal Court (ICC)<sup>13</sup>, Geneva Conventions, and related guidance<sup>14</sup>. War crimes and other violations of international humanitarian law<sup>15</sup> are certain crimes committed in the context of an armed conflict. Crimes against humanity are certain acts committed as part of widespread or systematic attacks directed against a civilian population. Genocide is an act committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group. War crimes include mass executions, use of child soldiers, torture of detainees, rape, pillaging, and targeting of civilians and medical personnel. Crimes against humanity include mass murder, slavery, deportation, rape, imprisonment, and torture. Direct or indirect support in mineral supply chains is often linked to support for armed groups or security forces who are active in mining regions. While this encompasses other issues, such as human rights abuses, for the purposes of this exercise, only reports that explicitly mention war crimes, IHL, CAH, and genocide were categorised as such.

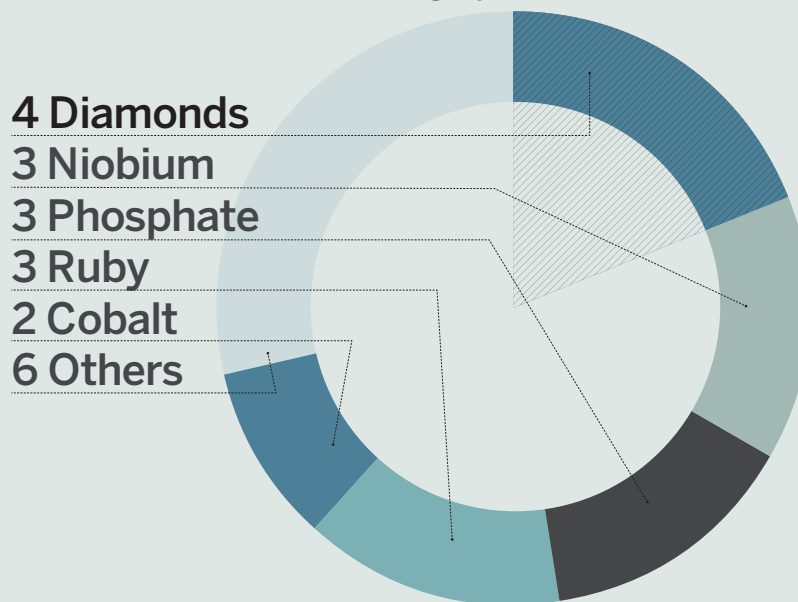
**Observations**  
 This figure shows the five most mentioned minerals in reports in this category. The overall volume of reports was quite low relative to other risks, with an even or low distribution of across the different minerals. That said, 3TG combined are the highest reported on, likely due to their historical association with conflict finance. After the top five have been removed, the high number of reports on phosphate are linked to the on-going conflict in Western Sahara, where 72% of the world's phosphate reserves are located.

- Trends links**
- + Child Labour
  - + Forced Labour
  - + Inhuman Treatment
  - + IHL/CAH/Genocide
  - + Other Human Rights
  - + Non-State Armed Groups
  - + Security Forces
  - + Money Laundering
  - + Bribery & Corruption
  - + Non-Payment of Taxes
  - + Fraudulent Origin

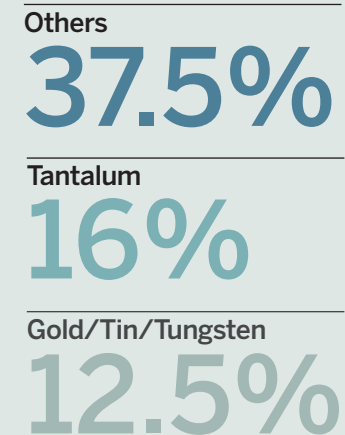
IHL/CAH/Genocide top 5 most reported



IHL/CAH/Genocide after removing top 5



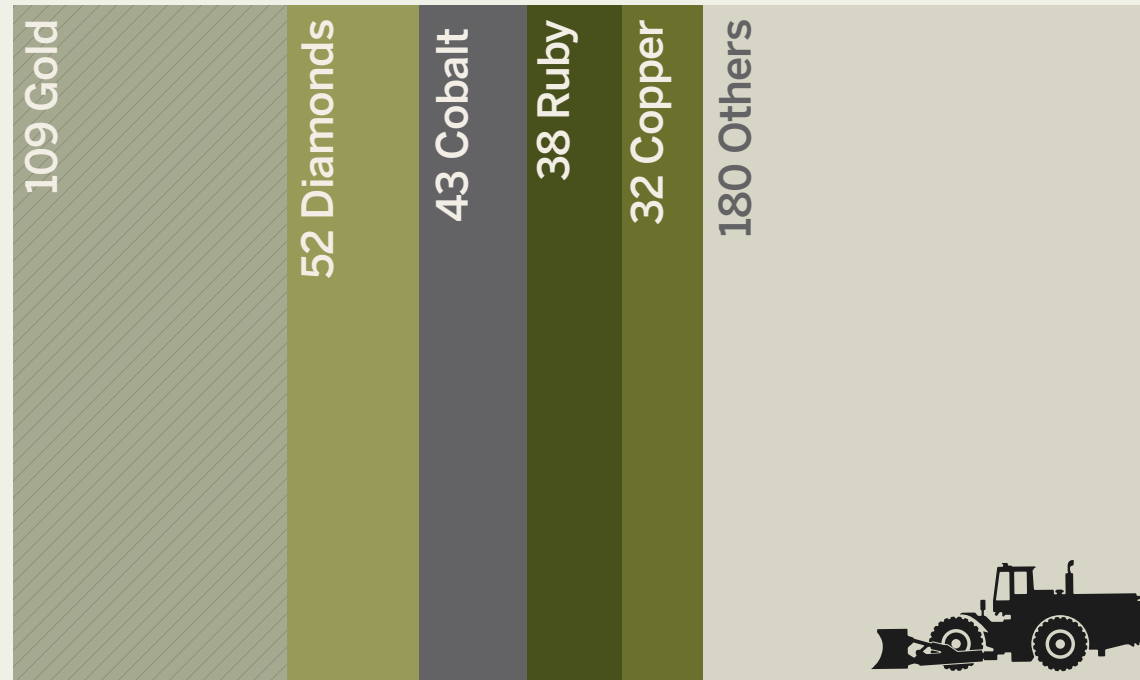
Top three reported



# Trends

## Other gross human rights violations

Other gross human rights violations top 5 most reported



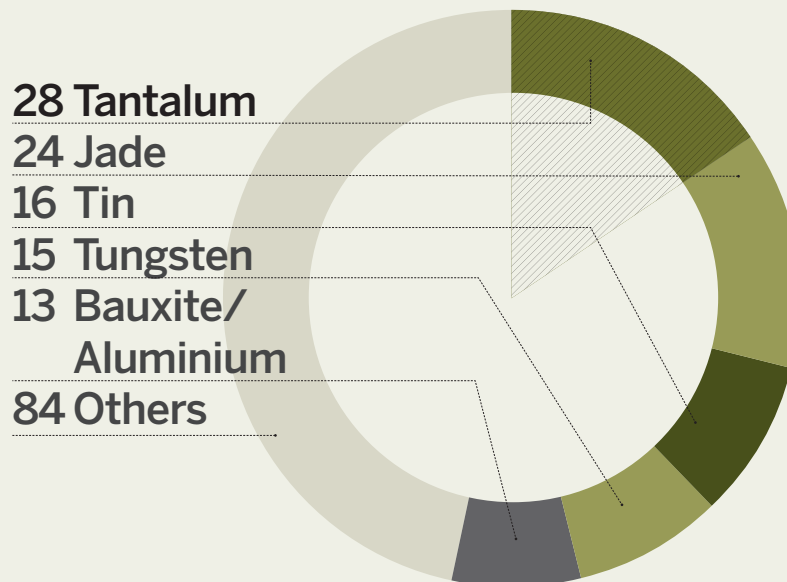
### Description

Of course, other gross human rights violations exist that are not listed here, but are of serious concern and should be taken into account. For a more complete view of the range of human rights violations, visit the website of the UN High Commissioner on Human Rights.<sup>16</sup> In human rights law, the terms 'gross,' 'grave,' and 'serious' are terms that international bodies have used interchangeably.<sup>17</sup> Although the debate around the exact meaning of the term is far from settled, generally a violation is considered gross depending on the scale, scope and irremediable nature of the violation.

### Observations

This figure shows the five most mentioned minerals in reports on other gross human rights violations. Gold is the most widely reported on in this category, but a relatively even distribution among the other top four and a large 'others' section suggests that the human rights violations are not isolated to one particular type of mineral.

Other gross human rights violations after removing top 5



Top three reported



### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin



# Trends

## Direct or indirect support to non-state armed groups

### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

### Description

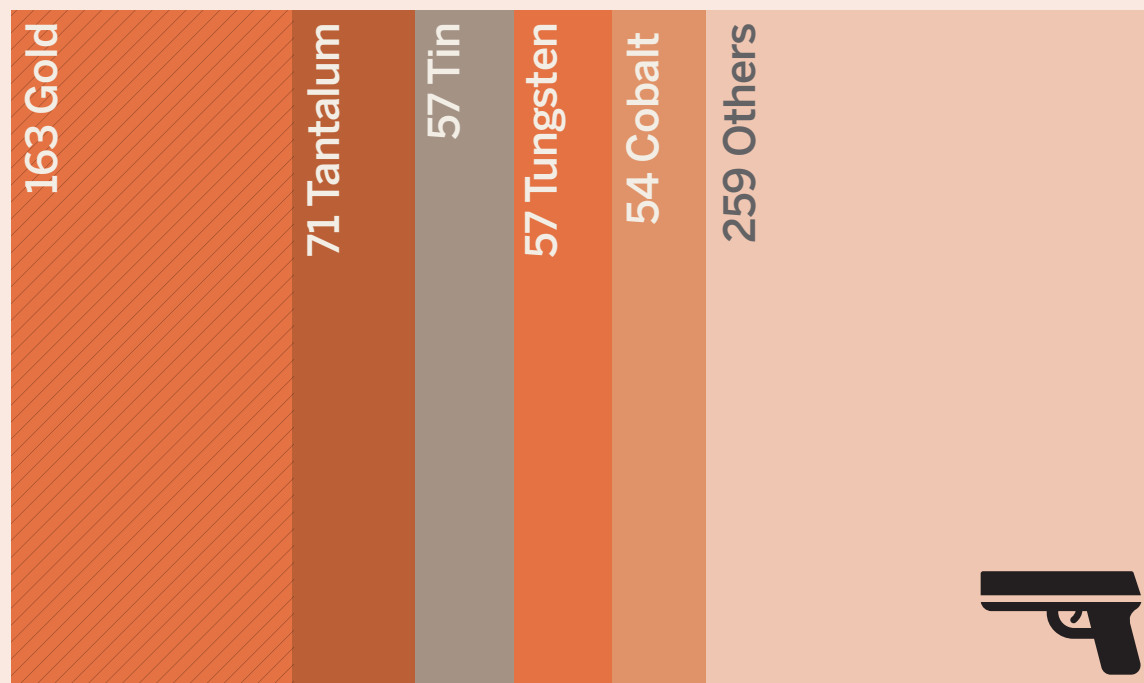
Under international law, non-state armed groups are generally defined as “distinctive organizations that are (i) willing and capable to use violence for pursuing their objectives and (ii) not integrated into formalized state institutions such as regular armies, presidential guards, police, or Special Forces.”<sup>18</sup> For clarity, any reports of terrorist financing associated with the production and trade of minerals will also be included in this category.

