

## AFRICAN GOLD REPORT

### SOUTH AFRICA

JULY 3, 2025

*This document is part of a larger research project on African gold flows. For information on data sources, methodology or recommendations, please refer to SWISSAID's 2024 report [On the trail of African gold](#).*

#### COUNTRY TYPE

**Main characteristics:** one of Africa's main gold producers; historically significant for global gold production and trade; declining industrial gold production and increasing (illicit) ASM gold production; home to the only LBMA-certified refinery in Africa, processing large quantities of industrially produced gold from other African countries; transit hub for smuggled gold from neighbouring countries, notably Zimbabwe.

#### Gold production

- Artisanal and small-scale mining
  - declared: n.d.
  - non-declared (estimate): 25 tonnes per year
- Industrial (or large-scale) mining: 97 tonnes in 2023

#### Gold imports

- Declared: 11.4 tonnes in 2023 (142.7 tonnes according to mirror data)
- Non-declared (estimate): n.d.

#### Gold exports

- Declared: 102 tonnes in 2023 (220.6 tonnes according to Rand Refinery data)
- Non-declared (estimate): n.d.

**EITI member:** no

**Reports to UN Comtrade:** yes, but the data is incomplete and therefore unreliable.

## **SUMMARY**

South Africa is a major gold producer and trading hub in Africa. However, the country's gold trade statistics are opaque, making it difficult to accurately assess gold imports and exports. This opacity hinders the identification and calculation of illicit gold flows.

South Africa, historically the world's largest gold producer, has seen a decline in production due to decreasing ore grades in large-scale mining. Rand Refinery, the only LBMA-certified company in Africa, processes and exports virtually all of South Africa's industrial gold output. The company plays a significant role in the global gold market, supplying gold to major trading centres and large consumers, such as China and India.

Artisanal and small-scale gold mining in South Africa takes place mainly in abandoned or unused industrial mines. The activity is illegal, largely controlled by syndicates, and involves mainly undocumented migrants from neighbouring countries. Estimates of gold production from artisanal and small-scale mining (ASM) vary widely, ranging from 5 per cent to 30 per cent of total production, or 7 tonnes to 51 tonnes annually. This gold is laundered into formal supply chains through local refineries, and may be exported legally.

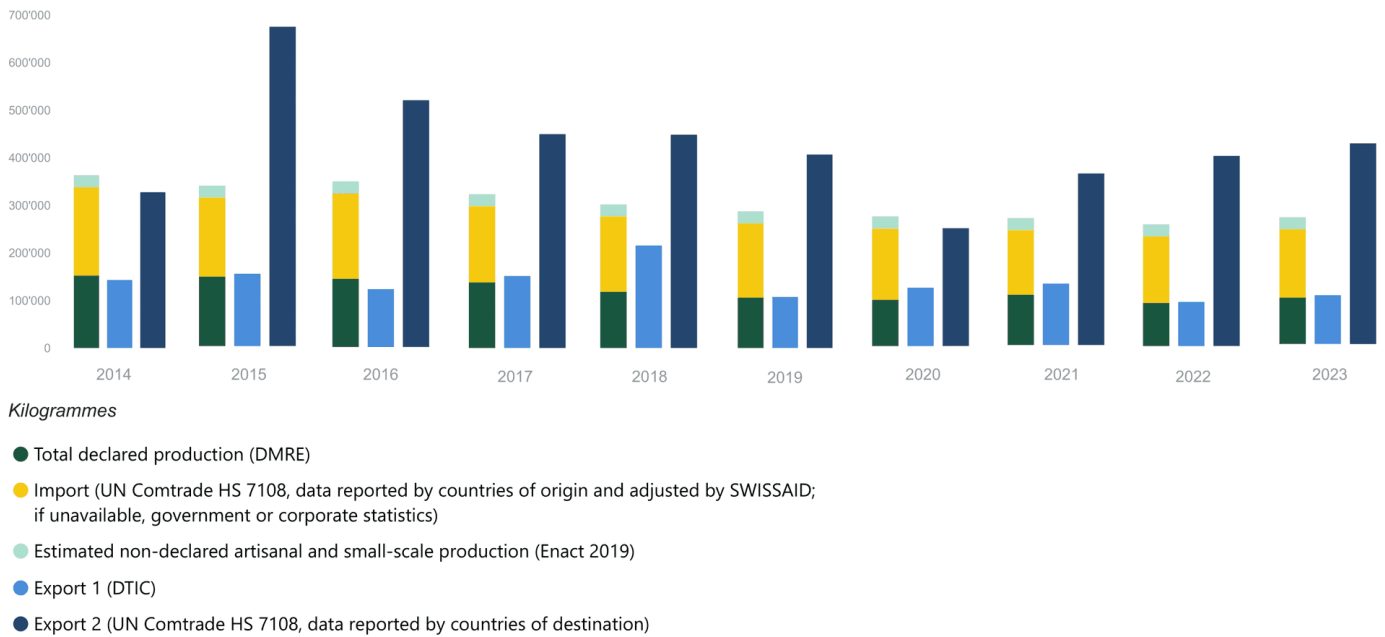
South Africa is a known destination for smuggled ASM gold from neighbouring countries, particularly Zimbabwe. That gold is also laundered locally before export. Consequently, there is a high risk that reprocessed, unprocessed, melted or scrap gold from South Africa may in reality contain in freshly mined ASM gold associated with smuggling, money laundering or human rights violations.

The comparison between South African gold imports/exports and their mirror image, namely gold exports to South Africa or imports from South Africa reported by the authorities of the other countries reveals discrepancies that are largely artificial, since South African official statistics are unreliable. However, some insights can be gained from using corporate data (supplied by Rand Refinery) instead. This shows, for instance, that most of the gold produced or imported into South Africa is

exported. And it suggests that part of the gold from South Africa imported into partners countries may have been sourced irresponsibly.

## **OVERVIEW**

#### Overview of the gold sector in South Africa (uncorrected)



Several observations can be made based on the graph above: total gold production in South Africa has decreased over the years, reported gold exports to South Africa are considerable, and South Africa’s partner countries have reported higher volumes of gold imports from South Africa than the combination of gold produced in South Africa and gold imported into that country.

South Africa is a major transit hub for gold, yet South African statistics on the trade in the yellow metal remain opaque, which creates artificial discrepancies and stands in the way of an assessment of the magnitude of illicit gold flows. Basically, there are three main issues, two of which could be tackled directly by the South African authorities.

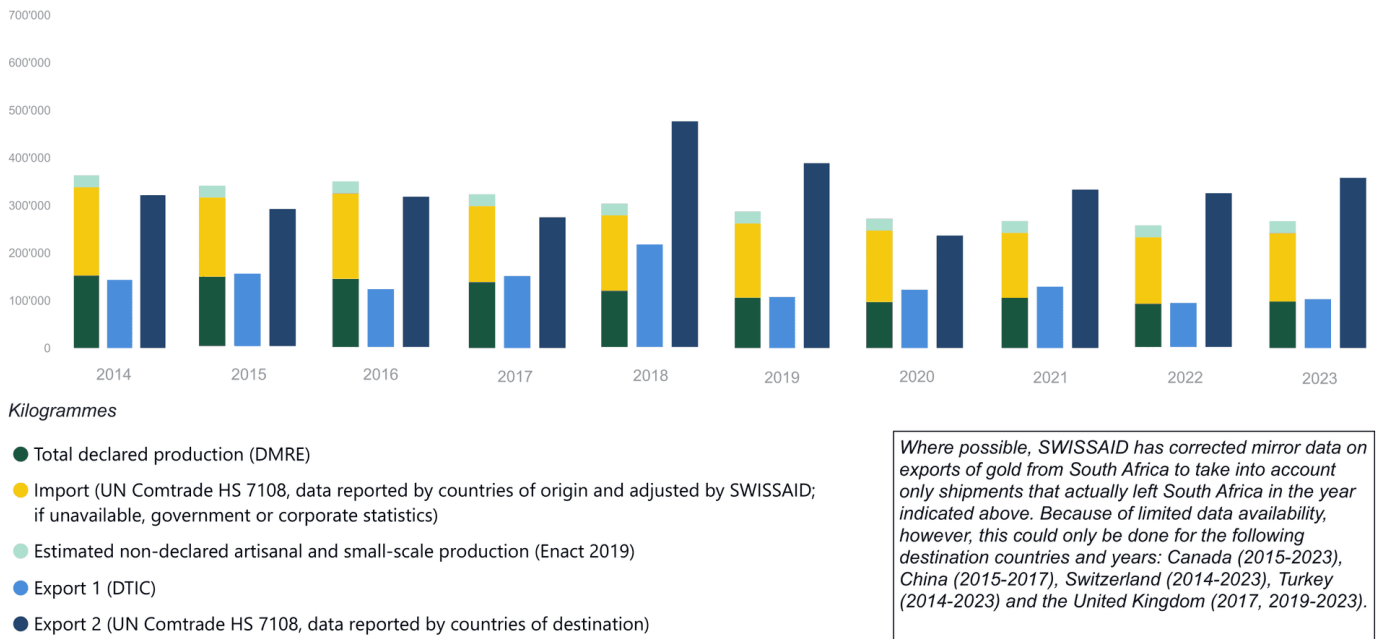
Firstly, regarding gold imports into South Africa (left-hand columns, yellow segments in the graph above), the South African Customs and Excise Division, which is part of the South African Revenue Service (SARS), only publishes data on gold imports for “home use” (domestic consumption). Gold imported for “inward processing” (refining) and re-exported, which represents by far the largest proportion of gold imports into South Africa, does not appear in the statistics. This is problematic, because it makes it impossible to know precisely the total quantities of gold imported into South Africa and the countries of origin of this gold (this type of information is only available for gold imports for “home use”). For this reason,

SWISSAID decided to display gold imports into South Africa in the Overview graph above using data declared by the countries of origin and to leave out the incomplete import data reported by South African authorities.

Secondly, regarding gold exports from South Africa (middle, light-blue columns in the graph above), SARS's statistics cover only gold mined in South Africa (whose production has been declared). Gold imported into South Africa, refined there, and then exported from there is recorded at customs, but not included in official export statistics<sup>1</sup>. Since most of South Africa's gold exports are re-exports (i.e. non-domestic gold), official statistics are not representative of the actual quantities of yellow metal that leave the country each year. Not only that, but these statistics do not disclose the countries of destination, except if these countries are members of the Southern African Customs Union (SACU), like South Africa<sup>2</sup>. Finally, it is uncertain if and to what extent these statistics cover gold from artisanal and small-scale mining (ASM) in South Africa, which is considered illegal, and gold smuggled into South Africa from neighbouring countries, first among them Zimbabwe.

Thirdly, regarding gold imports from South Africa reported by the authorities of the partners countries (right-hand, dark blue columns in the graph above), one can observe that they were higher, if not significantly higher, than the aggregate of total declared gold production in South Africa, imports of gold into South Africa<sup>3</sup> and undeclared ASM gold production in South Africa (left-hand columns, consisting of dark green, yellow and light-green segments) for almost every year between 2014 and 2023. A small part of this discrepancy can be attributed to the fact that gold is smuggled into South Africa from neighbouring countries (Zimbabwe), but SWISSAID discovered that **most of the gold imports from South Africa reported by the partner countries were not shipped directly from South Africa**. The case of China is illustrative: available data shows that the bulk of gold imports declared as originating from South Africa has been shipped from another country<sup>4</sup>. SWISSAID's research revealed that this lack of clarity is due to (a) the internationally applicable rules on the declaration of the country of origin of gold imports and (b) the presence of an LBMA-certified refinery in South Africa.

## Overview of the gold sector in South Africa (partially corrected)



In the graph above, gold imports into other countries from South Africa (right-hand, dark blue columns) have been partially corrected<sup>5</sup>, which explains why they are lower than their equivalent in the non-corrected version of the same graph. This is particularly obvious for the years 2015–2017, because SWISSAID managed to correct gold imports into China from South Africa only for those three years, and China reported very large imports of gold from South Africa, most of which was shipped from another country.

What this partially corrected overview of gold flows in South Africa reveals is that the **vast majority of gold produced or imported into South Africa is then exported from that country**. This is apparent in the fact that the left-hand columns are slightly higher than the right-hand columns for every year for which significant corrections, in particular on Chinese data, could be made (i.e. 2014–2017). The information shared by Rand Refinery with SWISSAID also confirms this observation: the South African company refines almost all the gold legally imported into South Africa and 98 per cent of the industrial gold mined in South Africa<sup>6</sup>, and exports 98–99 per cent of the gold it refines (figures for 2024–2025)<sup>7</sup>. From 2018 onward, with the exception of 2020, the left-hand columns are lower than the right-hand ones. This is because SWISSAID was able to correct only a portion of the data

on gold imports from South Africa, due to data unavailability; the high figures from China, in particular, distort the picture.

The poor quality of South Africa's statistics on the gold trade **seriously complicates the analysis of the country's gold sector and makes the identification and calculation of illicit gold flows almost impossible.**

SWISSAID therefore reiterates its recommendation that South Africa “abandon the strict special trade system and adopt instead the general trade system, in accordance with United Nations recommendations” (see [UNSD 2017](#)) and “publish the countries of destination of exported gold and the countries of origin of imported gold” ([SWISSAID 2024: 99](#)). South African authorities have argued years ago that this process had been initiated, but there have been no results so far. Much to the contrary, they seem to be clinging to an opaque gold trade reporting system dating back to apartheid, which conceals the total volumes of gold imported and exported as well as the origin and the destination of this gold. But times have changed long ago. Reform is overdue. In what follows, SWISSAID circumvented the deficiencies of South African gold trade statistics and created transparency by using corporate data, particularly from Rand Refinery, South Africa's largest precious metals refinery, and delving into partner countries' mirror data. In doing so, SWISSAID arrived at what is arguably the most realistic picture of the South African gold trade to date.

## **GOLD PRODUCTION**

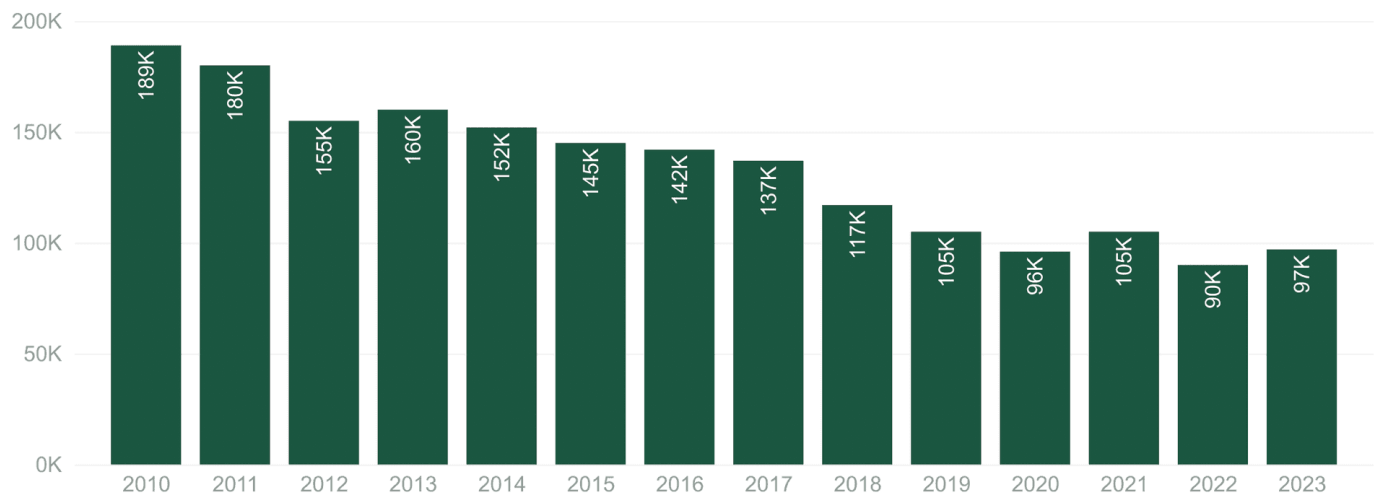
South Africa has historically been the most significant producer of gold not only in Africa, but also in the world. According to different sources, between 40 and 50 per cent of the total amount of gold ever mined worldwide came from the country's Witwatersrand Basin, a gold deposit stretching for 400 kilometres through the Free State, North West and Gauteng provinces ([Enact 2019a: 3](#), [Grynberg and Singogo 2021: 159](#)). For decades, a fixed international gold price of USD 35 per ounce could be maintained under the Bretton Woods system thanks to the steady gold supply from South Africa. The global economic development after the Second World War was significantly shaped by this system. Countless miners, mainly from neighbouring countries, as well as the local population and the environment, have paid a high price for the South African gold boom. Moreover, the country's gold production and trade helped South African governments remain an integral part of the international community and supported the South African economy throughout the

apartheid regime (1948–early 1990s) despite tensions and pressures such as boycotts (Grynberg and Singogo 2021: 161).