“Direct or indirect support” includes procuring minerals from, making payments to, or otherwise providing logistical assistance or equipment to groups who illegally control or extort mine sites, transportation routes, or upstream actors. “Control” of mines, transportation routes, points where minerals are traded and upstream actors in the supply chain means overseeing extraction, including by granting access to mine sites and/or coordinating downstream sales or acting as a director or officer of, or holding ownership interests in upstream companies or mines. “Direct or indirect support” does not refer to legally required forms of support, including legal taxes that companies pay to the government.

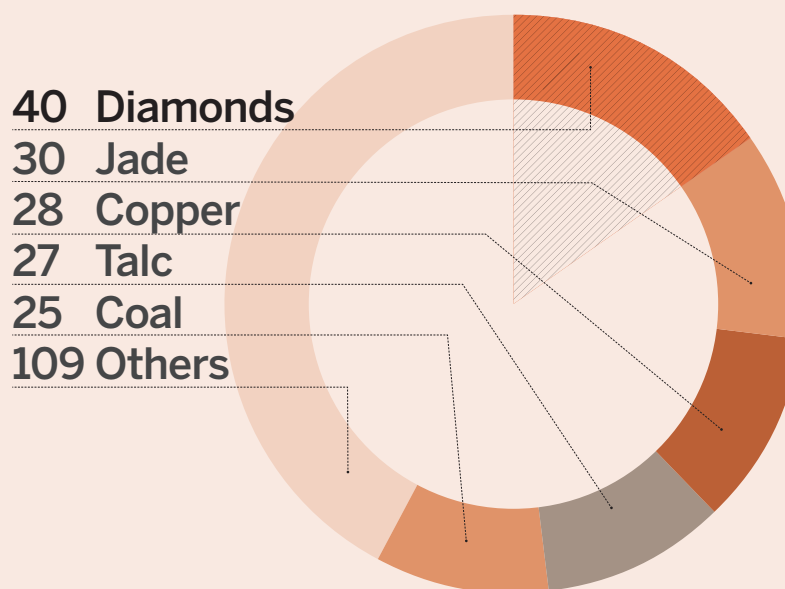
### Observations

This figure shows the five most mentioned minerals in reports on direct or indirect support to non-state armed groups. Gold is the most reported on mineral for this risk category, likely due to the fact that it can be used as a currency and the relative ease in which armed groups can exploit gold production trade due to its high-value, low volume nature. After gold, the 3Ts and cobalt are the most reported, followed by a large ‘others’ section.

### Direct or indirect support to non-state armed groups top 5 most reported



### Support to non-state armed groups after removing top 5



### Top three reported

Others  
**39%**

Gold  
**25%**

Tantalum  
**11%**

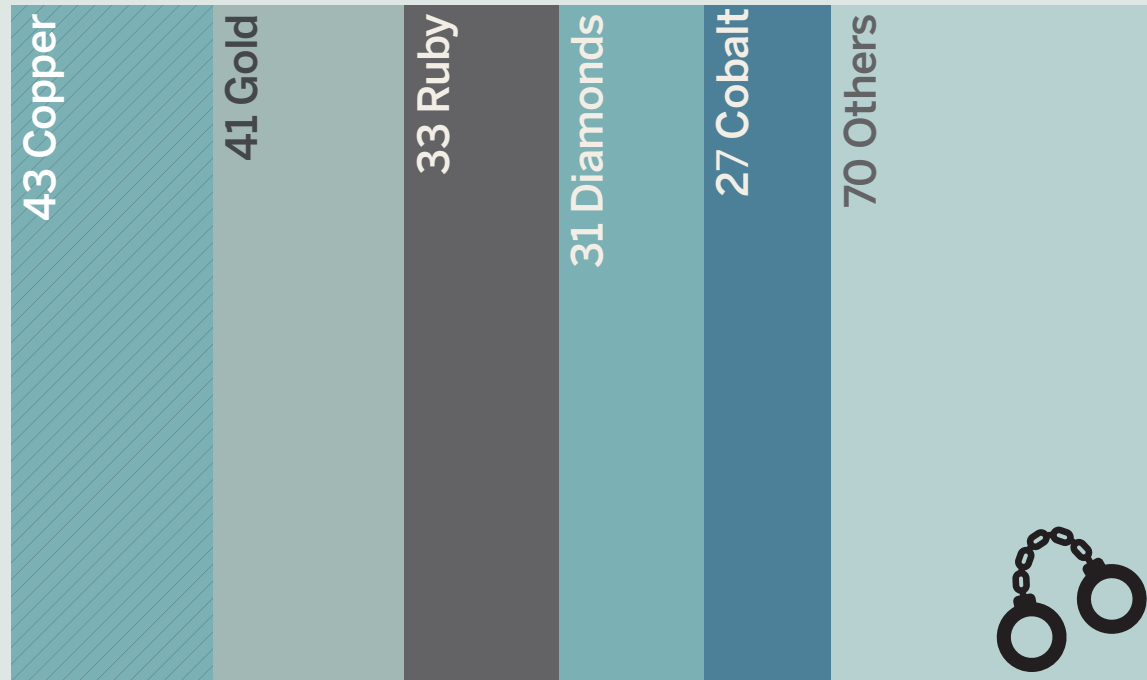
## Trends

# Support to public or private security forces

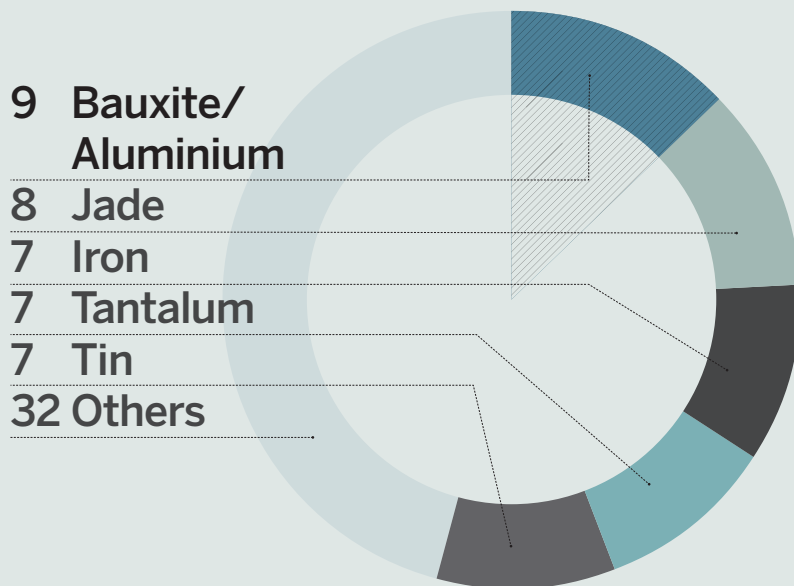
### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

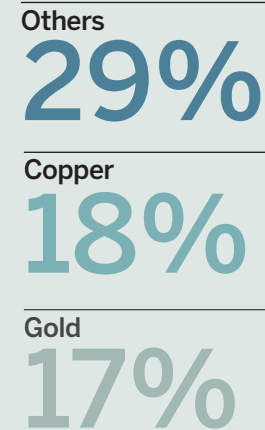
Support to public or private security forces top 5 most reported



Support to public or private security forces after removing top 5



Top three reported



## Description

The Guidance recognises that it is sometimes necessary to contract with public or private security forces to provide legitimate services to maintain the rule of law, including by providing security to mine workers, equipment and facilities, and protecting mines and transportation of goods from interference. However, in this instance, the Guidance recommends a company commitment to ensure that all security forces are engaged in conformance with the Voluntary Principles on Security and Human Rights<sup>19</sup> and take steps to ensure that individuals or groups who engaged in previous serious abuses of human rights are not hired. The Voluntary Principles are the only human rights guidelines designed specifically for extractive sector companies.

Some of the issues that may be in violation of the Voluntary Principles include, among others, contracting with public or private security forces with poor human rights records, lack of engagement with local communities on security issues, excessive use of force, inappropriate use of force on protected populations, violations of freedom of speech and assembly or other labour protections, and other gross human rights abuses by security forces.

## Observations

This figure shows the five most mentioned minerals in reports on abuse of force by public or private security forces. There is a relatively even distribution among the top five. Reports mentioning gold and precious stones feature prominently perhaps due to the higher need to contract security forces on those sites. The high number of reports on copper and cobalt may be linked to a lot of media and civil attention on violence against protestors and mining communities in the Democratic Republic of the Congo and Chile.



# Trends

## Money laundering

### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

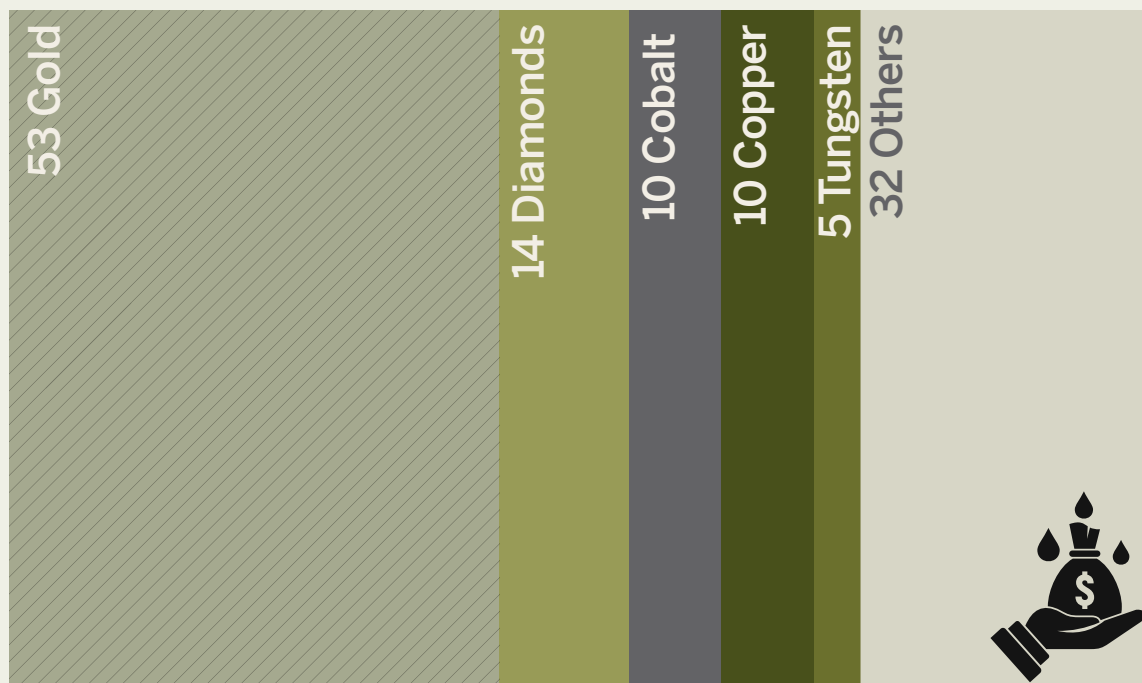
### Description

Money laundering in the Guidance refers to activities intended to conceal or disguise the origins of the proceeds of crime (i.e. “predicate crimes” or “predicate offences”) through processes that transform illegal inputs into apparently legitimate outputs.<sup>20</sup> Examples of this activity in minerals supply chains include minerals being purchased using the proceeds of crime and then reintroduced to the market; minerals used as an alternative currency in illicit transactions such as the purchase of weapons and drugs; and mineral trade connected to trade based money laundering (TBML). The basic techniques of TBML involving minerals include over- and under-invoicing of shipments, multiple-invoicing, over- and under-shipment (i.e., short shipping), and falsely described shipments, including phantom shipping.<sup>21</sup>

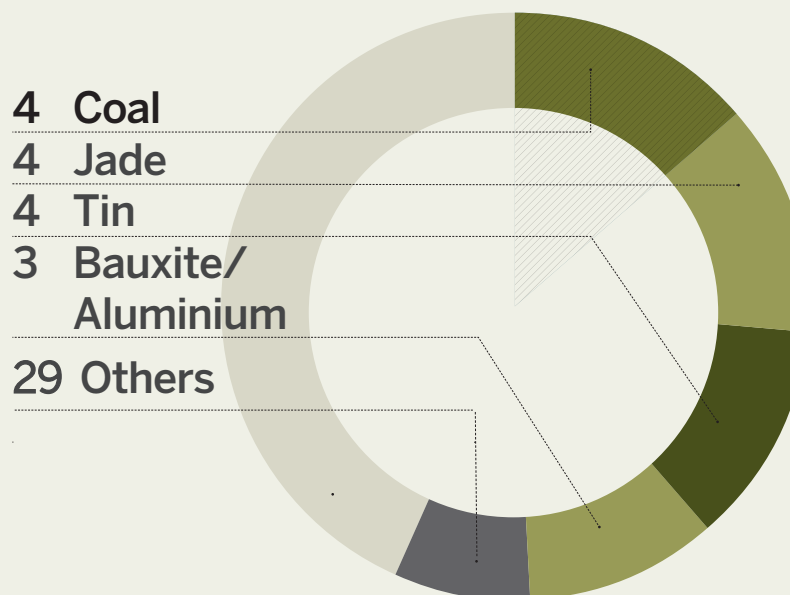
### Observations

This figure shows the five most mentioned minerals in reports on money laundering. Gold and diamonds make up more than half the reports on the topic in the database. According to the FATF, gold and diamonds are attractive vehicles for money laundering due to their functioning as an accepted currency in many parts of the world, high-value, high frequency of transactions in the trade, difficulty to trace, and anonymity in transactions.

### Money laundering top 5 most reported



### Money laundering after removing top 5



### Top three reported

Gold  
**43%**

Others  
**26%**

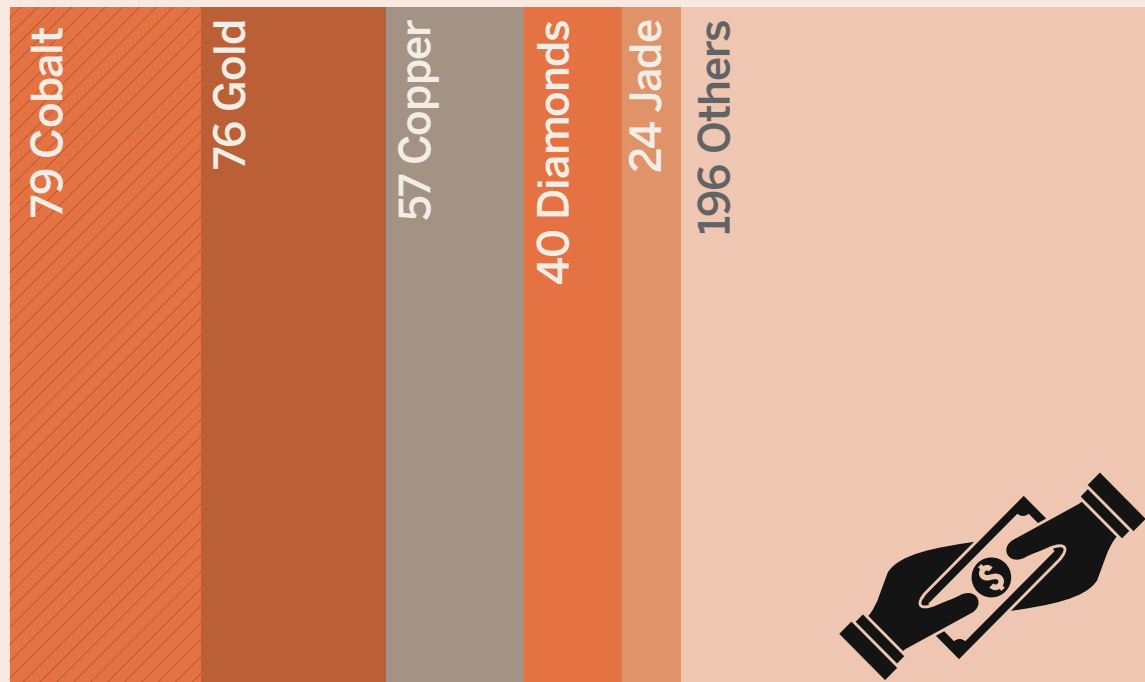
Diamonds  
**11%**

# Trends

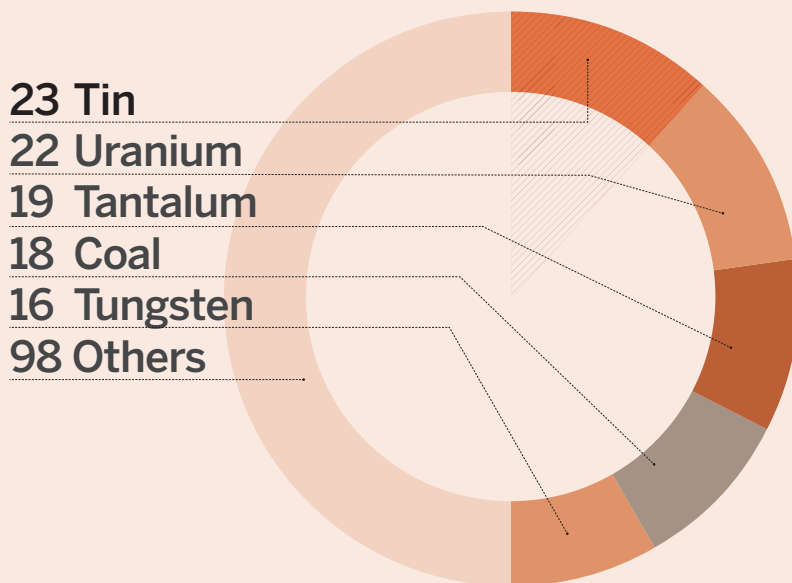
## Bribery and corruption

- Trends links**
- + Child Labour
  - + Forced Labour
  - + Inhuman Treatment
  - + IHL/CAH/Genocide
  - + Other Human Rights
  - + Non-State Armed Groups
  - + Security Forces
  - + Money Laundering
  - + **Bribery & Corruption**
  - + Non-Payment of Taxes
  - + Fraudulent Origin

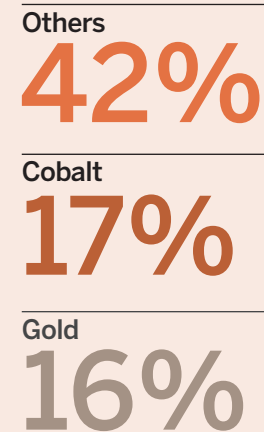
Bribery and corruption top 5 most reported



Bribery and corruption after removing top 5



Top three reported



### Description

The Guidance refers to the OECD Anti-Bribery Convention and the UN Convention Against Corruption which both define the act of bribery similarly.<sup>22</sup> Bribery is described as intentionally offering, promising, or giving any undue advantage to a public official in order to obtain an improper advantage. While bribery in the context of those international conventions is linked with public officials, for the purposes of presenting comprehensive information, this database will also feature reports of private-to-private bribery, also known as private corruption. Private corruption is defined as misdirection of organisational resources for personal or organisational benefit.<sup>23</sup>

Bribery in the early stages of mining supply chains comes in many complex forms. In 2016, the OECD developed a typology using 59 case examples.<sup>24</sup> For example, bribery can occur in the contract bidding processes, in the collection of taxes, in the certification process for the origin of the minerals, as part of the transportation and shipping, etc. Additionally, forms of bribery can be simple cash transactions to complex schemes involving shell corporations, opaque beneficial ownership, and false accounting practices. Private sector corruption may also be related to smuggling and fraudulent misrepresentation of the origin of goods and traceability information.

### Observations

This figure shows the five most mentioned minerals in reports on bribery and corruption. Copper and cobalt have received significant attention due to recent high-profile bribery cases in the DRC.



# Trends

## Non-payment of taxes, fees and royalties due to governments

### Description

Non-payment of taxes, fees and royalties due to government can come in two forms: tax evasion and tax avoidance. Tax evasion is generally understood as using illegal means to avoid paying taxes.<sup>25</sup> Tax avoidance, also known as aggressive tax planning, involves legally yet actively pushing the limits tax laws to reduce one's tax burden. For the purpose of this database, only reports related to tax evasion associated with production and trade of mineral ores and refined metals will be considered, but excluding semi-finished and finished products, as well as tax avoidance. In the mining sector, tax evasion is commonly facilitated through over-under valuation, smuggling, fraudulent misrepresentation as to the origin or value of goods, bribery, etc.