## **INDUSTRIAL OR LARGE-SCALE GOLD MINING**



### Industrial gold production in South Africa



Kilogrammes

Source: Department of Mineral Resources and Energy

Launched by the gold rush in 1886, the South African gold industry reached its peak around 1970, with an annual production of more than 1,000 tonnes. At that point, it accounted for over 70 per cent of global production ([Swarts and Newman 2023: 10](#)). However, South African gold production gradually decreased over the subsequent years due to a consistent decline in ore grades. As the graph above illustrates, production decreased by 90 tonnes between 2010 and 2023. In 2018, South Africa finally lost its position as Africa's leading gold producer to Ghana due to an increase in Ghana's gold output ([Mining Global 2020](#), [The Africa Report 2019](#)). Nevertheless, South Africa remains today one of Africa's main gold producers. According to the Department of Mineral Resources and Energy (DMRE)<sup>8</sup>, the country's industrial mines produced 97 tonnes of yellow metal in 2023. The data collected in the graph above is exclusively on industrial production. As explained by the DMRE, "The department collects mineral statistical data directly from license holders (mines) and refineries"<sup>9</sup>.

The vast majority of the gold produced in South Africa comes from industrial mines. According to DMRE, 68 gold mines are currently operating in South Africa ([DMRE n.d.](#), accessed in April 2025). While most of them are underground mines, there are also opencast mines.

The South African gold mining sector is dominated by three companies: Harmony, Sibanye-Stillwater and Gold Fields. Together, these companies were responsible for

76 per cent of the country's total gold production in 2022 (LBMA 2023: 2). Other major gold mining companies, such as Pan African Resources, also operate several gold mines in South Africa. Harmony is the largest gold producer in the country, with a production of 43.5 tonnes in financial year 2024 (ended 30 June 2024) (Harmony 2024: 74).

According to DMRE, the formal gold industry employed 94,024 people directly in 2023 (DMRE n.d.). Three decades and a half ago, the number of jobs in that industry was more than five times higher (536,057 jobs in 1988) (The Outlier 2025). Despite the drop in production and the number of employees, South Africa's gold reserves are still estimated at 68 million troy ounces, which means that, at the current pace, gold production could continue for another 27 years (PWC 2023: 5). That said, South Africa's gold reserves are deep and therefore difficult to access and costly to mine (MCSA 2024: 23).

Gold mining in South Africa is mainly undertaken in deep and narrow underground mines. This makes it less adapted to high mechanisation and more labour-intensive. It also creates challenging working conditions and increases health and safety risks (MCSA 2024: 23). As a result, accidents and fatalities in large-scale gold mines are more common in South Africa than in other parts of the world (LBMA 2023). Over the years, as employment has dropped, so have fatalities, from more than 700 a year in the 1980s to 42 in 2024 (The Outlier 2025) – which nevertheless remains a worrying figure.

More than a century of gold mining has left its mark on the landscape. According to a report released in 2022 by the Auditor-General, there were 6,100 abandoned mines in South Africa, including at least 700 gold mines (AGSA 2022: 17). The Auditor-General, Tsakani Maluleke, warned that these mines “pose serious health, safety and environmental hazards for nearby communities” and stressed that the government needs to urgently improve its rehabilitation efforts (AGSA 2022). These abandoned mines are notably exploited by the *zama zama* (see below).

## **Refineries processing industrial gold**

Established by the Chamber of Mines of South Africa in 1920, Rand Refinery is the only African refinery to be a member of the London Bullion Market Association (LBMA). It is based in Germiston, South Africa, and active in the refining and

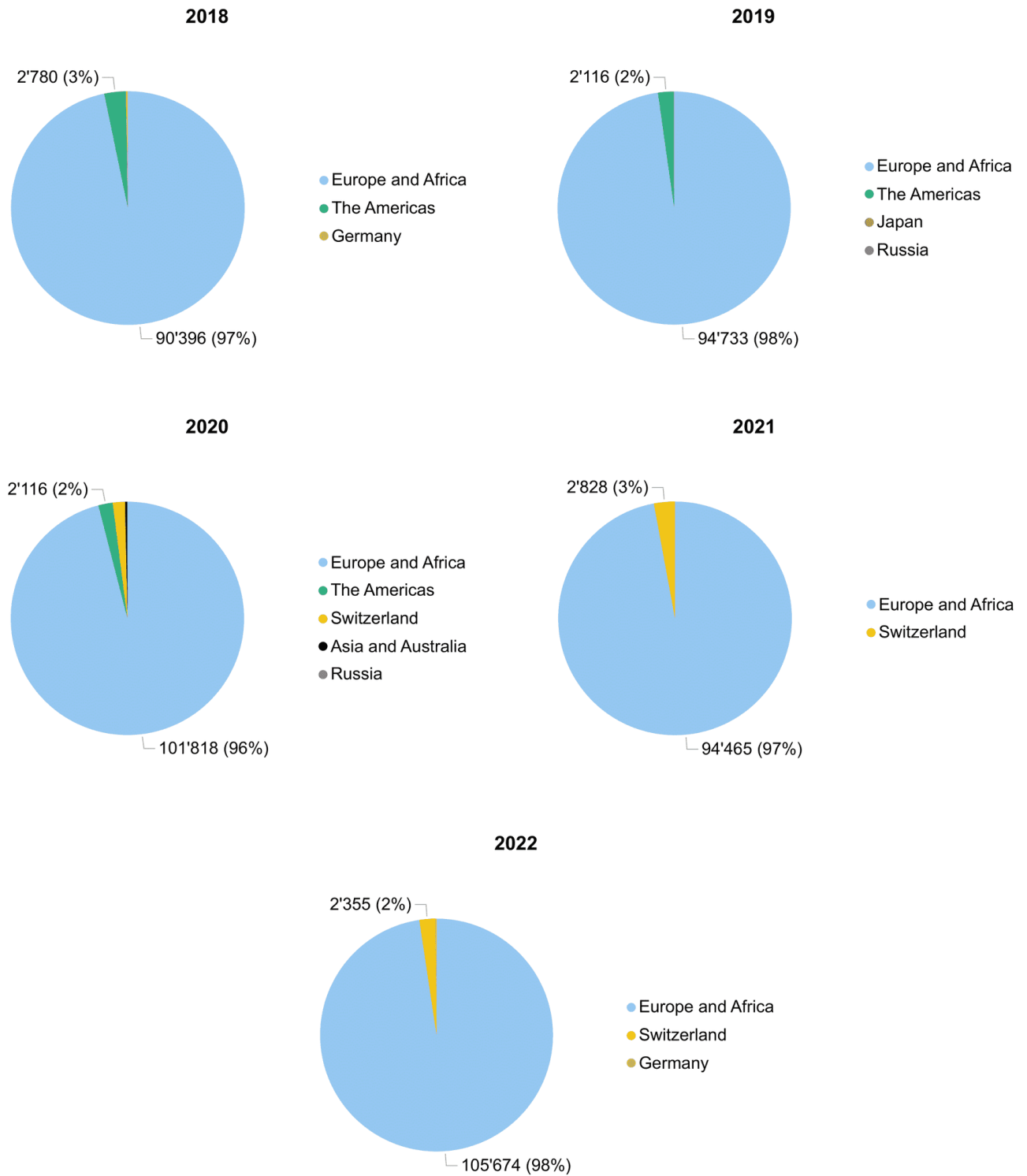
smelting of raw materials and the manufacturing of value-added precious metal products. Rand Refinery is owned by several major South African gold mining companies: AngloGold Ashanti (42.41%), Sibanye Gold (33.15%), DRDGOLD (11.3%), Harmony Gold Mining (10%) and Gold Fields Operations (2.76%) (Rand Refinery 2025). It has an annual refining capacity of 450–600 tonnes of gold<sup>10</sup>. In its over a century-long history, Rand Refinery has refined more than 50,000 tonnes of gold in total, which is almost a third of the total world gold production to date<sup>11</sup>.

Rand Refinery produced between 206 and 247.6 tonnes of fine gold annually during fiscal years 2018–2024 (September 1–August 31)<sup>12</sup>. In 2024, 39 per cent of the gold refined by Rand Refinery came from South Africa and 61 per cent from other countries (Rand Refinery 2024: 15). Most of the gold refined by Rand Refinery (between 62 and 73 per cent in 2018–2024) comes from mines owned or co-owned by its shareholders<sup>13</sup>.

In its 2024 compliance report (Rand Refinery 2024), Rand Refinery disclosed only the names of mines operated by mining companies that are members of the World Gold Council (WGC). For South Africa, the mines disclosed are those from Sibanye Stillwater (Beatrix, Driefontein, Ezulwini, Kloof and Rand Uranium) and Goldfields (South Deep). In 2023, SWISSAID identified business relationship between 49 industrial gold mines (including some gold tailings operations) and Rand Refinery. Twenty-five of those mines are located in South Africa (SWISSAID 2023: 10–11).

Rand Refinery acknowledges that it refines almost all the gold extracted from industrial mines in South Africa. In 2022, the company wrote to SWISSAID: “We refined the vast majority (> 98 per cent) of large-scale mining gold in South Africa”<sup>14</sup>. In financial year 2024 (Sept.–Aug.), Rand Refinery processed 90.0 tonnes of gold from South Africa, from 34 depositors that are “mainly South African large-scale mines” (Rand Refinery 2024: 15).

## LBMA-certified refineries: gold sourcing from South Africa



*Kilogrammes*

**Source:** LBMA Country of Origin Data

These graphs only show data on gold sourcing from large-scale (industrial) mines.

Country of Origin Data published by the LBMA (LBMA n.d., accessed in January 2025) <sup>15</sup> shows that certified refineries located in the “Europe and Africa” region

processed virtually all the gold originating from South African large-scale mining (between 96 and 98 per cent during the period 2018–2022). This is congruent with Rand Refinery’s statements mentioned earlier. And it implies that, apart from Rand Refinery, no other LBMA-certified refinery based in the LBMA’s “Europe and Africa” region<sup>16</sup> sourced LSM gold from South Africa between 2018 and 2022.

It would have been interesting to compare LBMA’s Country of Origin Data with DMRE’s and Rand Refinery’s gold production data for individual years. However, this is impossible because these datasets’ respective periods of reference differ: DMRE’s financial year lasts from April 1st to March 31st, Rand Refinery’s from September 1st to August 31st, and the LBMA assigns data reported by Rand Refinery to the next calendar year (January 1st to December 31st)<sup>17</sup>. That said, SWISSAID made a rough comparison over three years (2020–2022) and has observed only a tiny gap between these datasets (e.g. DMRE figures are 3.3% lower than LBMA figures). This confirms the central role played by Rand Refinery as virtually the only taker of LSM gold from South Africa and the reporter of the highest figures to DMRE. Indeed, in a response to SWISSAID, DMRE wrote that “More than 90% of gold reported by the DMRE is refined by the Rand Refinery, the remainder by other refineries where gold is a byproduct and other smaller refineries”<sup>18</sup>.

## **ARTISANAL AND SMALL-SCALE GOLD MINING**

Beyond industrial (aka large-scale) mining, gold is also extracted through artisanal and small-scale mining in South Africa. Artisanal gold miners are colloquially referred to locally as *zama zama*, the Zulu term for “take a chance” or “try your luck”. Unlike in many other countries, where they pan for gold or dig their own, narrow shafts, artisanal gold miners in South Africa work mainly in abandoned, closed or ownerless large-scale gold mines (DFFE 2021: 32). This activity is illegal, so artisanal and small-scale miners are generally perceived as law-breaking actors in the South African context.

SWISSAID had numerous exchanges with DMRE between 2022 and 2025 and made repeated attempts at obtaining official data on ASM gold production in South Africa from that agency, but at the time of writing (April 2025) DMRE still had not shared it with SWISSAID – indeed, it even remained unclear if this type of data exists at all. In one of its replies, DMRE explained: “We are unable to provide quantities, as we only

keep records of mineral statistics collected as prescribed by Section 28 of MPRDA Mineral and Petroleum Resources Development Act, 2002. That is only for legally operating producers, as they will naturally be on our database and thus are obliged to comply with section [sic]"<sup>19</sup>. This statement gives the impression that DMRE treats all ASM as illegal. At the same time, as explained below, the agency acknowledges that the number of mining permits has risen in recent years, and it is possible that some of them are held by non-industrial actors.

SWISSAID also turned to the Minerals Council South Africa (MCSA, formerly known as the South African Chamber of Mines), the industry organisation that represents the interests of large South African mining companies, to obtain figures on ASM gold mining in South Africa. MCSA replied that it did not have any statistics on ASM<sup>20</sup> and noted that “there is no reporting or data available” on ASM, which “is still a grey space in [South African] mining legislation”<sup>21</sup>. As Nomsa Mbere, an advisor on the commercial aspects of mining, explained to SWISSAID: “there is no specific, publicly available data on the annual gold production by licensed ASM miners in South Africa. Due to the historically informal and unregulated nature of the ASM sector, accurate data collection has been a challenge”<sup>22</sup>.

*Zama zama* typically operate in hazardous and precarious conditions, such as abandoned and unused industrial mines and shafts that can reach depths of up to four kilometres. They use rudimentary tools and often spend several months underground, facing high temperatures and maximum humidity, rockfalls, and other health hazards. Most of them suffer from tuberculosis and fatalities are common ([The New Yorker 2023](#), [Mining Review 2025](#)). In addition, *zama zama* are exploited by syndicates, who control the mines they work in and market the gold they extract. *Zama zama* rely on these criminal organisations for access to food and water and cannot enter or exit the mines – or survive in them – without the latter’s logistical help ([The New Yorker 2023](#), [BBC 2024](#), [The Financial Times 2024](#)).

These syndicates – together with their accomplices, including unscrupulous business people and corrupt state officials ([GI-TOC 2021](#)) – represent what South African authorities consider to be a significant threat to national security. In an email to SWISSAID, DMRE explained that “illegal mining has a range of negative social and financial impacts on employees, companies, the mining sector, and the country due



to loss of revenue, taxes, employment opportunities, capital expenditure, exports, foreign exchange earnings, procurement, as well as damage to infrastructure and homes, as well as endangerment of the player [sic], among others”. DRME also emphasised that state authorities know little about the *zama zama* world: “information is not properly documented, since illegal operations are not open and transparent with their information. Moreover, their records, if any, are not open to scrutiny by government officials” <sup>23</sup>.

According to estimates, between 70 and 90 per cent of *zama zama* are undocumented migrants from neighbouring countries, such as Lesotho, Mozambique, and Zimbabwe (MCSA n.d.: 4, S-RM 2021). South Africans are also “deeply involved, often in processing and selling”, according to research carried out by the Bench Marks Foundation, a South African civil society organisation with expertise on mining (Bench Marks Foundation 2024: 7). Various non-government organisations (NGOs) have reported that miners at the lowest levels in the syndicate hierarchy face precarious working conditions as well as violence, forced labour, human trafficking, and other human rights violations (Enact 2019a: 2, GI-TOC 2021: 8).

Several sources, including MCSA, reported that *zama zama* activity has increased in recent years (MCSA n.d., see also Enact 2019a: 3). Whereas many industrial gold mines can no longer operate economically due to the depletion of their deposits and are being abandoned, artisanal mining activities in ownerless mines are on the rise. In recent years, the *zama zama* have even become active in mines that are still operating.