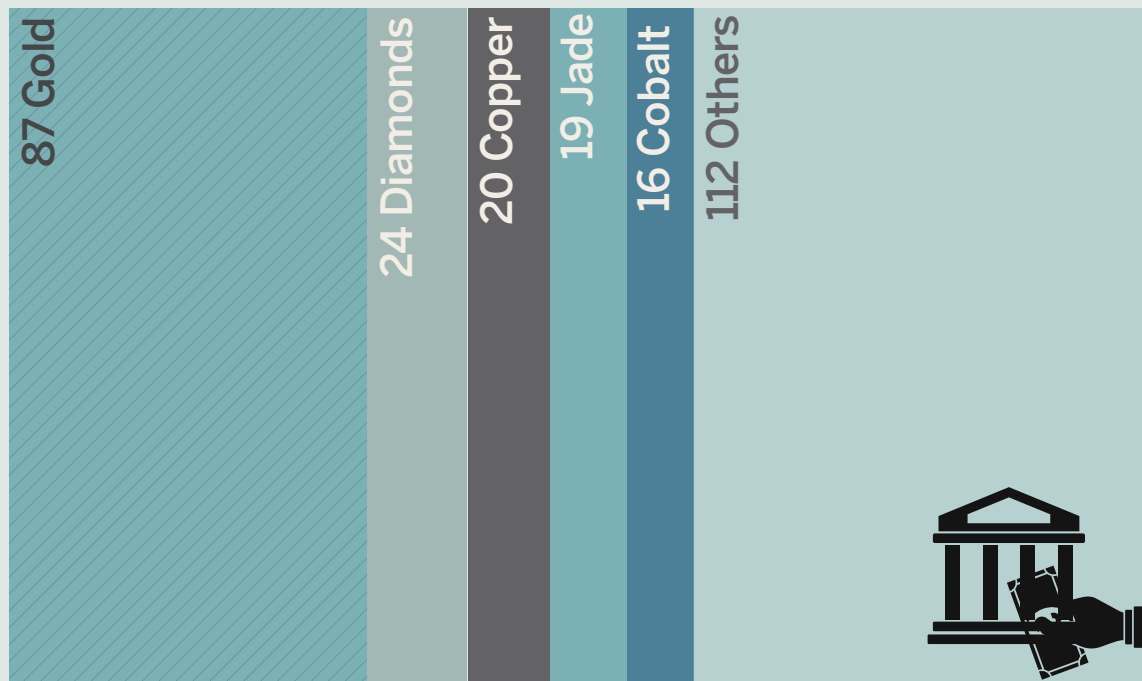
### Observations

This figure shows the five most mentioned minerals in reports on non-payment of taxes, fees and royalties due to governments. Gold is the most reported on mineral in this risk category with relatively even or low distribution for many other minerals. The volume of gold reports likely has to do with the predominance (and relative ease) of gold smuggling to evade often complicated and inconsistent tax regimes when moving gold across borders. Diamonds also feature highly in this category for likely the same reason.

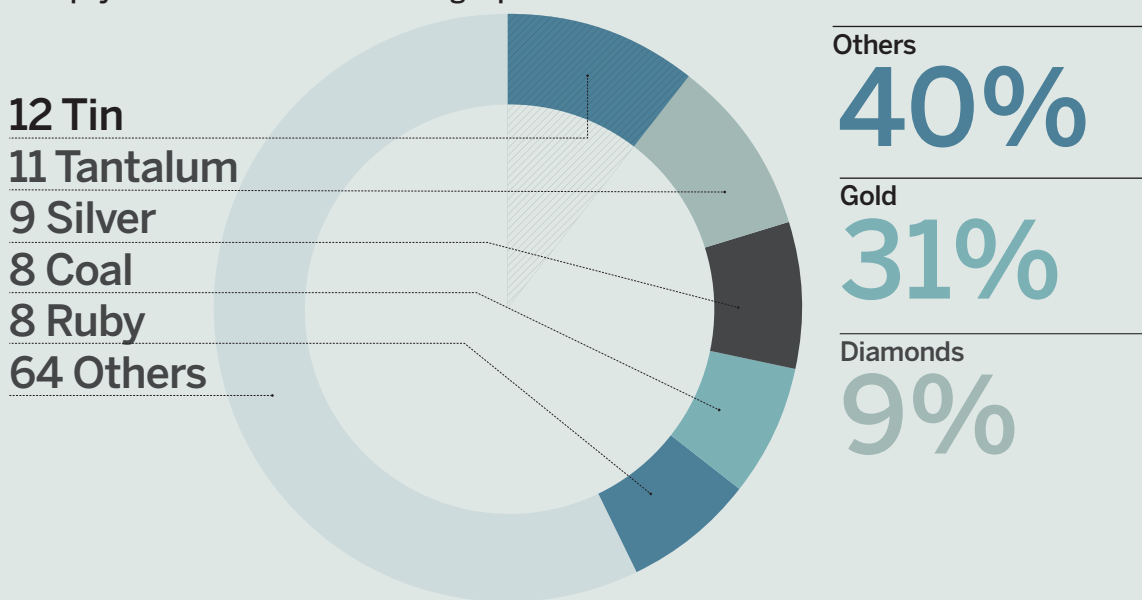
### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

### Non-payment of taxes, fees and royalties due to governments top 5 most reported



### Non-payment of taxes after removing top 5



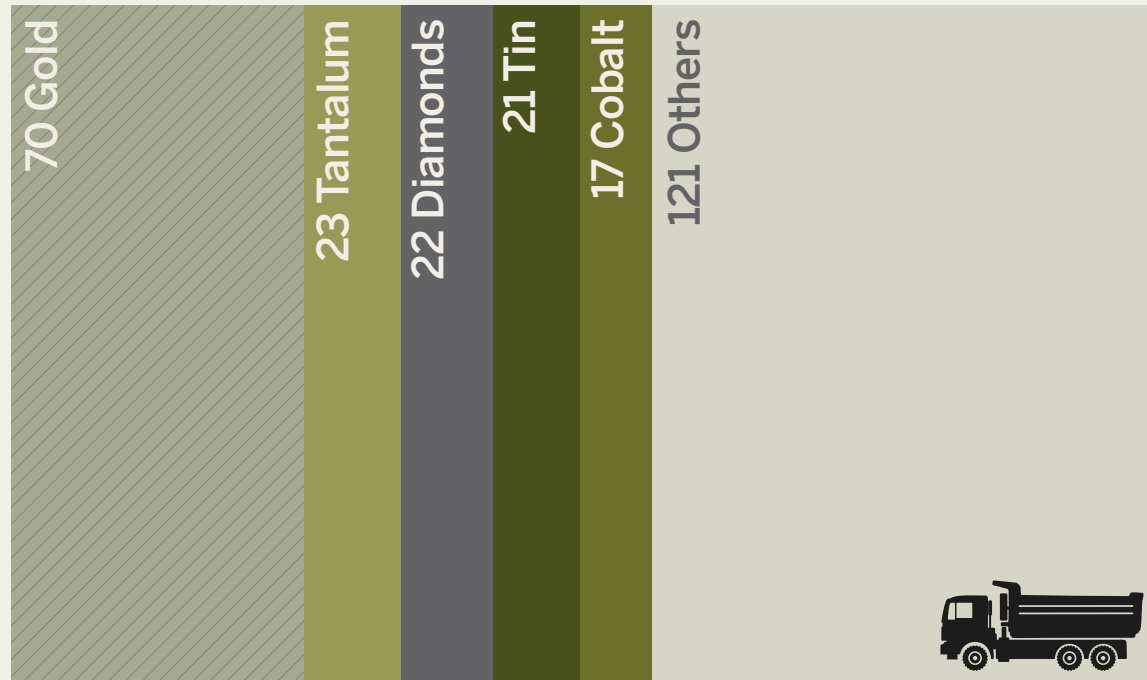
## Trends

# Fraudulent misrepresentation of the origin of minerals

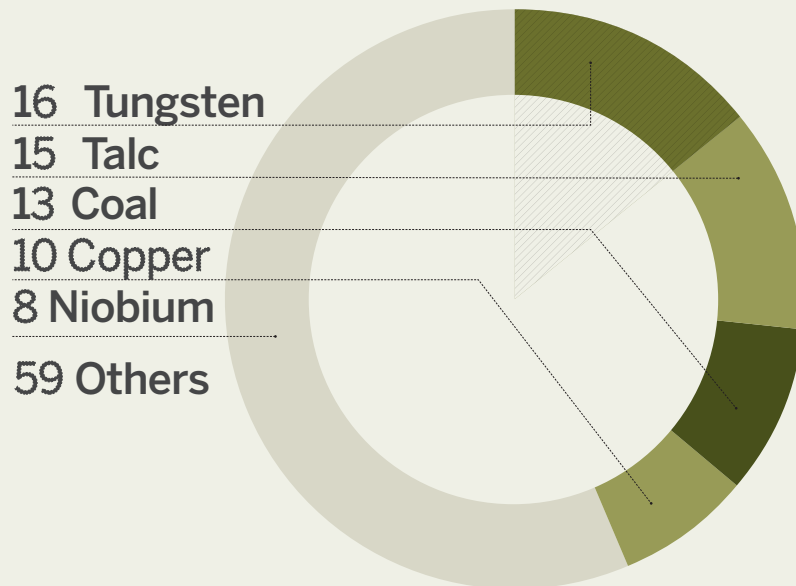
### Trends links

- + Child Labour
- + Forced Labour
- + Inhuman Treatment
- + IHL/CAH/Genocide
- + Other Human Rights
- + Non-State Armed Groups
- + Security Forces
- + Money Laundering
- + Bribery & Corruption
- + Non-Payment of Taxes
- + Fraudulent Origin

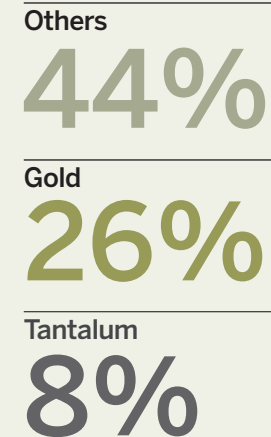
Fraudulent misrepresentation of the origin of minerals top 5 most reported



Fraudulent misrepresentation of the origin after removing top 5



Top three reported



## Description

Fraudulent misrepresentation is commonly understood to mean any false representation of a fact, intended to induce parties into entering into a transaction or contractual relationship. In the minerals supply chain due diligence context, examples this may come in the form of falsifying traceability, chain of custody, or customs documentation in order to conceal the origin of minerals, for the purpose of avoiding duties owed on the mineral or making the mineral more marketable or to comply with legal requirements (e.g. representing that a mineral is from a large-scale mine site versus from ASM, representing that a batch is 'DRC Conflict-Free', etc.).

## Observations

This figure shows the five most mentioned minerals in reports on fraudulent misrepresentation of the origin of minerals. The top five minerals have all received significant media, civil society, industry and regulator attention. As such, there is likely a significant effort by illicit traders of those materials to mask the origins of minerals that have not undergone the appropriate due diligence or certification checks.



# Deep dive



## Deep dive links

- + Financial crime
- + What issues are normally reported together?
- + Top minerals reported on
- + Battery minerals
- + Breakdown on which Issues are more associated with the "Mineral Origin" category
- + By geography
- + Trading hubs and OECD countries



# Deep dive

## Financial crime

(money laundering, bribery, tax evasion)

**Total number of reports related to each type of financial crime sub-divided by mineral** Perhaps unsurprisingly, reports on gold and diamonds feature highly for “Non-payment of Taxes” and “Money Laundering”, likely due to their high-value, low volume nature, the fact that they are used as currencies, and the role they are commonly known to play in smuggling and laundering activities. Jade scores highly for “Non-payment of Taxes” linked to a large number of reports of illicit trade of jade from Myanmar to People’s Republic of China (China).

For “Bribery and Corruption” the distribution of minerals seems to be more even, with a large Others category demonstrating that many of the materials profiled in the database are associated with “Bribery and Corruption” reports.

### Deep dive links

+ [Financial crime](#)

+ [What issues are normally reported together?](#)

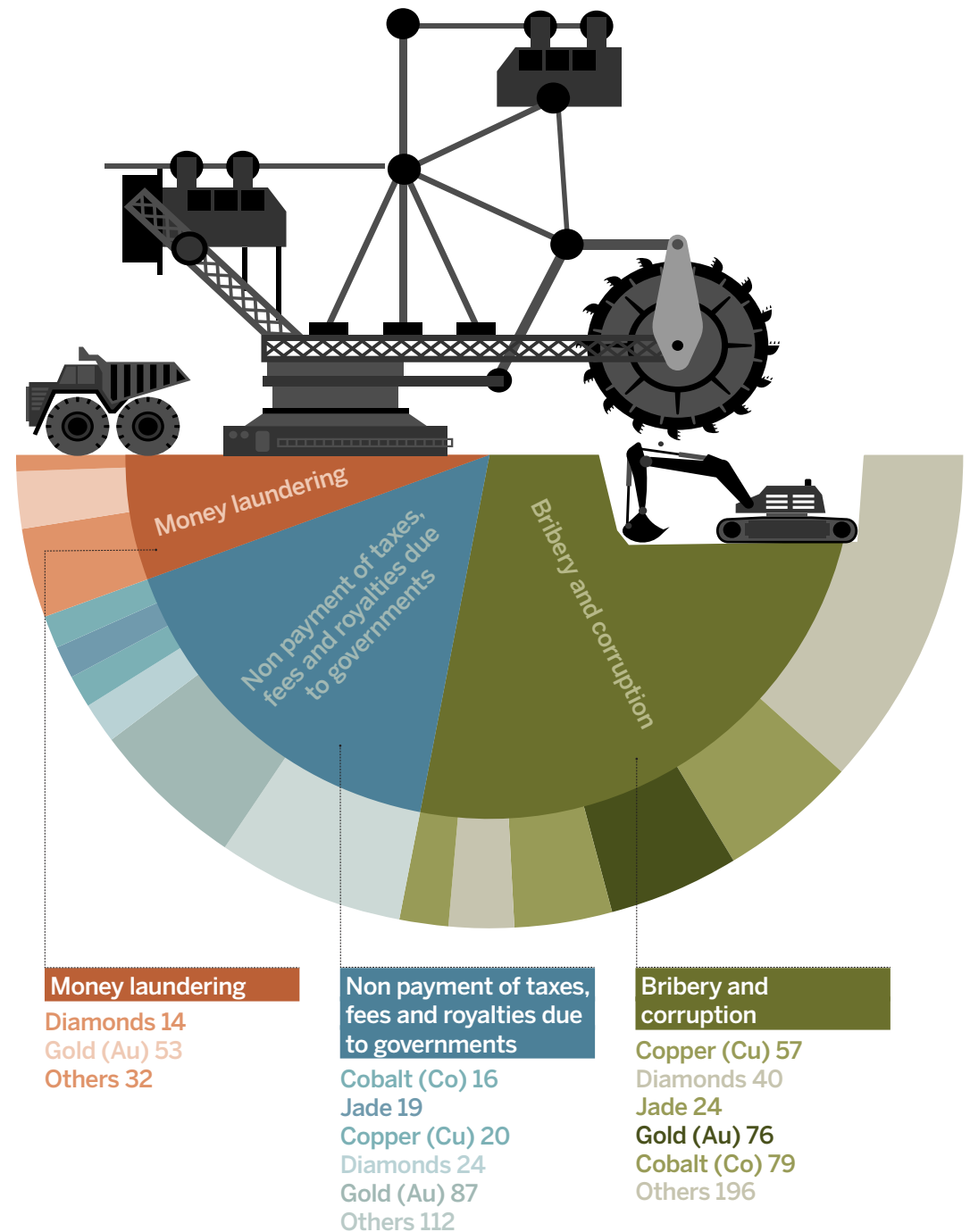
+ [Top minerals reported on](#)

+ [Battery minerals](#)

+ [Breakdown on which Issues are more associated with the “Mineral Origin” category](#)

+ [By geography](#)

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# Deep dive

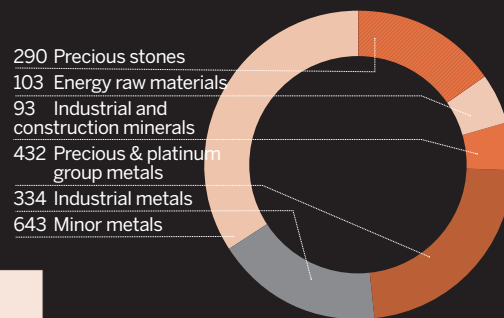
## What issues are normally reported together?



**Figure 3.24** Which two Annex issues are most commonly reported together

The worst forms of child labour																				
Forced or compulsory labour	184																			
Torture, cruel, inhuman and degrading treatment	18	27																		
IHL/CAH/Genocide	4	2	3																	
Other gross human rights violations	66	71	57	8																
Direct or indirect support to non-state armed groups	71	54	31	12	85															
Issues with public or private security forces	17	30	33	4	88	34														
Money Laundering	7	4	4	2	10	28	7													
Bribery and Corruption	49	28	13	2	43	78	39	38												
Non-payment of taxes, fees and royalties due to governments	13	11	6	3	25	51	15	20	58											
Fraudulent misrepresentation of the origin of minerals	16	11	5	7	19	60	9	26	31	40										

**Figure 3.25** The total number of reports according to mineral groupings



Many of the reports collected for this database cover multiple Annex II issues linked to the same alleged incident. The table below shows the which two Annex issues are most commonly reported together.

“Worst Forms of Child Labour” and “Forced or Compulsory Labour” often occur together. This is in part due to the fact that many reports describe “children forced to work in mines” or some similar language. “Direct or Indirect Support to non-State Armed Groups” appears to be strongly associated with a range of other Annex II issues. “Bribery and Corruption”, similarly, appears to be strongly associated with a range of other Annex II issues. (See also figure 3.24.) This suggests that the two issues are likely enablers of other issues taking place

**Figure 3.25** The total number of reports according to mineral groupings

This figure shows the total number of reports on different mineral supply chains according to their broader mineral grouping.

The predominance of Minor Metals appears to be attributable to significant attention on Annex II issues related cobalt, tantalum and tungsten mining in the DRC.

The second-largest category, precious metals, is predominantly due to reports about issues associated with gold mining and trading.

### Deep dive links

+ Financial crime

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# Deep dive

## Top minerals reported on

### Total number of reports of the top 5 reported on minerals

This figure shows the total number of reports of the top five most reported on mineral supply chains. Interesting to note that cobalt is associated with a much greater number of reports of Annex II issues than any of the 3T are, despite the significant regulatory attention on 3Ts. This is likely predominantly due to the attention on child labour issues in the DRC. The same observation applies to copper, which is often co-located with cobalt in the DRC, and has also received significant attention due to frequently reported abuses by public security forces against protestors in copper mining communities in South America.

### Removing top 5, how does the data change.

This figure shows the total number of reports for the rest of the mineral supply chains covered by this exercise.

Most of the highest-scoring minerals are those that also regularly receive media attention: tin and tungsten reports from Central Africa, ruby associated with reports on rights abuses in Mozambique, jade associated with reports of corruption and smuggling in Myanmar.

#### Deep dive links

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Figure 3.26 Total number of reports of the top 5 reported on minerals

Gold (Au)  
**392**

Cobalt (Co)  
**362**

Diamonds  
**149**

Copper (Cu)  
**136**

Tantalum (Ta)  
**96**

Figure 3.27. Total number of reports according to each mineral (removing the top 5)

Antimony	3
Bauxite / aluminium	40
Chromite (Cr)	18
Coal (hard)	72
Furite	2
Graphite	2
Iron	30
Jade	66
Lanthanum (La)	5
Lead	9
Lithium	20
Manganese (Mn)	12
Mica	44
Molybdenum	4
Nickel (Ni)	14
Niobium (Nb)	27
Phosphate	13
Platinum (Pt)	8
Potassium / Potash (K)	4
Ruby	75
Silver	32
Silicon	2
Talc	29
<b>Tin</b>	<b>84</b>
Titanium	16
Tungsten	74
Uranium	31
Vandium	2
Zinc	21
Zirconium	1



# Deep dive Battery minerals

(cobalt, copper, graphite, nickel and lithium) and battery mineral producing countries

### Deep dive links

- + Financial crime
- + What issues are normally reported together?
- + Top minerals reported on
- + **Battery minerals**
- + Breakdown on which Issues are more associated with the "Mineral Origin" category
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Figure 3.29. Total number of reports according to countries mentioned in the report

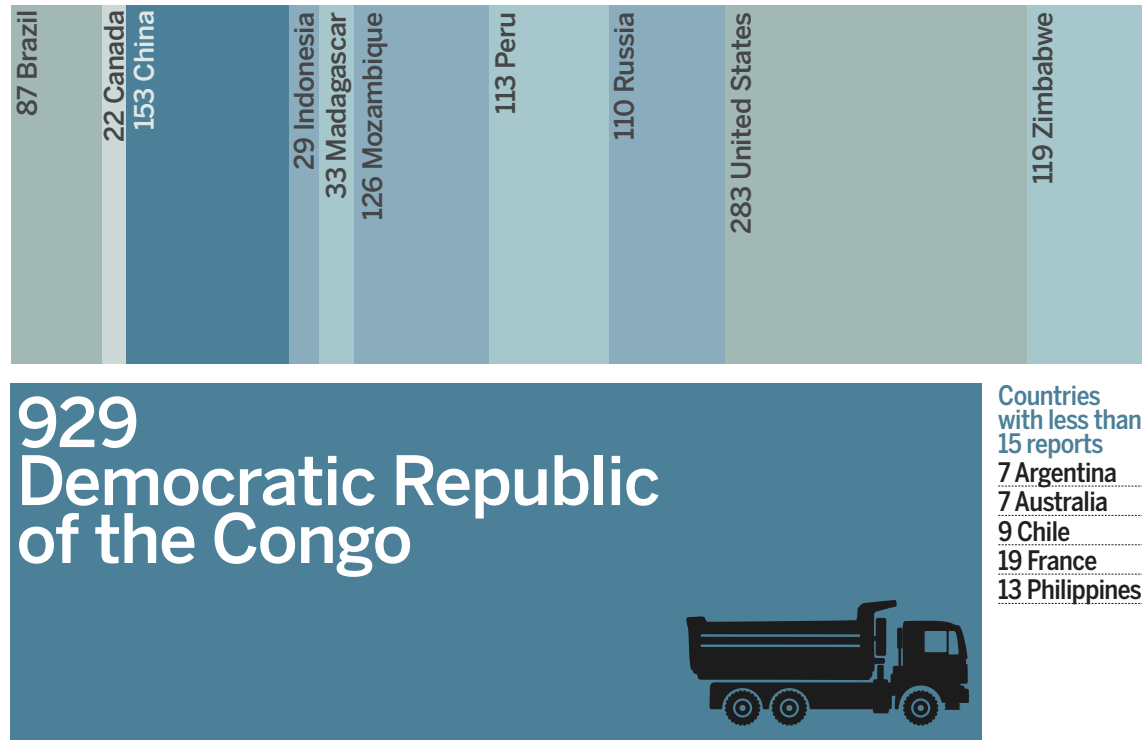


Figure 3.28. Number of reports on battery minerals, sub-divided by most reported risks