There are several estimates of the number of *zama zama* and the people who depend on them. According to the Human Rights Commission, there are about 39,000 active unregistered miners in South Africa (DFFE 2021: 32). Other sources suggest that about 14,000 *zama zama* are prospecting for gold in 6,000 mines in South Africa (Mining Dialogues D360 and CIRDI 2019: 24, Enact 2019a: 2, S-RM 2021). A media article mentions that in Gauteng province alone, an estimated 30,000 illegal miners operate and that there are over 100,000 such miners across the country (Press Xpress 2024). Academic researchers estimated that 250,000 people are “surviving on the proceeds of *zama zama* mining” (Bester and Uys 2023).

## Estimates of informal or “illegal” ASM gold production

SWISSAID has found many estimates of the (undeclared) annual gold production by artisanal miners or zama zama in South Africa. These estimates differ in several aspects: the time frame considered (a single year or multiple years, recent or old), the scope of materials included (all minerals or only gold), the unit of measurement (weight or value), and the calculation of revenue loss (only taxes and royalties or the gold’s value), which makes comparing them quite difficult.

MCSA estimates that approximately 7 tonnes of gold (or 5 per cent of total declared production) is illegally mined in South Africa, based on the total national production of around 135 tonnes (certainly figures from 2017) ([The South African 2020](#)). Metal Focus, in an estimate based on 2022 figures, suggests that ASM production accounted for 9 per cent of gold output, which amounts to approximately 9 tonnes annually, and considers that a significant portion of this gold is illegally mined ([LBMA 2023](#)). Godfrey Oliphant, Deputy Minister of Mineral Resources, declared in 2018 that about 10 per cent of the total gold production, worth about ZAR 7 billion (USD 565 million), comes from illicit mining ([Al Jazeera 2018](#)). DMRE estimates that illegal mining accounts for 30 per cent of South Africa’s gold production, with annual losses exceeding ZAR 14 billion ([Mining Review 2025](#)). The South African Chamber of Mines (now MCSA) estimated in 2016 that illegal mining costs the economy more than ZAR 7 billion every year ([MCSA 2016: 94](#)). In a report released by Enact in 2019, Marcena Hunter contends that South Africa’s lost gold production could exceed USD 1 billion (or ZAR 14 billion) a year, based on interviews with local industry experts ([Enact 2019b: 14](#)). This corresponds to approximately 25 tonnes of gold in 2019<sup>24</sup>. In a document submitted to the Parliament of South Africa in 2017, MCSA estimated the total revenue loss at ZAR 21 billion a year ([Enact 2019b: 2–3](#)). A South African government website mentions that “the cost of illegal mining is estimated to be over R70 billion annually in gold alone (...)” ([South African Government 2024](#)). This corresponds to approximately 51 tonnes based on the 2024 average gold price. David Van Wyk, mining analyst and lead researcher at the Bench Marks Foundation, mentioned that “everyone is speculating anything between R20 billion to 65 billion” ([SABC News 2025](#)).

In brief, the estimates vary from 5 per cent to 30 per cent of the total gold production, or 7 tonnes to 51 tonnes or ZAR 7 billion to ZAR 70 billion. Such a wide



range means that **little can be concluded with any certainty about the volumes of gold produced by the zama zama in South Africa**. Moreover, the opacity of South African export statistics (see below) makes it impossible to use data cross-analysis as another method for arriving at a reliable estimate.

Asked by SWISSAID which estimate of annual informal/illegal gold production it considers most realistic, DMRE did not answer directly but remarked that “The Department is only mandated to collect data from Mining Right Holders within the borders of South Africa, as such we do not have formal information on illegal gold data, as it has been identified as an illegal activity. However, together with the South African police we are working timelessly [sic] to curb these activities”<sup>25</sup>. At the same time, DMRE believes that informal/illegal gold production in South Africa has increased in the past ten years “Only informed by the number of incidents of arrests and accidents, that draw the attention of government”<sup>26</sup>.

### **ASM regulation**

Currently, ASM miners in South Africa can obtain a mining permit under Section 27 of the Mineral and Petroleum Resources Development Act, 2002 (MPRDA) (Mbere 2022). In a response to SWISSAID, mining expert Nomsa Mbere explained that “there is limited recent data on the number of mining permits issued for ASM mining under Section 27 of the MPRDA”. While over 1,000 mining permits were granted between 2004 and 2010, “Some of these permits may have been obtained by artisanal miners operating within the legal framework, although this would have been very limited, and almost non-existent”<sup>27</sup>. In a response to SWISSAID, the DMRE mentioned that “the industry remains largely informal despite an increase in the number of Section 27 mining permits that have been issued by the Department”<sup>28</sup>.

ASM miners struggle to meet requirements for obtaining a permit under Section 27 of the MPRDA. This is in large part because the permit system outlined in the act is tailor-made for large-scale mining and therefore unfit for regulating other types of mining. According to Mbere, ASM miners face the following challenges in applying for a Section 27 permit:

- financial and administrative burdens: high application fees, costly environmental impact assessments, and the need for environmental

assessment practitioners and stakeholder consultations

- a complex and burdensome application process
- lack of access to resources: Many ASM miners struggle to meet the financial and technical requirements outlined in the MPRDA for obtaining this permit.
- regulatory uncertainty: The mining permit system was not designed with ASM in mind, and it often does not consider the unique characteristics and needs of artisanal miners.

To address these challenges and trigger ASM formalisation, DMRE published an ASM policy in 2022 (DMRE 2022). Mbere explained to SWISSAID that this policy introduces an artisanal mining permit and a small-scale mining permit<sup>29</sup>. The policy also empowers the Minister to designate specific areas for ASM activities, informed by geological data. To be legally enforceable, these policy proposals require amending the MPRDA<sup>30</sup>. This process, which is essential for the formalization and regulation of ASM mining in South Africa, has just started. As DMRE explained to SWISSAID, “the Department has started the process of amending the MPRDA and currently stakeholder consultation is being undertaken. The Department plans to submit the Draft Bill to parliament by end of financial year 2025/2026”<sup>31</sup>. Even though it is not yet implemented, DMRE’s ASM policy has already attracted criticism. For instance, researchers remarked that “this policy has a number of shortcomings. In particular, it ignores the former miners from outside South Africa and fails to provide for a centralised buying agency, allowing criminal syndicates to continue” (Bench Marks Foundation 2024: 7 and 29, see also David Van Wyk’s comment on SABC News 2025 at approx. 7 min. 30 sec. and in The Citizen 2025).

It should be stressed that the root of the problem with the *zama zama* lies in the fact that abandoned or decommissioned industrial gold mining sites in South Africa can still easily be accessed. Requirements on mine closure are anchored in national legislation, particularly in Section 43 MPRDA and Subsection 1a, Section 28 National Environmental Management Act (NEMA) no. 8 of 2004, but they are not always implemented (Bester and Uys 2023). Moreover, there is a significant legacy issue with mines decommissioned before the adoption of the MPRDA, which supposedly represent the majority of decommissioned mines in South Africa: facing no legal requirements for rehabilitation, many mining companies left sites unattended, creating fertile ground for illegal operation. South Africa’s president Cyril

Ramaphosa himself acknowledged mining companies' responsibility in illegal mining: he is quoted in a media report as having declared that "Mining houses that don't comply with the laws around the closure and rehabilitation of mines have contributed to the proliferation of illegal mining" ([Mining Review 2025](#), see also David Van Wyk's comment on [eNCA 2024](#)).

## **Zama zama gold supply chains**

Some of the gold illegally produced in South Africa may be smuggled out of the country (see below, section on illegal gold exports). But most of the yellow metal extracted by the *zama zama* is said to be processed locally before being legally exported. There are several types of supply chains (see [Bench Mark Foundation 2024: 25–26](#), [MCSA n.d.](#), accessed in April 2025). In one of them, for instance, *zama zama* doré (raw gold) is bought by local buyers and sold on to scrap metal traders or pawn brokers connected to the syndicates, who melt it. The gold is then processed in small refineries and put on the international gold market via legitimate channels ([Enact 2019b: 7](#)). These channels serve to launder not only *zama zama* gold from South Africa but also smuggled mined gold from other countries. The South African local scrap metal-to-refinery route leading to Dubai appears to be the preferred route for most syndicates ([Enact 2019a](#)). South African state authorities are aware of the high risk that illegally mined or smuggled gold enter formal supply chains and claim to be taking it seriously and acting accordingly. In a response to SWISSAID, DMRE asserted that "Although there is a high probability of illegal gold ore being made 'legal' via illegal supply chains, various measures have been instituted to counter the effect"<sup>32</sup>. It is not clear to SWISSAID what these measures consist in and whether they have had any impact so far. Indeed, SWISSAID's impression is that **much remains to be done in South Africa to tackle illegality and criminal behaviours in mining.**

## **Refineries**

Tellingly, Rand Refinery adopts a very cautious approach to ASM gold and so-called recycled gold (aka scrap gold or secondary material) originating from South Africa. Questioned by SWISSAID in 2022 about its sourcing policy, the Germiston-based refinery asserted that "given our thorough responsible sourcing practices, illicit material (e.g. *zama zama* gold, etc.) does not flow into Rand Refinery" and explained

that “ASM mining in South Africa is illegal (only small, medium and large scale allowed), accordingly we processed no ASM material from South Africa”<sup>33</sup>. More recently, Rand Refinery confirmed that it had not refined ASM gold from South Africa in 2024 and 2025<sup>34</sup>. As regards scrap or “recycled” gold, Rand Refinery wrote in its 2022 annual report: “Very little secondary material is sourced from within South Africa due to the *prevailing risk of cross-contamination with other sources*” (Rand Refinery 2023: 3, SWISSAID’s emphasis). In its 2024 LBMA compliance report, Rand Refinery explained: “Recycled gold is [...] a risk and must be managed accordingly. Only 0,4% of Rand Refinery’s gold input is recycled material. It must be noted virtually all of the recycled gold we receive comes directly as industrial by-product (e.g. refining sweeps) from reputable sources (e.g. other LBMA refiners)” (Rand Refinery 2024: 8–9, SWISSAID’s emphasis). In Rand Refinery’s 2022 LBMA compliance report, one can also read regarding the sourcing of recycling gold that Rand Refinery “declined local material / depositors during the reporting period as the material did not meet our due diligence requirements” (Rand Refinery 2022: 7).

There is little publicly available information about the other precious metals refineries operating in South Africa and their policies regarding gold sourcing. SWISSAID therefore had to contact the South African Diamond and Precious Metals Regulator (SADPRM), which is the agency in charge of issuing gold refining licenses. SADPRM accepted to answer some of SWISSAID’s questions<sup>35</sup>. Regarding the current number of refineries in South Africa, the agency wrote that it had issued “a total of 219 Precious Metal Refining licences as of 28 February 2025”<sup>36</sup>. However, it is impossible to know how many licensed refineries are refining gold given that “the Precious Metals Refinery licence allows all the holders to process or refine either gold and [sic] PGMs [i.e. palladium group metals]”. The names of licensed refineries are not publicly available due to “constraints imposed by the Promotion of Access to Information Act”<sup>37</sup>. Moreover, SADPMR doesn’t have statistics on the volume of metal processed by licensed refineries, “because currently licensees submit manual register of transactions and the SADPMR does not have sufficient human capital to capture such registers”. However, SADPMR is currently working on a new system that will enable it to know “at the click of a button” the total volume of gold processed by South African refineries<sup>38</sup>. Regarding illegal refining, SADPRM responded that it “is not aware of companies illegally refining gold in South Africa” and added: “We

wouldn't know that information, unless if it comes to the attention of law enforcement authorities [who] would then inform us to assist them for purposes of conducting joint inspections together with other relevant regulatory authorities". Accordingly, SADPRM doesn't have estimates of illegal refineries' annual gold refining volumes.

Despite the lack of a central public register for licensed refineries in South Africa, SWISSAID managed to identify and contact some of them, namely Metal Concentrators (MetCon), Zion Precious Metals, SA Precious Metals, Kusasa Refining, Cape Precious Metals, Natural Precious Metals, Precious Metals Tswane, and Gauta Refinery. Only SA Precious Metals and Gauta Refinery replied to SWISSAID's emails. SA Precious Metals answered only some of SWISSAID's questions and only very briefly. It wrote that it sourced both "mined and reprocessed feedstock", exclusively from South Africa<sup>39</sup>. In response to SWISSAID's several follow-up questions, it mainly wrote: "We deal with compliant mining operators"<sup>40</sup>. Gauta Refinery shared the volumes of gold processed from 2022 to 2024 (between 79 kg and 367 kg per year), wrote that it sourced both mined gold from large-scale mines and scrap jewellery from collectors and refineries, exclusively within South Africa<sup>41</sup>. SWISSAID is not able to assess the veracity of the information provided by these two refineries.

In a report on the South African gold sector published in 2023 by the LBMA, one can read that "Within South Africa, more than 80% of refining companies are based in Gauteng" and that "[...] many companies that hold refining licences will not be directly involved in refining secondary material as a core business. Instead, they will hold this licence to allow for processing material into an intermediate product or as part of the refining of material within a broader fabrication objective" (LBMA 2023: 15).

## **GOLD IMPORTS**

### **THE OPACITY OF SOUTH AFRICAN STATISTICS**

Statistics on gold imports into South Africa are opaque. In 2022, the South African Revenue Service (SARS), which is the agency in charge of customs, among others, explained to SWISSAID that this is due to the application of the strict special trade system in South Africa as well as to "problems inherited from the past"<sup>42</sup>. **This**



**opacity is particularly problematic**, as it makes it impossible to know precisely the total quantities of gold imported into South Africa and the countries of origin of this gold.

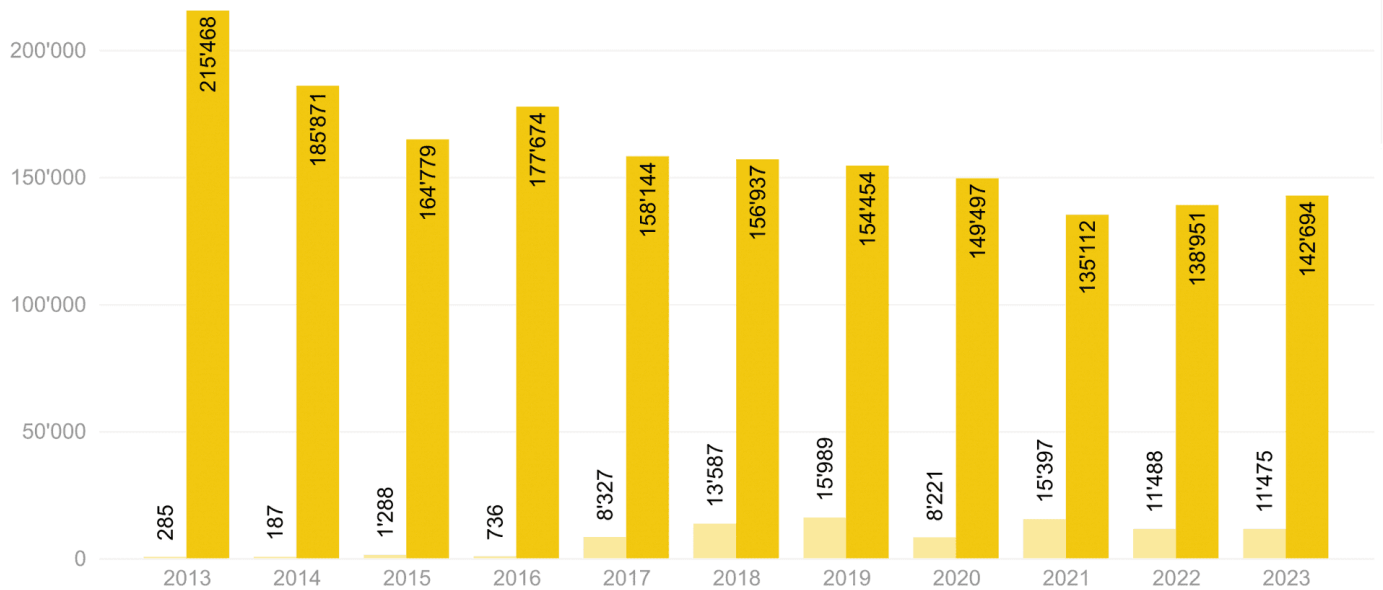
On its website, SARS explained in 2021 that it “follows the guidelines in the United Nations International Merchandise Trade Statistics: Concepts and Definitions 2010 (UN IMTS 2010) manual, when reporting South Africa’s merchandise trade statistics” and that it “currently follow[s] a hybrid<sup>43</sup> special strict system, which means that warehoused goods destined for local consumption are included. Furthermore, goods imported (...) for processing are excluded from trade statistics” (SARS 2021). For imports, this basically means that companies must declare their gold to SARS’s Customs and Excise division and indicate a customs procedure code, e.g. “inward processing” (in this case refining) or “home use”. Given that South Africa applies the strict special trade system, SARS only reports statistics on gold imports for home use, even though gold imports for inward processing account for by far the largest proportion of gold imports into South Africa (see below).