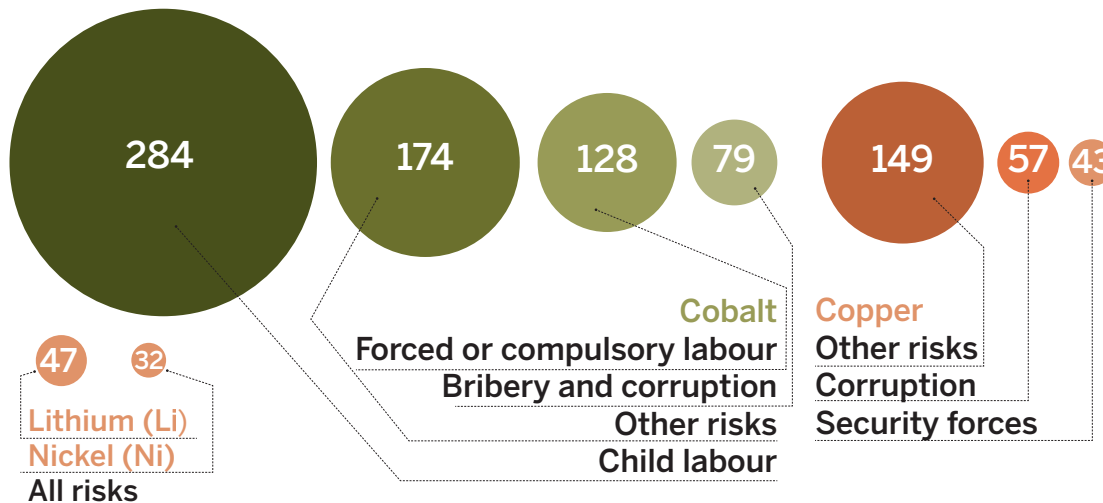


Figure 3.28. Number of reports on battery minerals, sub-divided by most reported risks Cobalt, copper, graphite, nickel and lithium are necessary for the manufacture of batteries and will be critical in the transition towards a green economy. This figure features the total number of reports of these "battery minerals"; sub-divided by the most reported on Annex II issues.

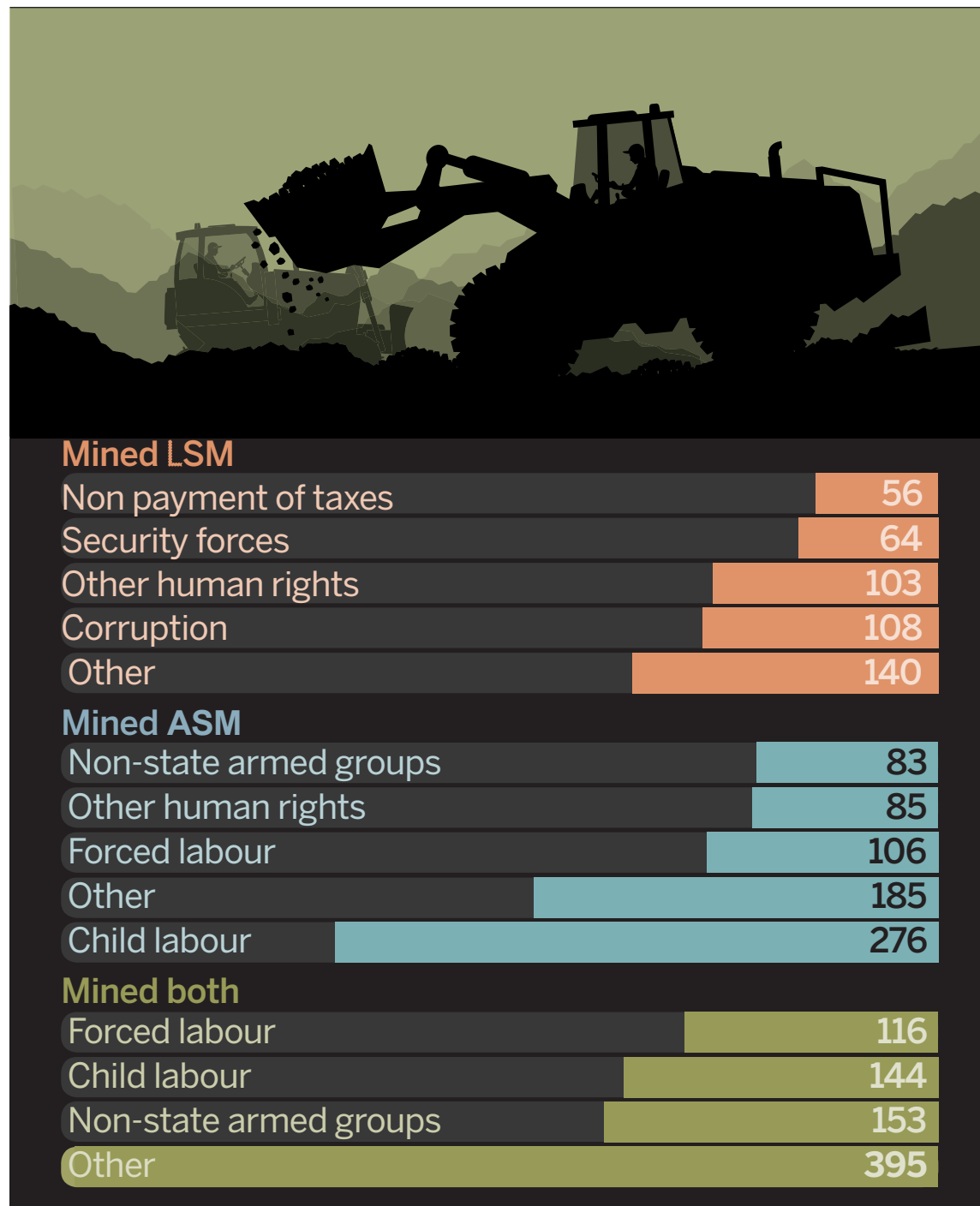
Given that more than half of the world's cobalt is produced in the DRC, it is no surprise that cobalt reports feature most prominently among battery minerals. Some of the reported association between copper and child labour and "Direct and Indirect Support to Non-State Armed Groups" may be a false positive, since copper is sometimes conflated, in reporting, with issues associated with cobalt mining in the DRC copperbelt, or with 3TG mining elsewhere in the DRC. However, there are some reports of child labour in copper mines in the DRC and Zambia. Reports on graphite are not visible in the figure since there were only two reports identified in the date collection process.

Figure 3.29. Total number of reports according to countries mentioned in the report This figure features the total number of reports of the top producers for one or more of the battery minerals listed above, according to the latest USGS data. Reports in the DRC predominate. Reports that feature the United States do not necessarily mean that there are Annex II issues present in the United States, since countries are tagged when companies incorporated in their jurisdiction are involved. Legal action against United States-incorporated tech firms for allegedly benefitting from child labour in their supply chains causes this figure to be particularly high.

## Deep dive Breakdown on which Issues are more associated with the “Mineral Origin” category (ASM only, LSM only, Both)

### Deep dive links

- + [Financial crime](#)
- + [What issues are normally reported together?](#)
- + [Top minerals reported on](#)
- + [Battery minerals](#)
- + [Breakdown on which Issues are more associated with the “Mineral Origin” category](#)
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**Figure 3.31. Total number of reports based on mineral origin.** As part of the data categorisation process, reports on mineral production were further sub-divided according to whether the article specified the type of mining; large-scale mining (LSM) or artisanal and small-scale mining (ASM). This figure the total number of reports based on the mineral origin, sub-divided by Annex II issue.

The figure shows an almost equal distribution across the different types of mineral origin. Reports of Annex II issues are demonstrably not confined to ASM, consistent with what the OECD and a number of other organisations have often reported.



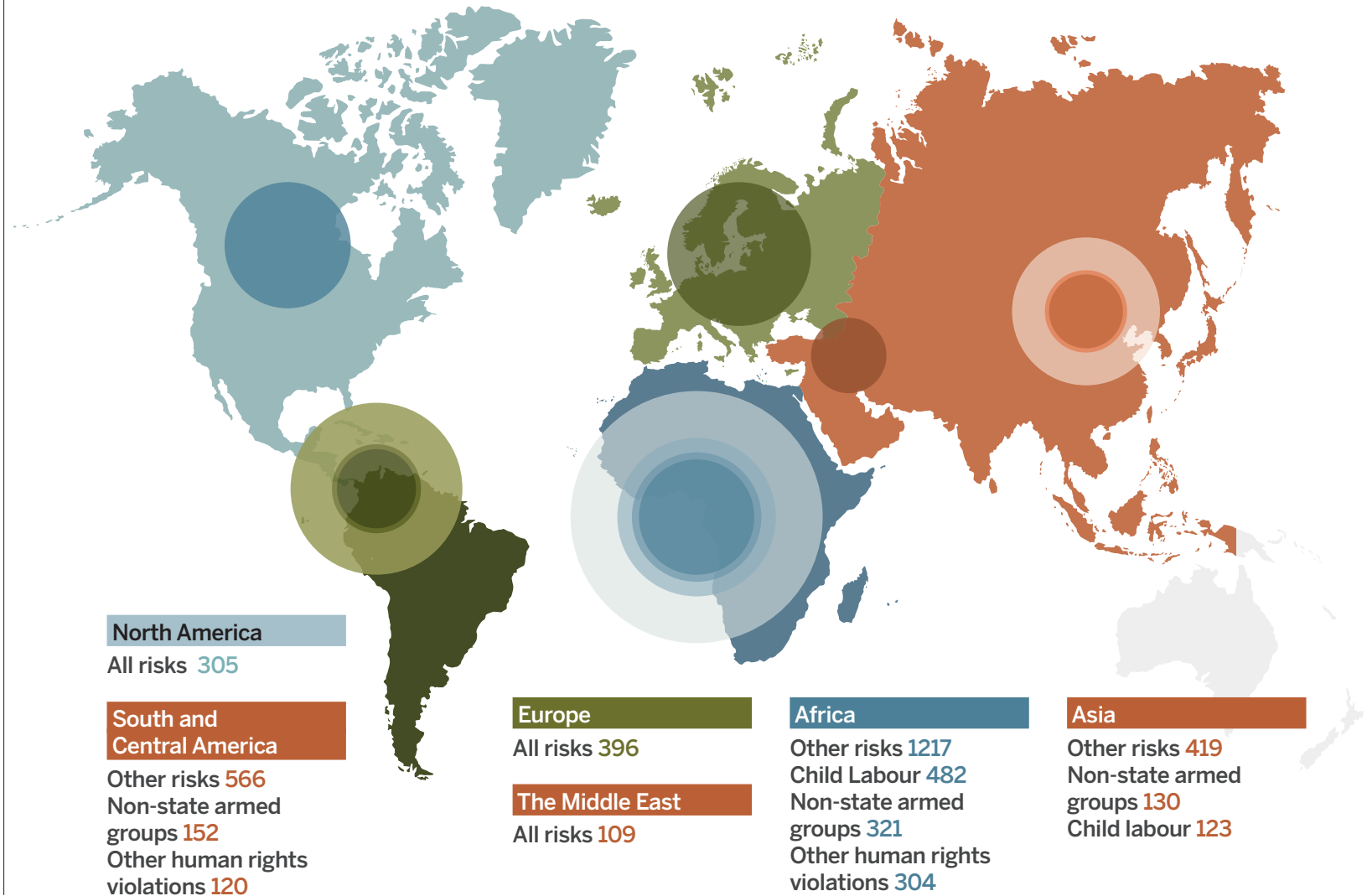
# Deep dive

## By geography

As part of the data categorisation process, reports were tagged according to the countries mentioned in each report. This included the countries where the alleged incident identified in the report took place, but also the countries of the individuals or companies involved in the incident, if mentioned.

**Figure 3.32. Total number of reports by continent.** This figure shows the total number of reports by continent, subdivided by most reported on Annex II risk. Reports on Africa dominate, with significant attention paid to each region of the mineral rich continent. Child labour is one of the most reported on risks globally, but appears receive less attention in South America than in Africa or Asia.

The volume of reports that feature North America or Europe are likely because countries are tagged when companies incorporated in their jurisdiction are mentioned in the story. The significant presence of North America and Europe in the chart below demonstrates how frequently Western companies are involved in supply chains where Annex II issues are reported.



### Deep dive links

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# Deep dive

## By geography

**Figure 3.30. Total number of reports according to countries mentioned in the report (top 5)** This figure shows the total number of reports linked to the top five most reported on countries, subdivided by Annex II risk.

Reports that feature the US do not necessarily mean that there are Annex II issues present in mineral supply chains within the US, since countries are tagged when companies incorporated in their jurisdiction are involved. However, the significant presence of the US demonstrates how frequently American companies, in particular, are linked to supply chains where Annex II issues are reported. A similar logic applies to the presence of China and Russia, although they are large producers of minerals in their own right.

The presence of Russia in the top five is perhaps surprising. This is primarily attributable to reports of corruption, and the smuggling of materials such as gold and jade, and also to the reports of alleged harassment of local communities in mining regions of some African countries by Russian mining companies and security forces.

While the African continent features the most reports, this is largely due to the focus on DRC. Many South American countries, and India, appear to have a higher volume of reports than most African countries. On a per-country basis, it appears that reports are more numerous in South America and India than they are in Africa. This trend becomes even more apparent when the top five are removed from the map.

### Deep dive links

+ Financial crime

+ What issues are normally reported together?

+ Top minerals reported on

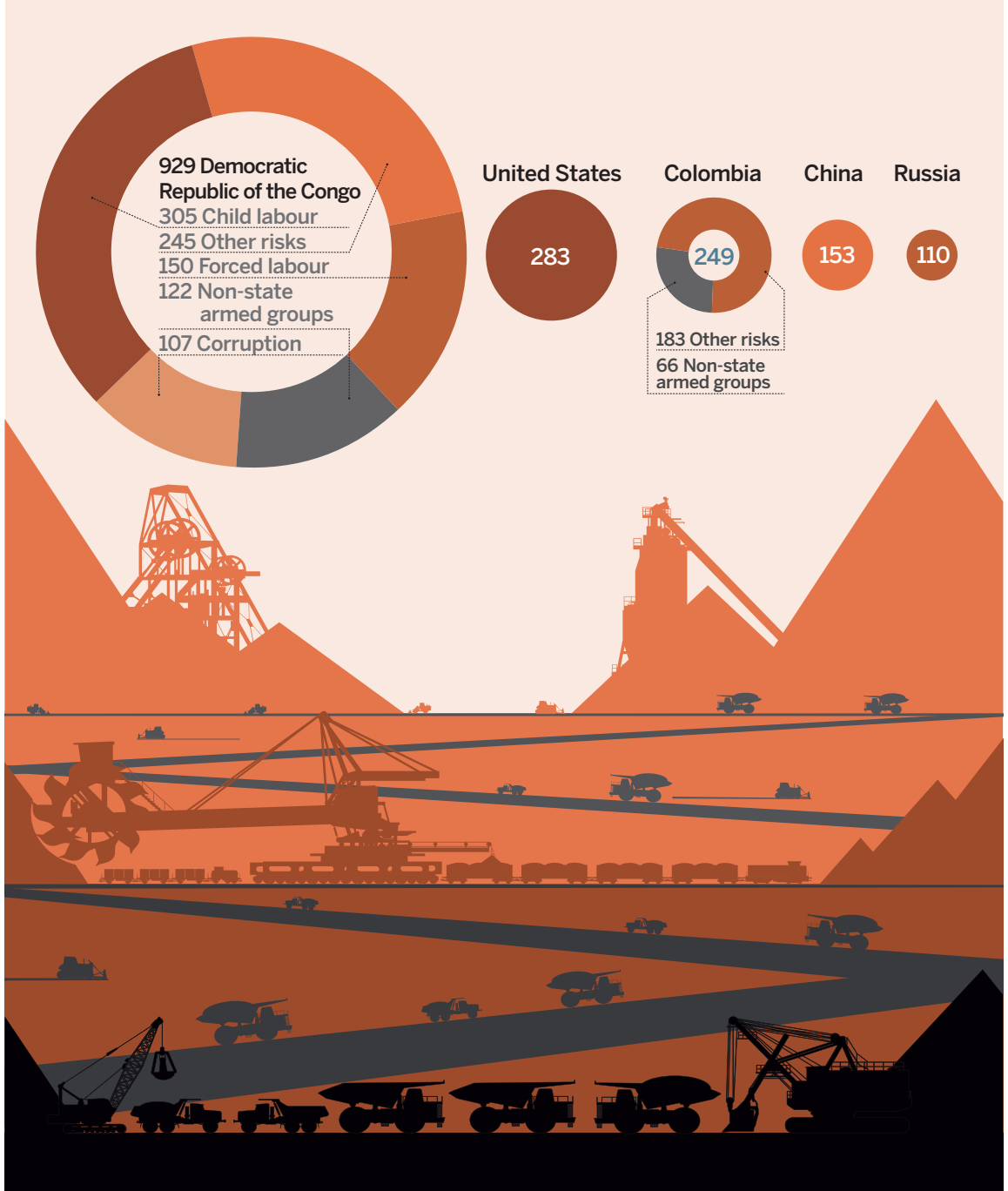
+ Battery minerals

+ Breakdown on which Issues are more associated with the "Mineral Origin" category

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**Figure 3.30. Total number of reports according to countries mentioned in the report (top 5)**





# Deep dive

## Trading hubs and OECD Countries

Figure 3.33. Total number of reports related to countries known to be mineral trading hubs