Rand Refinery confirmed this to SWISSAID. Although the company reports all its figures to the relevant authorities, because of the trade system applied in South Africa, the volumes of gold it imports for refining and re-export do not appear in official imports statistics<sup>44</sup>.

SWISSAID tried to obtain figures on gold imports for inward processing from SARS, but the agency refused to provide them, citing South Africa’s strict special trade system<sup>45</sup>.

On its website, SARS stated in 2021 that “efforts [we]re being made to move to a general system to enable easier comparison with other countries[’] trade numbers”. However, at the time of writing (April 2025), South Africa still had not adopted the general trade system.

## Imports of gold into South Africa versus mirror data



Kilogrammes

● UN Comtrade HS 7108, data reported by South Africa

● UN Comtrade HS 7108, data reported by countries of origin (if unavailable, government or corporate statistics)

The graph above shows that, officially, gold imports into South Africa from the rest of the world are much lower than gold exports from all countries to South Africa. This is because, as explained above, SARS's statistics cover only gold imports for "home use" and leave out those for "inward processing". It can thus be concluded from the large discrepancies that **gold imports for "inward processing" account for by far the largest proportion of total gold imports into South Africa.**

While analysing UN Comtrade data on gold imports into South Africa (which was reported by SARS), SWISSAID discovered what appears to be an exception. In recent years, small quantities of gold were imported into South Africa from European or Asian countries, but most significantly also from Namibia. Indeed, between 2017 and 2023, South African authorities reported gold imports from that country ranging from 6 tonnes to 10 tonnes per year. A large part of this gold comes from large-scale mines in Namibia, in particular the Otjikoto mine, and is imported into South Africa for "inward processing", as confirmed by Rand Refinery's disclosures below. This strongly suggests that there is an exception to South Africa's trade reporting system, particularly for member states of the Southern African Customs Union (SACU), to which South Africa and Namibia both belong. However, asked by SWISSAID to

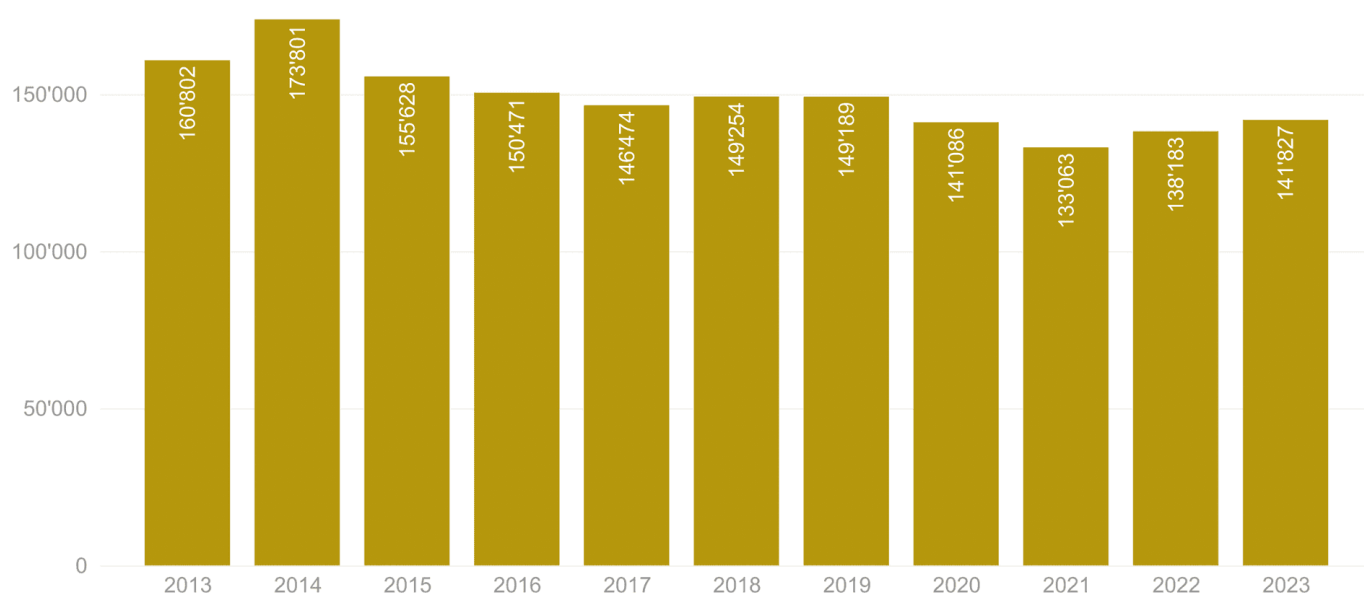
confirm this, SARS surprisingly replied that “there is no special exception for the SACU member states. The strict special trade system is applied consistently and is not country specific. Any gold that is imported for processing or refining is excluded from the reported or published gold numbers irrespective of the country of origin”<sup>46</sup>.

## **ANALYSIS OF GOLD IMPORTS INTO SOUTH AFRICA**

Based on statistics reported by the countries of origin and according to SWISSAID’s calculations, some 139 and 143 tonnes of gold were exported to South Africa in 2022 and 2023, respectively.



## Exports of gold to South Africa according to African countries of origin

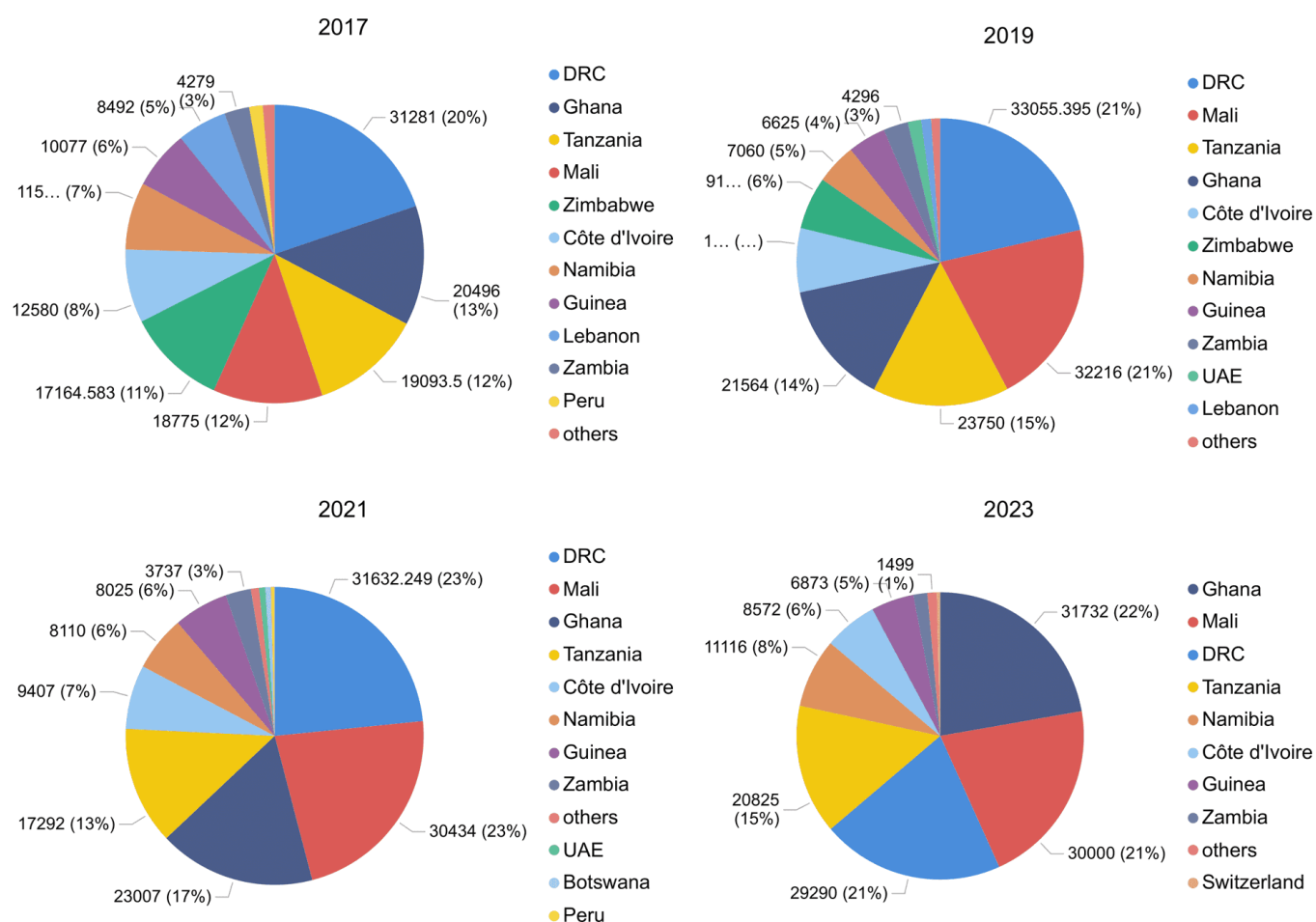


*Kilogrammes*

**Source:** UN Comtrade HS 7108, data reported by African countries of origin and adjusted by SWISSAID (if unavailable, government or corporate statistics)

A comparison of the figures from this bar chart with those from the previous one leads to the conclusion that **the vast majority of the gold exported to South Africa in recent years – indeed, for some years almost all that gold – originated from other African countries.** The proportion was 99.4 per cent in both 2022 and 2023. In other words, exports of gold from non-African countries to South Africa accounted for only 0.6 per cent in those years. This is also apparent in the pie charts below.

## Imports of gold into South Africa (according to mirror data): countries of origin



Kilogrammes

Source: UN Comtrade HS 7108, data reported by countries of origin (if unavailable, government or corporate statistics)

In 2023, the main exporters of gold to South Africa according to UN Comtrade data were, in descending order by weight: Ghana, Mali, the Democratic Republic of Congo (DRC), Tanzania, Namibia and Côte d'Ivoire<sup>47</sup>. Non-African countries taken as a group ranked much lower, with only 867 kg in total. Figures for other recent years are higher, but still much lower than those reported by most African countries of origin. The only considerable shipments of gold from a non-African country to South Africa recorded relatively recently date back to 2020 and concern the United Arab Emirates and Peru<sup>48</sup> (6.5 tonnes and 1.2 tonnes, respectively).

## Imports by South African refineries

### Rand Refinery

Rand Refinery processed only South African gold until the 1990s. With the end of apartheid, the drop in South African gold production and the rise in gold production elsewhere, the company changed its business model and began sourcing from other African countries as well as the rest of the world<sup>49</sup>.

Much of the gold exported to South Africa from other African countries in recent years came from industrial mines.

## Gold sourcing by Rand Refinery: Countries of Origin

Country	LSM gold	Melted recyclable gold	Unprocessed recyclable gold	Industrial by-product gold	Total gold
Australia				135	135
Burkina Faso	402				402
Canada	215				215
DRC	23,267				23,267
Eswatini	31				31
Ghana	25,455				25,455
Guinea	8,727				8,727
Ivory Coast	5,353				5,353
Kenya	299				299
Mali	41,352				41,352
Mozambique	137				137
Namibia	10,507				10,507
South Africa	90,043		282		90,325
Taiwan					
Tanzania	25,740				25,740
USA	23			497	520
Zambia	1,059				1,059
<b>Grand Total</b>	<b>232,610</b>	<b>-</b>	<b>282</b>	<b>632</b>	<b>233,525</b>

*Kilogrammes. Financial year 2024 (1 September 2023 - 31 August 2024)*

**Source:** LBMA Responsible Gold and Silver: Rand Refinery 2024 Compliance Report, p. 15

In its 2024 LBMA compliance report, Rand Refinery disclosed the countries of origin of its gold imports, indicating the weight and the type of gold associated with each country ([Rand Refinery 2024: 15](#)). As the table above shows, the South African refinery sourced gold from 17 countries in 2024. While most of this gold came from South Africa, considerable amounts also came from Mali, Ghana, Tanzania and the DRC. Rand Refinery specified in the report that it had sourced gold from 39 international “depositors” (i.e. suppliers) and that most of them were African LSM mines. The table also shows that Rand Refinery imported very little LSM gold from non-African countries and very little non-LSM gold (consisting entirely in “industrial by-product gold” from non-African countries).

## Rand Refinery's List of World Gold Council Depositing Mines (FY 2024)

Mining group	Mine name	Mine location
Anglogold Ashanti	Geita	Tanzania
Anglogold Ashanti	Iduapriem	Ghana
Anglogold Ashanti	Obuasi	Ghana
Anglogold Ashanti	Siguri	Guinea
Anglogold Ashanti	Yatela	Mali
B2Gold Corp.	Fekola	Mali
B2Gold Corp.	Otjikoto	Namibia
Barrick Gold Corp.	Bulyanhulu	Tanzania
Barrick Gold Corp.	Kibali	DRC
Barrick Gold Corp.	Loulo	Mali
Barrick Gold Corp.	North Mara	Tanzania
Barrick Gold Corp.	Tongon	Ivory Coast
Goldfields Ltd.	South Deep	South Africa
Hummingbird Resources Plc.	Kouroussa	Guinea
Hummingbird Resources Plc.	Yanfolila	Mali
Sibanye Stillwater Ltd.	Beatrix	South Africa
Sibanye Stillwater Ltd.	Driefontein	South Africa
Sibanye Stillwater Ltd.	Ezulwini	South Africa
Sibanye Stillwater Ltd.	Kloof	South Africa
Sibanye Stillwater Ltd.	Rand Uranium	South Africa

**Source:** LBMA Responsible Gold and Silver: Rand Refinery 2024 Compliance Report, p. 16

**Note:** These are mines that deposited at Rand Refinery between September 2023 and August 2024.

The table above, also reproduced from Rand Refinery's 2024 LBMA compliance report ([Rand Refinery 2024: 16](#)), lists the mines operated by mining groups that are members of the World Gold Council from which Rand Refinery sourced gold. Through earlier research, SWISSAID was able to identify business relationships between other African industrial gold mines and Rand Refinery ([SWISSAID 2023: 9–11](#)).

Asked by SWISSAID if it had imported any ASM gold in 2024 or since the beginning of 2025, Rand Refinery replied that it had not. At the same time, the company shared that it is “actively trying to source responsible ASM material” and “in terms of concrete projects, [...] focused closely on responsible ASM in Ghana and Ivory Coast”<sup>50</sup>.

Rand Refinery confirmed to SWISSAID that it reports data to SADPMR, an agency attached to DMRE that is in charge of issuing precious metals import and export

permits, “On various categories such as gold received (local and international), sales (local and international), imported gold and exported gold”<sup>51</sup>.

SWISSAID attempted to obtain a confirmation from SARS that Rand Refinery’s imports of gold for “inward processing” account for a very high percentage (possibly more than 95 per cent) of the total, but the agency declined to answer, arguing that “this information is trader specific and cannot be shared directly, by SARS, without the trader’s approval”<sup>52</sup>.

## **Other refineries**

Rand Refinery is by far the largest importer of gold into South Africa, but it is not the only one. Asked by SWISSAID if there are other companies that import several tonnes of gold into South Africa each year for “inward processing”, SARS replied: “There are other[,] smaller refineries in South Africa”<sup>53</sup>, but referred to MCSA for details.