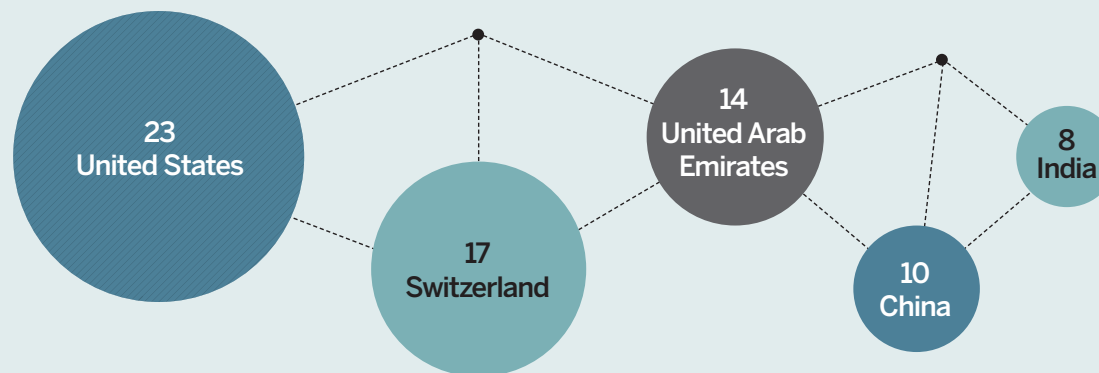


Figure 3.34. Total number of reports related to OECD countries

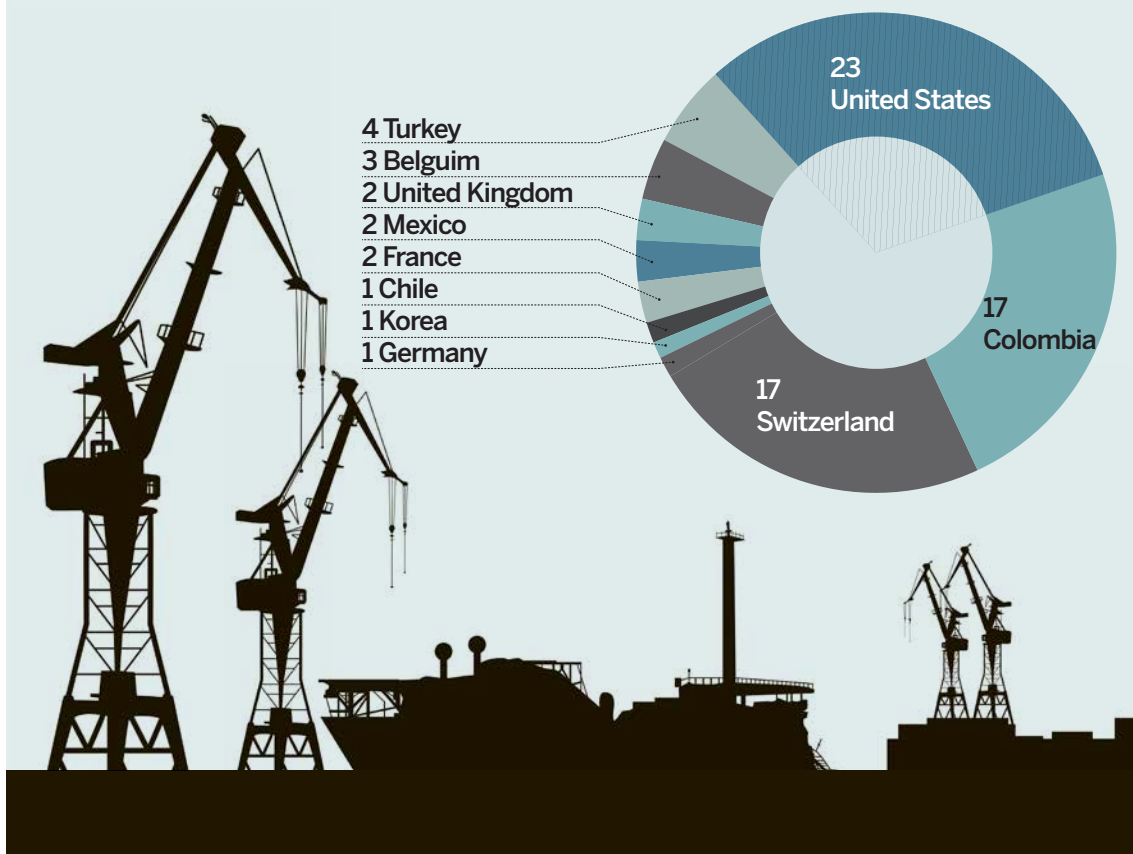


Figure 3.33. Total number of reports related to countries known to be mineral trading hubs. This figure shows the total number of reports linked to mineral processing and trading hubs.

While the United States and China both had a significant number of reports linked to their trading and processing activities, this may be a false positive as companies from both countries are also heavily linked to reports of risk in mining regions. Unsurprisingly, India, United Arab Emirates, and Switzerland features quite highly due to the historically high volume of gold processing and trading taking place there.

Figure 3.34. Total number of reports related to OECD countries. This figure features the total number of reports were OECD countries were mentioned.

The significant presence of the United States appears to be attributable to the large number of United States-incorporated companies that are reported to be using supply chains linked to Annex II issues.

The presence of Colombia is largely as a producer country, associated with reports of high levels of corruption and active non-state armed groups, particularly in gold and coal supply chains.

### Deep dive links

- + Financial crime
- + What issues are normally reported together?
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# Guide to data entry



## Quick links

- + [Methodology & trend analysis](#)
- + [Overview of data collected](#)
- + [Trends](#)
- + [Deep dive](#)
- + [A guide to data entry](#)



# Guide to data entry

This guide was provided to TDI Sustainability as instructions for how to collect and enter the individual reports in the accompanying excel document.

## Quick links

[+ Methodology & trend analysis](#)

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## Primary or Secondary Source

Each identified supply chain issue may be reported several times, over several different URLs. Often, one media report will offer the most complete picture of an issue, and other media reports, from other outlets, will simply reproduce or paraphrase it. In such a case, the first report should be designated the “Primary” report, and the other reports designated the “Secondary” reports.

In other cases, the “Primary” report may be a court ruling, for example, with subsequent media articles on the ruling constituting “Secondary” reports. The media articles might give more context to the case than the court ruling does, but the court ruling should still be considered the “Primary” report, as it is more authoritative.

Designating the “Primary” report is a matter of subjective judgement. It depends on which report you, as the analyst, think would be most interesting and relevant for companies that have these issues in their supply chains.

The first report on a subject, chronologically, is not always the best “Primary” report. In the case of media articles, early reports often give basic facts about incidents, such as place names and casualty numbers, and subsequent reports then explore thematic issues around incidents, systemic failures, drivers of conflict, etc., and are therefore better choices for the “Primary” report, since they are the more informative source overall.

If you have two similar reports, with overlapping information, but neither one completely contains the other, then designate them both “Primary” reports. If in doubt, go for “Primary”.

## Report ID

Give each report a number, starting from 1 and counting upwards. If you encounter a report that is a “Secondary” version of another report, then give it the “Primary” report’s ID number.

## Country or Territory Involved

Select the country where the incident is reported to have taken place.

If the report is about a pattern of issues spanning several countries then use the additional country

columns to flag multiple countries.

Also use the additional country columns to record the nationalities of individuals involved, and the countries in which companies that are involved are based.

If the webpage contains no specific allegations of wrongdoing, pertaining to individual companies or countries (for example, a general description of how diamond revenues can fuel conflict around the world) choose “THEMATIC - NOT COUNTRY SPECIFIC”.

## Commodities Involved

Select from the list those commodities whose processing and production is in some way linked to reported conflict or human rights abuses of the natures described in Annex II of the OECD Due Diligence Guidelines for Responsible Supply Chains of Minerals from Conflict Affected and High-Risk Areas.

Multiple columns are provided for this data field since in some cases multiple commodities might be mentioned in a single report.

The ‘web scraping’ tool collects names of featured commodities, and these are listed in Column E. However, this is only an automated data grab and may not be accurate, so a manual check is required.

## Anonymised one sentence description of article containing the names of countries involved, the type of risk, and the type of mineral. No company names or individuals’ names.

This is the only data field which requires narrative analysis, rather than a simple drop-down menu selection.

In addition to naming the country where the incident reportedly took place, name any other countries that are of relevance in the story. For example, if a report discusses Swedish banks taking money from a corruption scandal in DRC, mention the Swedish bank connection, but not the specific bank names. If a mining company incorporated in Australia is accused of rights abuses in Kyrgyzstan then mention the Australia incorporation, but don’t name the company.

In the case of a complex article covering multiple issues it is possible to use more than one sentence, as an exception, but do strive to be as concise as possible.

See the English language spread sheet for examples of how this field should be completed.



# Guide to data entry



## Type of Source

Select the type of organisation that is reporting the issue, from a drop down list.

Here “public organisations” means any organisation administered by a national or regional government.

## Type of Risk

Select the risk type (based on Annex II of the OECD Guidance) most applicable to the report.

If multiple risk types are discussed then use the #2 and #3 columns

If an article covers more than three risk types then add additional columns as necessary.

Annex II of the OECD Guidance identifies specific types of corruption, whereas we are using a more general overall “Bribery and Corruption” filter. This change was made at the request of the client team at the OECD, so this is the one instance in which you should look at issues beyond Annex II

## Origin of Material

Select whether the material described in the report was produced from industrial Large Scale Mining (LSM), from Artisanal and Small Scale Mining (ASM)<sup>26</sup>, or from both, or from recycled material.

In many cases a report will not state explicitly whether mining is LSM or ASM. In such cases, try to find

the answer through your own research (for example, if a company name is mentioned then look the company up on google and confirm it is LSM).

If you cannot find a definitive answer from your own research, but you still feel confident from the context and the issues that the report describes to make an ASM/LSM judgement then do so, and simply make a short note in the comments column to reflect this.

## Report Date

This is the date of the online report, not the date of any alleged incidents.

We are only considering reports from the start of 2017 onward, so earlier reports can be disregarded.

Reports with no dates can also be disregarded.

Other reproductions of the exact same article elsewhere? (paste URL)

Certain websites, such as [allafrica.com](http://allafrica.com), reproduce articles from local media sources in their entirety, and vice versa local media can sometimes reproduce articles from international sources verbatim.

Likewise, some websites host html and pdf versions of the same report, with different URLs.

If you spot two identical reproductions of the same article or report, but with different URLs, then paste the reproduction URL into this box.

The methodology for data collection has been piloted for the first time with this paper. Moving forward, the OECD plans to prepare future papers periodically (e.g. every two years). As feedback is received and reporting on these issues grows, the OECD will further revise the methodology, which would be reflected in future papers.

## Quick links

[+ Methodology & trend analysis](#)

[+ Overview of data collected](#)

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# Sources

**1** For the approach used to differentiate 'primary' and 'secondary' reports, see the analytical guidance contained in the Annex to this document.

**2** The US Department of State endorses the Guidance and encourages companies to draw upon it as they establish their due diligence practices.

**3** In May 2017, the European Union adopted Regulation (EU) 2017/821, requiring Union importers to conduct due diligence on 3TG originating from conflict-affected and high-risk areas in accordance with the five steps of the Guidance. The EU Regulation entered into force in January 2021.

**4** The London Metal Exchange (LME) proposed market-wide rules for the application of responsible sourcing principles to all LME-listed brands in line with the Guidance. The LME's proposed rules will require all of its listed brands to undertake a Red Flag Assessment based on the Guidance. If this assessment demonstrates potential responsible sourcing red flags the brand will need to be audited against an OECD-aligned standard by the end of 2022. The LME is the world's largest market for futures

and options contracts for aluminium, cobalt, copper, lead, molybdenum, nickel, steel, tin and zinc.

**5** See, for example, the Responsible Mica Initiative, BetterCoal, and the Coloured Gemstone Working Group.

**6** ILO (1999), Convention No. 182 on the Worst Forms of Child Labour.

**7** OECD (2017) Practical Actions on the Worst Forms of Child Labour.

**8** ILO (1930), Convention No. 29 concerning Forced or Compulsory Labour; See also ILO (2012), "Questions and Answers on Forced Labour."

**9** See ILO (2012), "Questions and Answers on Forced Labour."

**10** US Department of State, Office to Monitor and Combat Trafficking of Persons, "What is Modern Slavery?"

**11** Article 1, United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984).

**12** International Rehabilitation Council for Torture Victims "What we do / Torture Rehabilitation." See also

the International Justice Resource Centre page on Torture [here](#) for a more complete understanding and guide to jurisprudence.

**13** Rome Statute of the International Criminal Court (1999).

**14** International Criminal Court (2013) Elements of Crimes.

**15** See ICRC, "Geneva Conventions of 1949 and their Additional Protocols"; See also ICRC, "International Humanitarian Law Database."

**16** See "List of Issues" page on OHCHR website.

**17** Geneva Academy of International Humanitarian Law and Human Rights (2014) "What amounts to 'a serious violation of international human rights law'?"

**18** ICRC (2011), Engaging non-state armed actors in state and peace-building: options and strategies.

**19** Voluntary Principles on Security and Human Rights.

**20** IMF (2014) Implementing AML/CFT Measures in the

Precious Minerals Sector: Preventing Crime While Increasing Revenue.

**21** See FATF (2006) Trade Based Money Laundering.

**22** Article 1, OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997); Article 15, United Nations Convention Against Corruption (2004).

**23** OECD (2016), Private-to-private corruption: Taking business managers' risk assessment seriously when choosing anti-corruption measures.

**24** OECD (2016), Corruption in the Extractive Value Chain.

**25** OECD (2017) Technology Tools to Tackle Tax Evasion and Tax Fraud.

**26** A resource that explains the difference between ASM and LSM: <https://www.barksanem.com/what-is-mining/>





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