## **ILLEGAL GOLD IMPORTS**

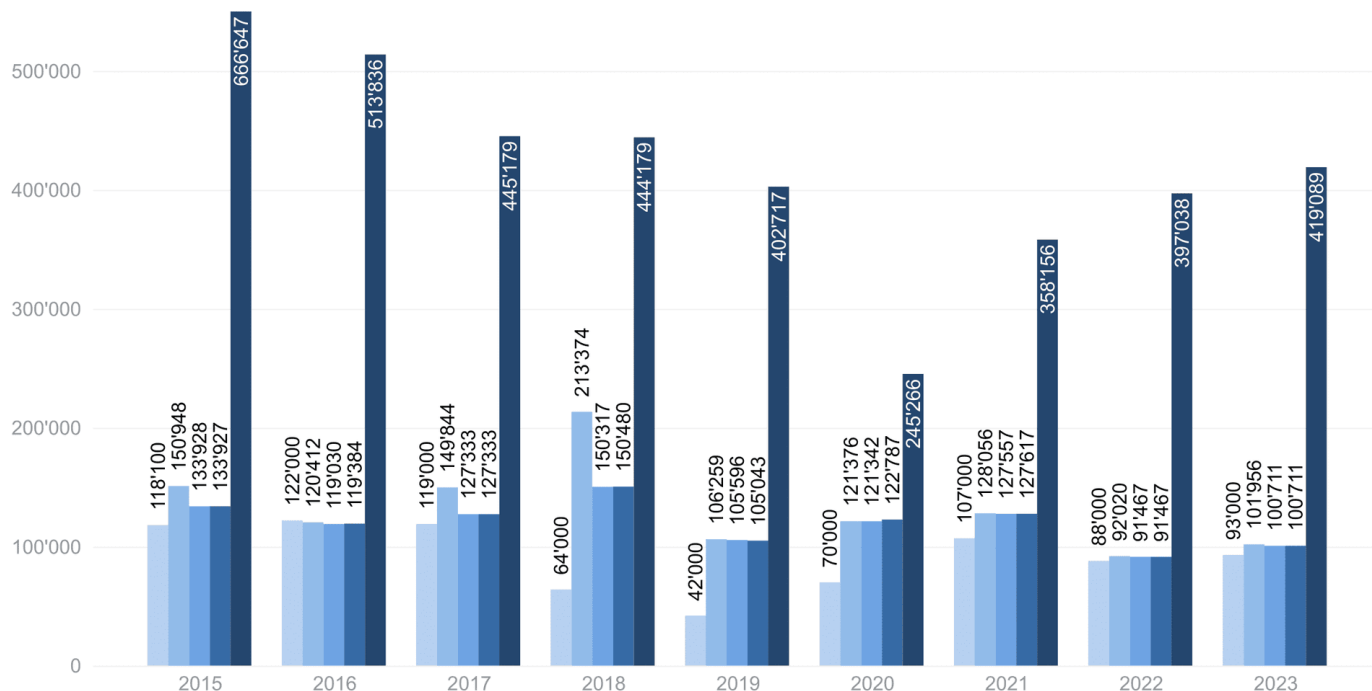
Beyond these official exports of gold from industrial mines, South Africa is also a major destination for smuggled ASM gold from several neighbouring countries, most notably **Zimbabwe**. Various media and NGOs have reported on the traffic in Zimbabwean gold in recent years (**The Sunday Mail 2020**, **News24 2019**, **GI-TOC (UNIDO) 2018**). According to a report by the Global Initiative against Transnational Organized Crime (GI-TOC), Johannesburg acts as a trading and laundering hub for smuggled gold, including from Zimbabwe (**GI-TOC 2021: 29**). The NGO writes that some of this gold is laundered into formal supply chains through local refineries. Unfortunately, as is often the case with smuggling, there are no reliable estimates of the amount of gold involved. SWISSAID calculated that Zimbabwe had lost almost 60 tonnes of gold to smuggling in 2022 (**SWISSAID 2024: 71**). While it is an established fact that a significant portion of this gold is traded through South Africa (see, e.g. **GI-TOC (UNIDO) 2018: 34**), the quantities remain unknown.

Asked by SWISSAID if it had an estimate of the quantity of gold that is illegally imported into South Africa each year or if it found the estimate of 30 tonnes realistic, DMRE declined to answer<sup>54</sup>.

As mentioned above, there is evidence that gold produced abroad and smuggled into South Africa, much like gold produced within the country by the *zama zama*, is laundered through melting by local scrap metal dealers and further processing at local refineries, and thus enters formal supply chains.

## **GOLD EXPORTS**

Exports of gold from South Africa (several sources) versus mirror data (uncorrected)



Kilogrammes

- Department of Mineral Resources and Energy
- Department of Trade, Industry and Competition
- South African Revenue Service
- UN Comtrade HS 7108, data reported by South Africa (2023: hypothetical weight calculated by SWISSAID based on reported trade value)
- UN Comtrade HS 7108, data reported by countries of destination (uncorrected)

As the graph above illustrates, there are significant discrepancies between the gold exports reported by South African authorities and the gold imports from South Africa reported by the authorities of the partner countries. However, **a large part of the gap is artificial**. Firstly, the gold exports reported by South African authorities are not representative, because they cover only the gold mined in South Africa; in other words, they exclude that which is imported into South Africa, refined there, and subsequently re-exported. Secondly, the gold imports reported by the authorities of the partner countries are not representative either, because they include gold bullion originally manufactured in South Africa but that was imported from another country during the year in question.

## COMPARISON OF DATA SOURCES ON SOUTH AFRICAN EXPORTS

There are several sources of data on gold exports from South Africa, but none of them is representative of the actual quantities of gold that are exported from that country.



- The **Department of Mineral Resources and Energy** (DMRE) publishes data on local sales, export sales and total sales (DMRE n.d.). On its website, DMRE used to mention that “Data regarding export sales is obtained primarily from the last link in the minerals value chain prior to export, for example the refinery or export agent” (DMRE n.d., accessed in 2022)<sup>55</sup>. In a response to SWISSAID<sup>56</sup>, DMRE explained that “as the mining industry regulator, it collects and reports only on the activities of license holders. There is also a working arrangement with the Rand Refinery whereby only South African mined gold is reported to the DMRE by Rand Refinery”. The state agency added that “More than 90% of gold reported by the DMRE is refined by the Rand Refinery, the remainder by other refineries where gold is a byproduct and other smaller refineries”. DMRE’s gold export figures are also published by MCSA in its Facts and Figures reports (MCSA 2025).
- The **Department of Trade, Industry and Competition** (DTIC) publishes gold export data by value and weight on its website (DTIC n.d., accessed in April 2025<sup>57</sup>). The DTIC’s figures are the same as those reported by SARB and SARS for the years 2012–2016 and 2019 but different for 2017 and 2018. DTIC does not specify how the data is collected.
- The **South African Revenue Service** (SARS) publishes gold export data on its website (SARS n.d., accessed in April 2025), but this data is not SARS’s own. In an exchange with SWISSAID, the agency explained that it reproduces “aggregated gold sales figures as provided by the South African Reserve Bank (SARB)”<sup>58</sup> (see also SARS 2017: 5). SARS does not differentiate between gold sales and gold exports: “the sales figures provided by SARB (published in trade stats) represent the gold export figures for South Africa”<sup>59</sup>. Questioned about SARB’s methodology for collecting gold export data and asked if gold exporters submit a customs declaration to SARB, SARS answered, “No, all customs declarations of goods by exporters are submitted to SARS not SARB”<sup>60</sup>. This is puzzling. Since SARS receives exporters’ declarations, why does it publish “sales figures” from another institution (SARB) instead of its own export data?
- The **South African Reserve Bank** (SARB) publishes gold export data by value but not weight. In its Quarterly Bulletin, the balance of payments annual statistics contain a line entitled “net gold exports” (SARB 2025). SARB does not

specify how the data is collected. The figures are the same as those reported by SARS, so SWISSAID did not include them in the graph above.

- The **United Nations Comtrade Database** (UN Comtrade). SARS is the agency that reports South African gold export data to the United Nations Statistics Division, which manages UN Comtrade (see [UN Comtrade n.d.](#), accessed in April 2025). The agency confirmed to SWISSAID that the data reported covers only gold extracted in South Africa and excludes gold that has been extracted in a foreign country and processed/refined in South Africa<sup>61</sup>. It also explained that scrap or reprocessed (“recycled”) gold that enters the market in South Africa is not included. While it confirmed that the data reported to UN Comtrade is only “South African gold sales figures”<sup>62</sup>, it seems obvious that this data corresponds to SARB’s sales figures.

In sum, three of the five sources of official data on gold exports from South Africa report the same figures: SARS, SARB and UN Comtrade. This data originally comes from SARB. As can be seen in the graph above, DTIC’s figures are very close to SARB’s – indeed, for some years, reported trade values are identical – except for 2015, 2017 and 2018. SWISSAID has not found any explanation for the discrepancies. As for DMRE’s figures, they are significantly lower than the others between 2018 and 2021. While comparing DMRE’s figures on exports sales and local sales, SWISSAID discovered that these figures are correlated, and that this correlation explains the gap with the other sources.

**Local sales of gold in South Africa: Rand Refinery data versus government data**



Export sales are to customers located outside of South Africa’s territory, whereas local sales are to customers located within that territory<sup>63</sup>. As the graph above illustrates, DMRE local sales were particularly high in 2018 and 2019, the two years where DMRE exports were particularly low (even lower than local sales). Rand Refinery’s local sales<sup>64</sup> being very close to DMRE’s, SWISSAID asked the refinery why it had sold a significant portion of its gold locally instead of exporting it. The answer is that sales of Krugerrands, the official South African gold coin, through Prestige Bullion, a joint venture between Rand Refinery and the South African Mint, rose in those years<sup>65</sup>.

Gold can be registered as sold locally and yet be exported, which is problematic. As Statistics South Africa explained to SWISSAID, “Not all local sales is [sic] consumed locally”. Indeed, “Some of the locally bought minerals end up being exported”<sup>66</sup>. DMRE confirmed this to SWISSAID: “Any gold that was reported as local sales and was later sold by agents or third parties to buyers outside the borders of South Africa, will not be considered, as the sale would have been reported locally with the first sale”<sup>67</sup>. Because DMRE’s figures on export sales do not include all effective exports of

South African mined gold, they will necessarily differ from SARS's figures – and should really be approached with caution<sup>68</sup>.

To sum up, **none of the five sources of official data on South African gold exports reflects the reality**. And one of them, DMRE, does not even include all exports of South African mined gold.

## **THE ISSUES WITH GOLD EXPORTS REPORTED BY SOUTH AFRICA**

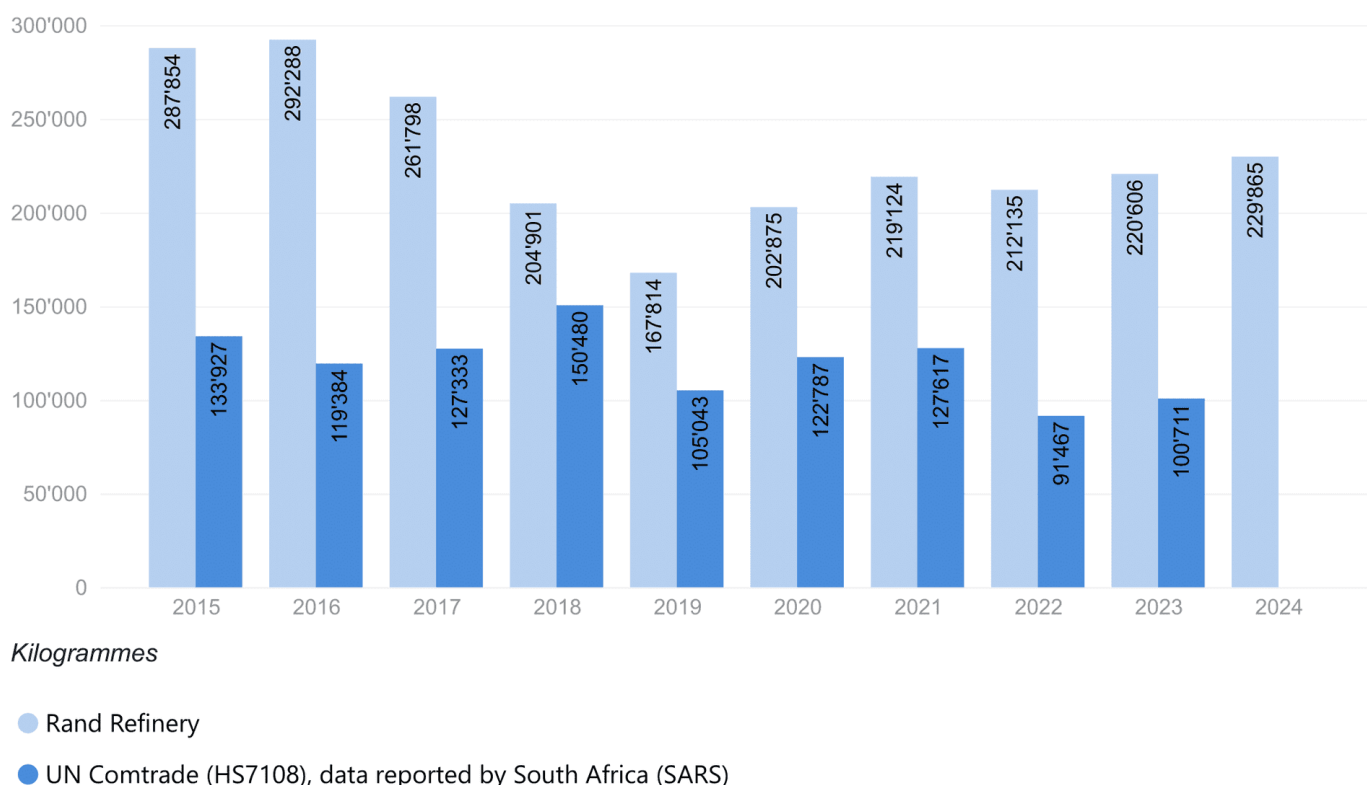
There are two main issues with official data on South African gold exports. First, it is incomplete: it only covers gold mined within the country, so gold that is imported into South Africa, refined there, and subsequently re-exported remains unaccounted for. Official figures are therefore not representative of the actual quantities of yellow metal that leave the country each year. Second, this data contains no indication on the countries of destination of gold exports, unless these countries are members of the Southern African Customs Union (SACU), like South Africa.

An additional issue with official data is that it leaves open the question of whether some of the gold from South African ASM (which is considered illegal) and some of the gold smuggled into South Africa from neighbouring countries is declared for export.

### **Incomplete export data: the hidden transit gold trade**

As mentioned earlier, the five publicly available data sources on South African gold exports only cover gold mined in South Africa. SWISSAID therefore contacted SARS and asked the agency to share figures on the total volumes of gold exported from South Africa, including gold originating from foreign countries, processed in South Africa and re-exported. SARS refused to do so<sup>69</sup>, so SWISSAID turned to Rand Refinery, South Africa's largest gold exporter, which accepted to share its data.

**Exports of gold from South Africa: Rand Refinery data versus government data**



Unlike those emanating from state agencies, Rand Refinery’s figures on (total) gold exports give a realistic image of the actual quantities of yellow metal that leave South Africa each year. For some years (e.g. 2017, 2022, 2023), the company’s figures are more than twice higher than those SARS reported to UN Comtrade, which means that the quantity of gold imported, refined and re-exported by Rand Refinery was higher than that of gold mined in South Africa and exported.

The information Rand Refinery shared with SWISSAID confirms that the vast majority of the gold produced in South Africa or imported into that country is then exported (see “Overview” section above): Rand Refinery refines almost all the gold legally imported into South Africa, refines 98 per cent of the industrial gold mined in South Africa<sup>70</sup>, and exports 98–99 per cent (figures from 2024–2025) of the gold it refines<sup>71</sup>. Rand Refinery confirmed that, even though it reports all its figures to the relevant authorities, the gold it imports for refining and re-export does not appear in official statistics on gold exports from South Africa, due to the country’s strict special trade system<sup>72</sup>.

Between 2018 and 2024, Rand Refinery refined between 206 and 247.6 tonnes of fine gold each (fiscal) year. The average purity of the gold varying between 74 and 83 per cent<sup>73</sup>, this represents between 266 and 302 tonnes of doré (raw gold). Almost all gold refined by Rand Refinery is exported: 98 per cent in (FY) 2024 or 99 per cent in 2025 (YTD)<sup>74</sup>. This ration has been lower in the past (66 tonnes and 76 tonnes were sold locally in 2018 and 2019, respectively, as mentioned above).

Gold exporters must specify if the gold originates from a mine in South Africa or has been imported for inward processing. Accordingly, “[SARS] can determine if the exported gold is local, or it originated from a foreign country”<sup>75</sup>. Exporters are also required to “declare the country of origin for all transactions including outright exports of free circulation goods” (customs code H6000, the code used for gold exports in South Africa)<sup>76</sup>.

Asked by SWISSAID if it needed to have separate refining lines to be able to declare exports of gold coming from South Africa separately from those of gold coming from foreign countries, Rand Refinery replied: “We do not have separate refining lines, we apply the first-in-first-out principle in our refining process. However, in compliance with the specific permit requirements, every ounce of gold imported is exported within the time period allowed”<sup>77</sup>. This means that all gold imported by Rand Refinery is exported and that the gold sold locally, particularly for Krugerrand fabrication, comes from South African mines. This also means that importers of gold from South Africa, particularly those buying from Rand Refinery, cannot know if the gold in question has been sourced in South Africa or in a foreign country.

On its website, SARS stated in 2021 that “efforts [we]re being made to move to a general system to enable easier comparison with other countries['] trade numbers” (SARS 2021). Asked by SWISSAID four years later when the change would happen, SARS replied that “this is work in progress. We do not have a specific date of completion or implementation”<sup>78</sup>.

### **Opacity regarding the countries of destination**

Unlike the countries of origin of gold imports into South Africa for “home use”, the countries of destination of gold exports from South Africa are not disclosed in official statistics. SARS explained to SWISSAID that this is due to “legacy issues” and



has nothing to do with the special trade system, which does not prevent South African authorities from disclosing the countries of destination<sup>79</sup>. However, there is an exception: Botswana, Lesotho, Namibia and Eswatini all appear in gold export statistics reported by SARS to UN Comtrade (see [UN Comtrade n.d.](#)). According to SARS, this is because these countries are members of the Southern African Customs Union (SACU), like South Africa<sup>80</sup>. In SARS's database, "Country code ZN is described as 'Origin of Goods is Unknown'. For purposes of better understanding, this has been renamed to 'Gold, Petroleum and Other' as over 95% of this bubble is made up of gold. Gold, due to legacy data rules, is treated as a country". In the UN Comtrade database, destination countries are reported as "Areas, nes" unless they are members of SACU. While gold export figures reported by SARS to UN Comtrade come from SARB sales figures and do not contain any countries of destination, as explained by SARS, it is difficult to understand why SACU countries of destination are available.

SARS refused to provide SWISSAID with data on gold exports disaggregated by country of destination. The agency argued that "data is available but due to legacy issues data is not publicly accessible"<sup>81</sup>.

In a policy document on trade statistics, SARS wrote that South Africa publishes all "exports per country of destination" but there is an exception for gold and it is "not possible to determine where the [gold] exports are going" ([SARS 2017: 4](#)). Asked when this exception appeared and why, SARS replied, "Not sure but before 1994. Hence one of the legacy decision[s] made by the previous government"<sup>82</sup> and the "exception to gold is that we don't publish our exports gold [read gold exports] but only gold sales figures, hence country unknown". Asked to explain what exactly is this "legacy decision", SARS explained that it is the decision "to use the gold export sales figures from SARB". SARS was unable to explain which legislation or rule this decision refers to.

SARS's explanation of the origin of the opacity regarding the countries of destination for gold exports from South Africa is rather vague and unsatisfactory. SWISSAID suspects that this opacity dates back to the apartheid regime. During that period, South Africa faced international sanctions, so state authorities likely found it advantageous to hide the destination of gold exports. By publishing gold sales figures (which omit any mention of the countries of destination) instead of gold

exports figures, they were able to achieve this. However, apartheid has ended long ago, so South African authorities have had more than enough time to change their reporting practices. The fact that they have not – and that they appear relatively indifferent to this issue – is preoccupying. It may even be that the current practice violates international standards on trade statistics reporting. This would need to be assessed. In any case, **SWISSAID strongly encourages South African authorities to immediately adopt new rules and make information on the countries of destination of gold exports publicly accessible.**

On its website, SARS indicated in 2021 that the “legacy data rules” on gold exports would be abandoned as part of the move to the general trade system ([SARS 2021](#)). However, questioned about a precise date when this change would occur, SARS replied, “This is work in progress. We do not have a specific date of completion or implementation”<sup>83</sup>.

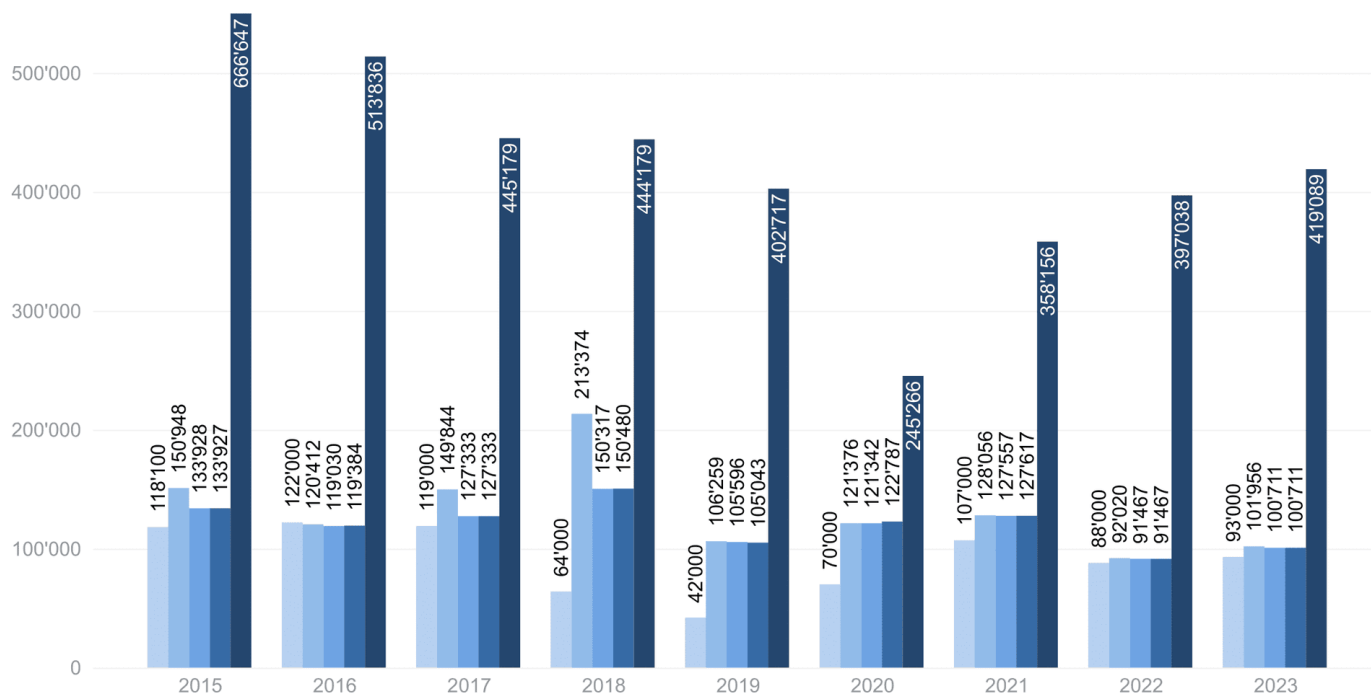
So long as South African authorities keep the same, outdated rules on the reporting of gold exports, South African players will face the suspicion that yellow metal is exported illegally out of South Africa on a massive scale. Some may try to set the record straight, as MCSA has in commissioning economic consultancy Eunomix to debunk the conclusions of a study on trade mispricing conducted by researchers at the United Nations Trade and Development (UNCTAD) (see [UNCTAD 2016a](#), [Eunomix 2016](#), [UNCTAD 2016b](#), [Eunomix 2017](#), see also [Grynberg, Nyambe and Singogo 2019](#)), but none of this would be necessary if the South African authorities were transparent enough in their reporting on gold exports.

Being more transparent would also signal to the international community that South African authorities are taking the problems posed by the gold sector in South Africa seriously. It would be timely to act now, because the Financial Action Task Force (FATF) has put the country on its grey list ([National Treasury 2025](#)), including because of a weak state monitoring of the precious metals sector, which raises the risk of money laundering ([Oak Group 2023](#)).

## **THE ISSUE WITH GOLD IMPORTS REPORTED BY THE PARTNERS COUNTRIES**



**Exports of gold from South Africa (several sources) versus mirror data (uncorrected)**



Kilogrammes

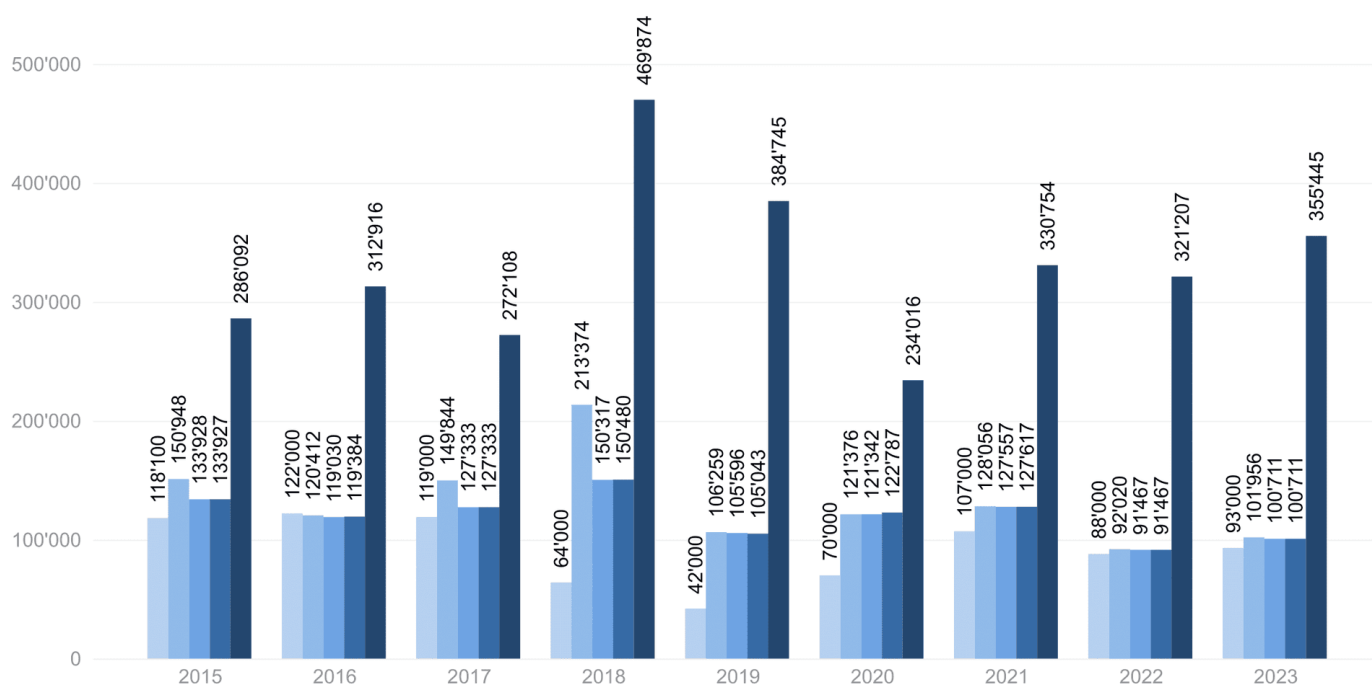
- Department of Mineral Resources and Energy
- Department of Trade, Industry and Competition
- South African Revenue Service
- UN Comtrade HS 7108, data reported by South Africa (2023: hypothetical weight calculated by SWISSAID based on reported trade value)
- UN Comtrade HS 7108, data reported by countries of destination (uncorrected)

Between 2015 and 2023, the imports of gold from South Africa reported by partner countries have consistently exceeded 240 tonnes annually. In 2015, they even peaked at over 660 tonnes. Through a detailed analysing of these statistics, SWISSAID discovered that most of this gold does not come directly from South Africa. The example of China, the main importer of gold declared as coming from South Africa is particularly telling. Over this period, China was clearly the main importer of gold declared as coming from South Africa. The Chinese authorities reported gold imports from South Africa of 377 tonnes in 2015, but detailed analysis shows that 314 tonnes was shipped from Hong Kong, 62 tonnes from the UK and nothing directly from South Africa. The situation is similar regarding 2016<sup>84</sup>.

This is due partly to the internationally applicable rules on the declaration of the country of origin of gold imports and partly to the presence of an LBMA-certified refinery in South Africa. The United Nations Statistics Division (UNSD) states that importers are required to declare the country of origin and the country of dispatch of

their gold (UNSD 2012). The country of origin is the country where the gold was mined or underwent transformation (i.e. was melted or refined). The country of dispatch is the country from which gold was shipped abroad. Bullion manufactured by the LBMA-certified Rand Refinery in South Africa is recognised as monetary gold and stored, exported and re-exported between the world's major trading centres and gold-importing countries. So long as it has not undergone any processing, it is always declared on import as originating from South Africa. Only by looking at the country of dispatch can one determine if it was shipped directly from South Africa or not. The problem is that the authorities of gold-importing countries do not report all their data on countries of dispatch, and some do so only partially. This creates artificial discrepancies, distorts the picture and complicates the analysis.

**Exports of gold from South Africa (several sources) versus mirror data (partially corrected)**



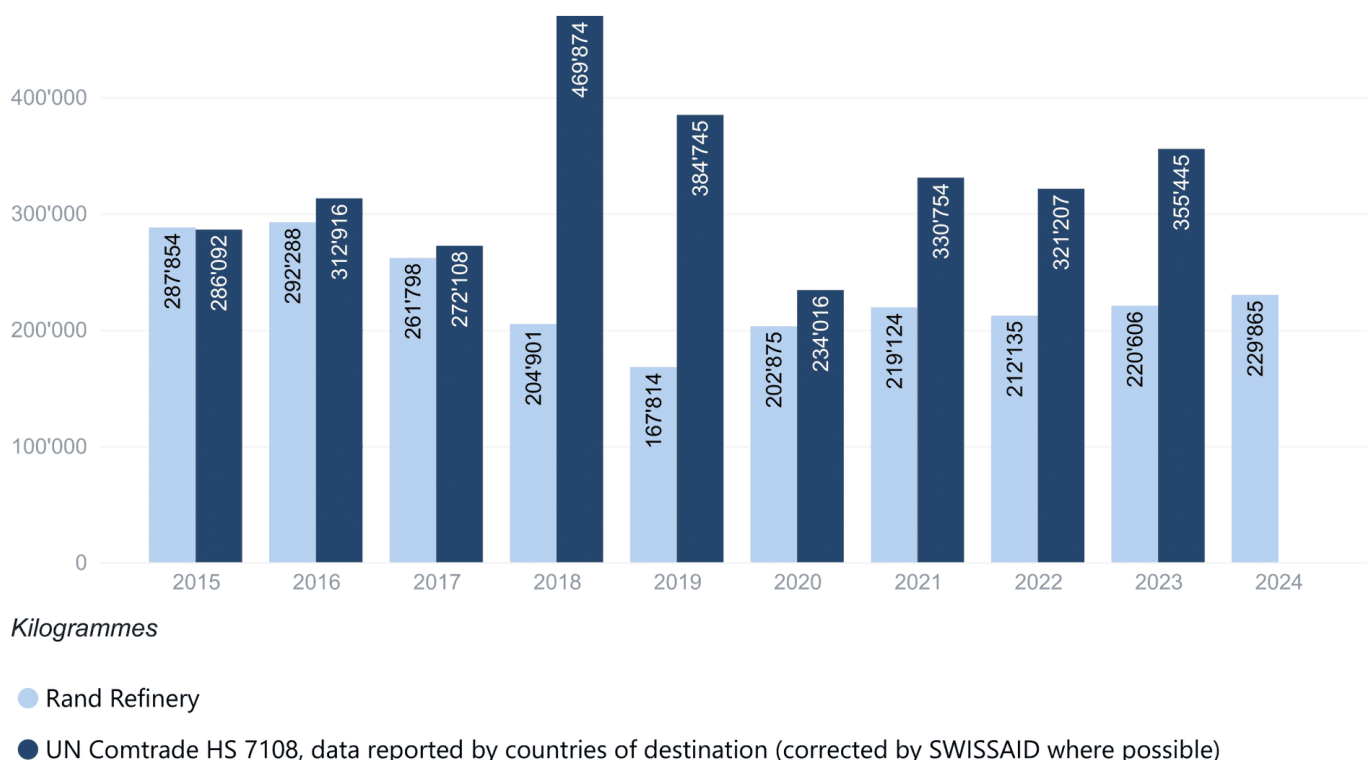
Kilogrammes

- Department of Mineral Resources and Energy
- Department of Trade, Industry and Competition
- South African Revenue Service
- UN Comtrade HS 7108, data reported by South Africa (2023: hypothetical weight calculated by SWISSAID based on reported trade value)
- UN Comtrade HS 7108, data reported by countries of destination (partially corrected)

Where possible, SWISSAID has corrected mirror data on exports of gold from South Africa to take into account only shipments that actually left South Africa in the year indicated above. Because of limited data availability, however, this could only be done for the following destination countries and years: Canada (2015-2023), China (2015-2017), Switzerland (2014-2023), Turkey (2014-2023) and the United Kingdom (2017, 2019-2023).

In the graph above, figures reported by the partner countries (right-hand, dark blue columns) have been corrected as much as possible, to factor out South African bullion imported via a third country. A comparison of this version of the graph with the previous, uncorrected one reveals much lower imports over the years 2015–2017. This is mainly because SWISSAID only managed to correct gold imports into China from South Africa until 2017.

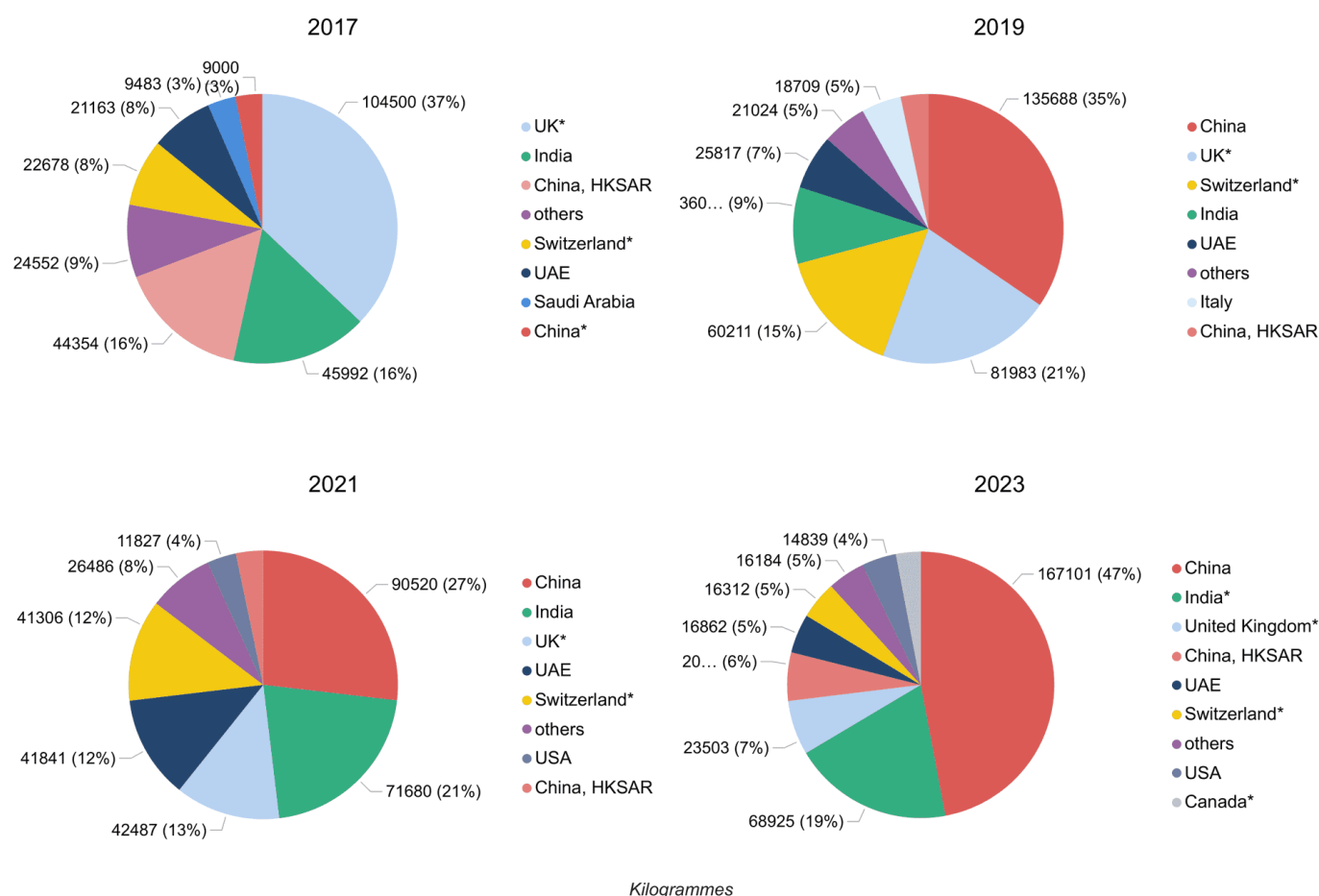
**Exports of gold from South Africa (only by Rand Refinery) versus mirror data**



Still focusing on 2015–2017, the years for which the Chinese data could be corrected, one can see in the graph above that partner countries’ imports are almost at the same level as gold exports declared by Rand Refinery. This shows that the company supplied a vast majority of the gold from South Africa declared on import in the partner countries<sup>85</sup>.

## **ANALYSIS OF GOLD IMPORTS FROM SOUTH AFRICA REPORTED BY THE PARTNER COUNTRIES**

## Exports of gold from South Africa (according to mirror data): countries of destination



Source: UN Comtrade HS 7108, data reported by countries of destination. Asterisks stand for country of dispatch has been verified as being South Africa.

Chinese authorities reported very high gold imports from South Africa in recent years. In the graphs above, China ranks first in the list of countries of destination for South African gold between 2019 and 2023. However, as mentioned above, only a portion of the gold reported by Chinese authorities as originating from South Africa was actually shipped directly from that country in those years. This is because Chinese customs consider every gold bar produced by Rand Refinery as originating from South Africa, regardless of the country of dispatch. The contrast with 2017 is striking. SWISSAID corrected the Chinese figure for that year. As a result, China appears last in the list.

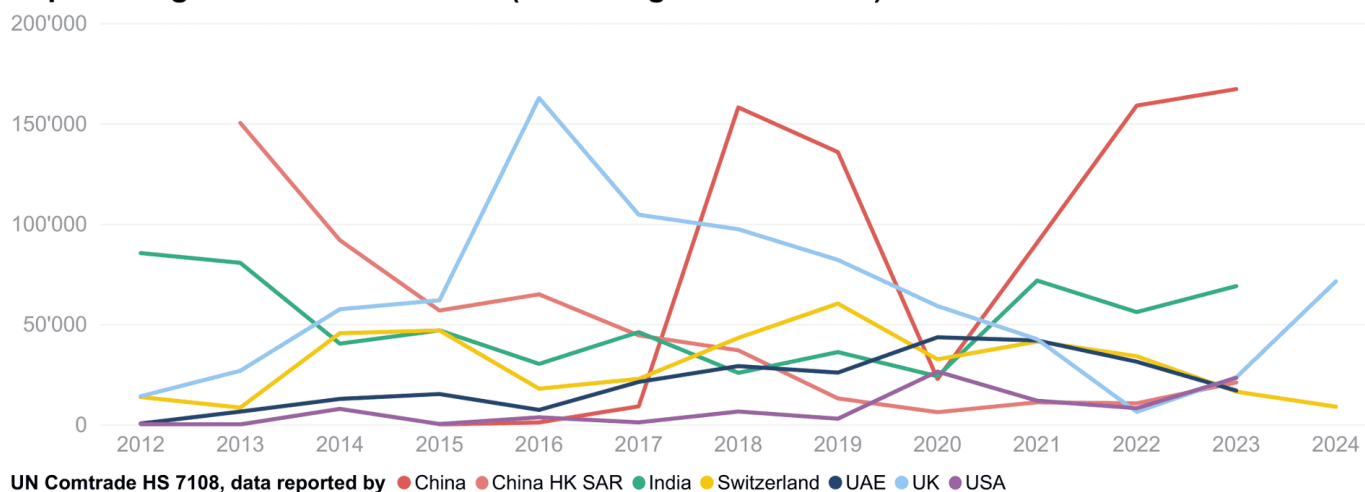
It is worth noting that all the world's major gold markets are represented in the graphs above: China, India, Switzerland, the United Kingdom (UK), the United Arab Emirates (UAE), and the United States of America (USA). This demonstrates that South Africa still plays a key role as a supplier of gold to the world.

## Bilateral comparison using Rand Refinery data

Given the opacity and unreliability of official data on gold exports from South Africa, SWISSAID asked Rand Refinery to share the countries of destination of its gold exports (for 2020–2024 and even 2016–2024 regarding Switzerland and the UAE). The refinery kindly obliged and the data it communicated to SWISSAID gives what is arguably the most realistic picture available of the countries of destination for South African gold (from the South African perspective).

Below, SWISSAID compared Rand Refinery's data with the imports of gold from South Africa reported by each of the main partner countries. The relevance of such comparisons depends largely on whether the partner country has disclosed the countries of dispatch of its gold imports from South Africa or not. For the ones that have, the comparison makes it possible to determine whether all the gold imported directly from South Africa came from Rand Refinery or not. For the others, drawing that kind of conclusion is tricky, but some insights can nevertheless be gained from the comparison.

## Exports of gold from South Africa (according to mirror data): main countries of destination

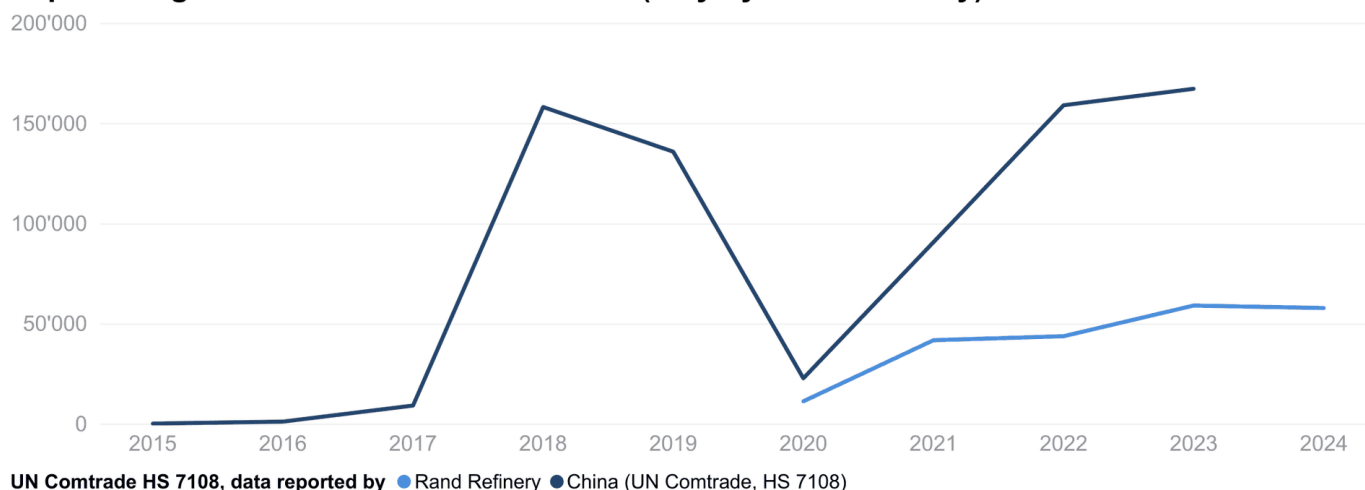


Kilogrammes

Where possible, SWISSAID has corrected mirror data on exports of gold from South Africa to take into account only shipments that actually left South Africa in the year indicated above. Because of limited data availability, however, this could only be done for the following destination countries and years: China (2015-2017), India (2023), Switzerland (2012-2024) and the United Kingdom (2017, 2019-2024).



## Exports of gold from South Africa to China (only by Rand Refinery) vs mirror data

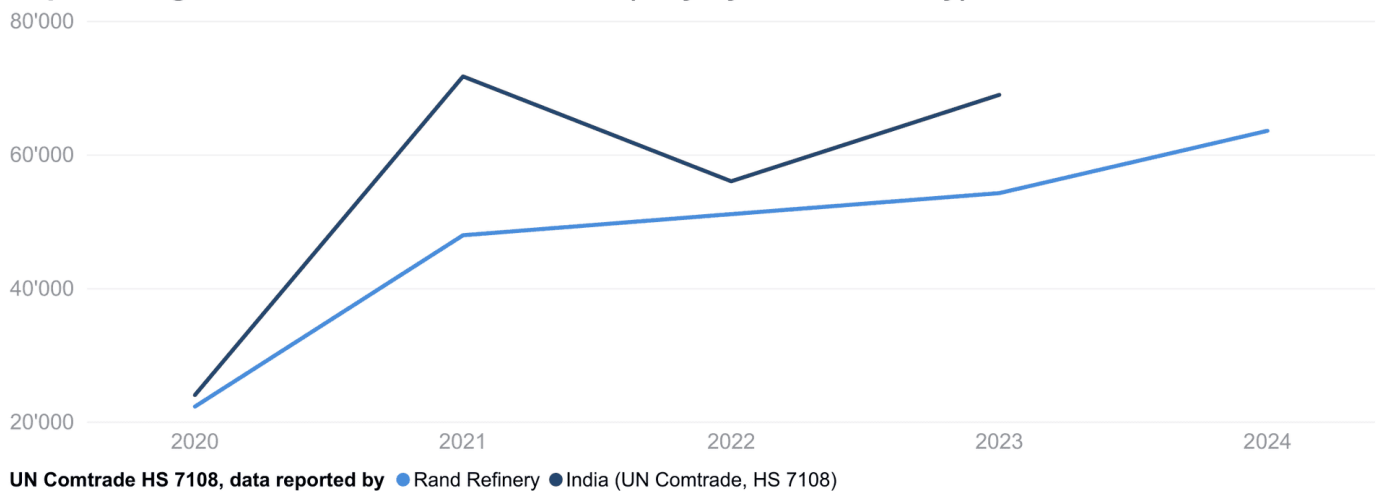


Kilogrammes

Where possible, SWISSAID has corrected mirror data on exports of gold from South Africa to China to take into account only shipments that actually left South Africa in the year indicated above. Due to limited data availability, however, this could only be done for the following years: 2015-2017.

Chinese data fluctuates a lot over the period considered here. The low level in 2015–2017 is due to corrected figures, as explained above<sup>86</sup>. The drop in 2020 may have been triggered by the COVID-19 pandemic and its repercussions on supply chains. The rise from 2021 onwards shows that China continues to source vast quantities of South African gold, most likely consisting in bullion fabricated by Rand Refinery. And the comparison with that refinery’s figures reveals that a considerable proportion of this gold (approximately 50 tonnes per year between 2021 and 2024) is now shipped directly from South Africa into China.

### Exports of gold from South Africa to India (only by Rand Refinery) vs mirror data



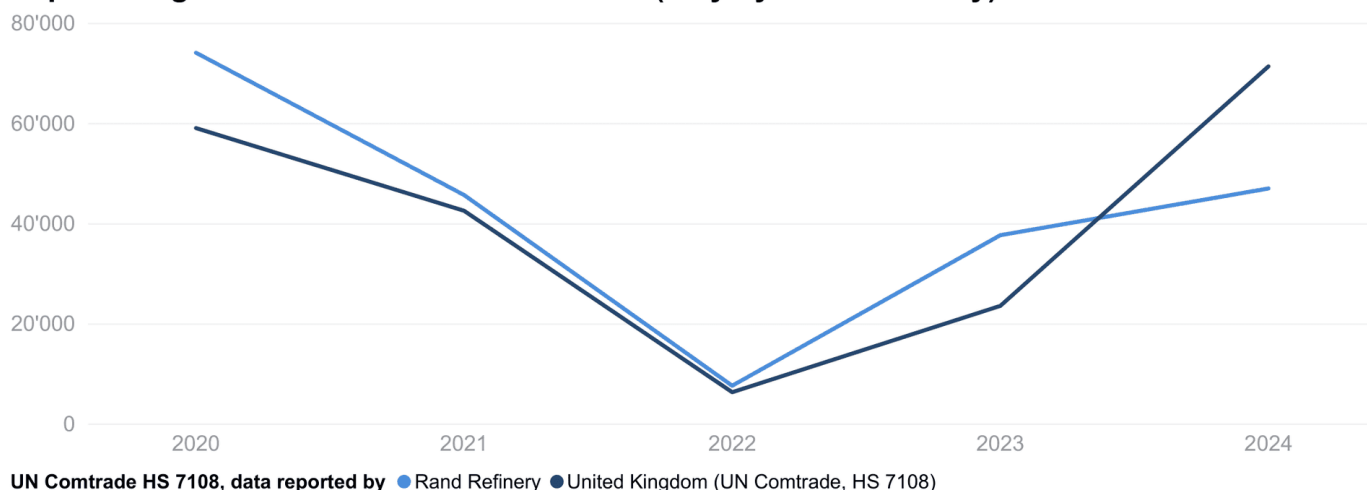
*Kilogrammes*

Where possible, SWISSAID has corrected mirror data on exports of gold from South Africa to India to take into account only shipments that actually left South Africa in the year indicated above. Due to limited data availability, however, this could only be done for the following years: 2023.

The Indian authorities only reported the countries of dispatch of gold imports into India to UN Comtrade for 2023. That year, 68.9 tonnes of gold was imported directly from South Africa. Rand Refinery's data indicates that it supplied 54.2 tonnes. The gap (14.7 tonnes) must have come from other suppliers. Since Rand Refinery is responsible for the overwhelming majority of legal exports of mined gold from South Africa, these imports must have consisted largely in other types of gold. However, ASM gold is considered illegal in South Africa and the size of the market for so-called recycled gold in that country is deemed to be limited (see below). Thus, the origin of these 14.7 tonnes of gold would need to be investigated.

The drop in Indian data in 2020 (which does not appear as such in the graph above because the graph omits previous years) may have been due to COVID-19.

## Exports of gold from South Africa to the UK (only by Rand Refinery) vs mirror data

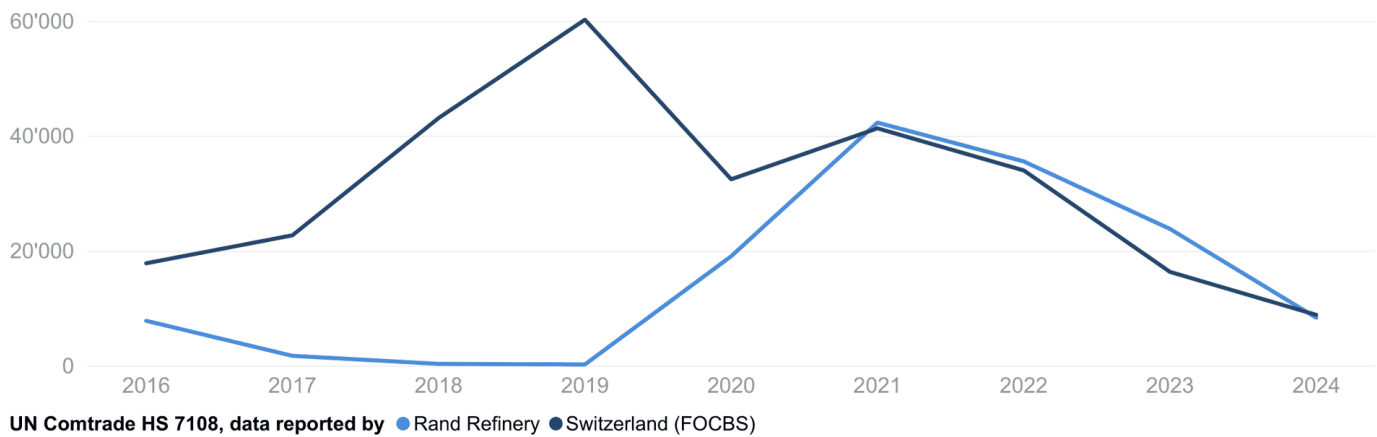


*Kilogrammes*

Where possible, SWISSAID has corrected mirror data on exports of gold from South Africa to the United Kingdom to take into account only shipments that actually left South Africa in the year indicated above. Because of limited data availability, however, this could only be done for the following years: 2020-2024.

British data on gold imports from South Africa (which SWISSAID was able to correct<sup>87</sup>) follows more or less the same trend as Rand Refinery data. The discrepancies would need to be explained, but some are small (2021, 2022) and most are not particularly preoccupying (Rand Refinery's figures are higher). If confirmed, the discrepancy in 2024, where British data exceeds Rand Refinery data by about 24.4 tonnes, would be surprising and would need to be investigated. It is not clear to SWISSAID what type of market players might import almost 25 tonnes on non-LBMA gold into the UK.

## Exports of gold from South Africa to Switzerland (only by Rand Refinery) vs mirror data



*Kilogrammes*

SWISSAID has corrected mirror data on exports of gold from South Africa to Switzerland to take into account only shipments that actually left South Africa in the year indicated above. Thanks to detailed data from FOCBS this could be done for all years.

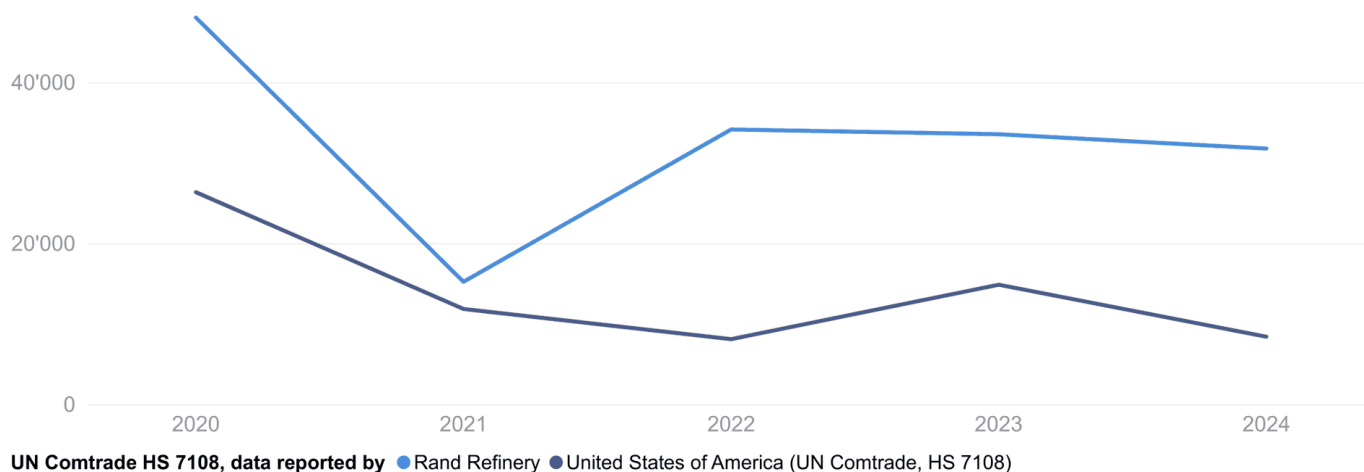
As the graph above illustrates, a significant change took place between 2019 and 2021. The analysis of available data and information indicates that this change concerns both the types of actors that imported gold into Switzerland from South Africa and the type of gold involved.

For the years up to and including 2020, Swiss gold imports from South Africa (which SWISSAID was able to correct<sup>88</sup>) and Rand Refinery gold exports to Switzerland follow almost opposite trends. We know from LBMA country of origin data (LBMA n.d., accessed in April 2025, see also table below) that Swiss LBMA-certified refineries imported huge quantities of “recycled” gold from South Africa<sup>89</sup>. This gold was not supplied by Rand Refinery, since, as mentioned earlier, the South African company sources very little material of that type. The quantities involved (36.1 tonnes in 2018 and 49.4 tonnes in 2019) are significantly higher than available estimates of the size of the legitimate scrap gold market in South Africa (see below), which raises suspicions. It is plausible that gold labelled as “recycled” and processed by these LBMA refineries may in fact have contained freshly mined, “illegal” ASM gold.

For the years since and including 2021, Swiss gold imports from South Africa and Rand Refinery gold exports follow the same trend. This suggests that imports of yellow metal into Switzerland from South Africa were supplied exclusively by the South African LBMA-certified refinery (and that it was therefore mainly freshly

mined LSM gold). LBMA data shows that only a small portion of this gold was imported by Swiss LBMA-certified refineries. It can therefore be concluded that other types of actors, particularly banks and trading companies, played a more prominent role. In 2022, Rand Refinery confirmed to SWISSAID that its gold exports to Switzerland were destined for those types of actors: “We trade with dealers and banks”<sup>90</sup>.

### Exports of gold from South Africa to the USA (only by Rand Refinery) vs mirror data

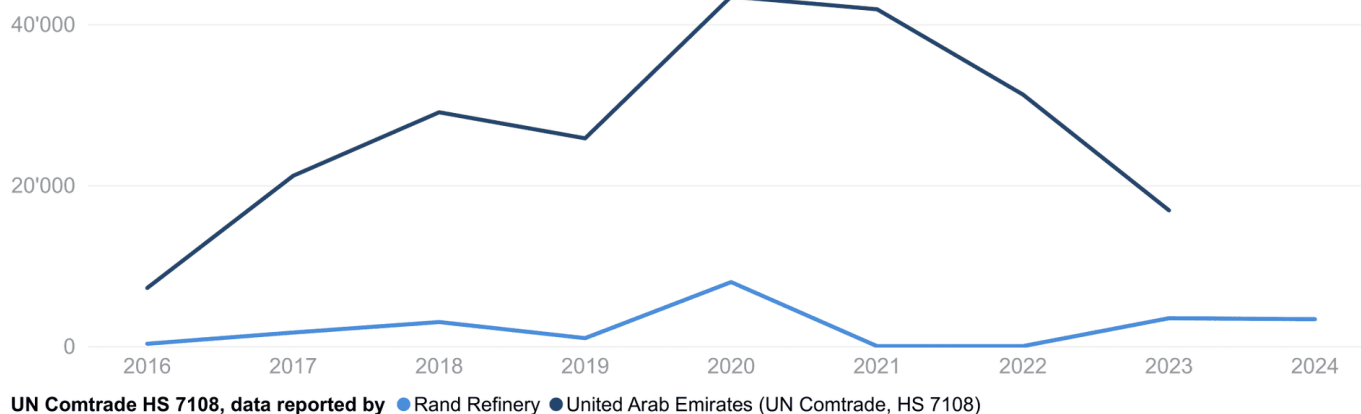


*Kilogrammes*

Due to missing data details, SWISSAID has not been able to correct mirror data on exports of gold from South Africa to the United States of America to take into account only shipments that actually left South Africa in the year indicated above.

The large discrepancies between American statistics on gold imports from South Africa (which SWISSAID was not able to correct) and Rand Refinery's figures on gold exports to the USA raise questions. SWISSAID has not investigated them, because they cannot possibly be interpreted as a red flag for illicit gold flows from South Africa (Rand Refinery figures are consistently higher than the others). But one hypothesis can be mentioned: Rand Refinery declared the USA as the country of destination of its gold exports, but a good portion of that gold has been stored in vaults located in free zones, and therefore not declared for import in the USA and invisible in American official statistics.

## Exports of gold from South Africa to the UAE (only by Rand Refinery) vs mirror data



Kilogrammes

Due to missing data details, SWISSAID has not been able to correct mirror data on exports of gold from South Africa to the United Arab Emirates to take into account only shipments that actually left South Africa in the year indicated above.

As the graph above illustrates, discrepancies between Emirati statistics on gold imports from South Africa (which SWISSAID was not able to correct) and Rand Refinery's declared gold exports to the UAE are huge. It should be stressed that these discrepancies cannot be interpreted as a red flag for gold smuggling.

The South African LBMA-certified refinery manifestly only played a minor role in this bilateral trade<sup>91</sup>, which raises the question of who the exporters were. It is not clear either what type of gold the Emirati importers sourced from South Africa. A player in the Emirati gold sector interviewed by SWISSAID in 2022 put forward that most of it is ASM gold either illegally extracted in South Africa by the *zama zama* or smuggled into South Africa from a neighbouring country, notably Zimbabwe<sup>92</sup>.

It is plausible that the bulk of gold exports into the UAE from South Africa have been declared for export. In a report published in 2019, researcher Alan Martin writes, "These exports probably left through the legal system – processed at small refineries in Gauteng and given legal export papers by [SADPMR]" (Enact 2019a: 7, see also Enact 2019b: 11). On the other hand, the fact that syndicates control *zama zama* gold marketing suggests that some of this gold may have been smuggled out of South Africa to Dubai. In any case, there is a **strong suspicion that this gold was not sourced responsibly by the Emirati importers.**



	Refineries in Switzerland			Refineries in Europe and Africa			Refineries in the Americas			Refineries in China		
	LSM	ASM	recycled and others	LSM	ASM	recycled and others	LSM	ASM	recycled	LSM	ASM	recycled and others
2018			36 127	101 818		8 611	2 780					7 208
2019			49 417	94 465		10 327	2 116					5 052
2020	1 798		8 641	105 674		4 639	2 116					1 120
2021	2 828		198	90 396		5 882						
2022	2 355		1 672	94 733		4 974						14

	Refineries in Germany			Refineries in Japan			Refineries in Russia			Refineries in Asia and Australia		
	LSM	ASM	recycled	LSM	ASM	recycled	LSM	ASM	recycled	LSM	ASM	recycled and others
2018	257											
2019				22			20		10			
2020							5		2	335		38
2021												5 124
2022	208											2 004

Country of Origin Data published by the LBMA (LBMA n.d., accessed in January 2025) has already been analysed above regarding LSM gold from South Africa (see Production section). But another observation can be made based on that dataset, namely that LBMA-certified refineries have imported significant quantities of so-called recycled gold from South Africa between 2018 and 2022 (see table above)<sup>93</sup>. The totals for 2018 and 2019 are, respectively, 51.9 tonnes and 64.8 tonnes. Refineries located in Switzerland were responsible for most of these imports (36.1 tonnes in 2018 and 49.4 tonnes in 2019). Totals for 2021 and 2022 are not as impressive (11.2 tonnes and 8.6 tonnes, respectively<sup>94</sup>), but imports of secondary material (scrap/unprocessed/reprocessed/melted gold) from South Africa by LBMA-certified refineries clearly remained a reality in those years.

The high volumes in 2018 and 2019 raise the questions of what exactly these flows consisted in and whether South Africa had that much secondary material to offer.

## Local gold – recycled gold

There are no official statistics on the market for scrap/reprocessed (“recycling”) gold in South Africa. Metal Focus estimates that it could have reached around 10 tonnes in 2016–2017/2021–2022 and around 25–30 tonnes in 2018–2019 (LBMA 2023: 15). Rand Refinery estimates the size of the legitimate local scrap market to 2–5 tonnes per year (Engineering News 2021). Asked about how it had arrived at this estimate, the company recommended that SWISSAID contact the Jewelry Council of Africa (JCA) and added “[JCA] stated that in the 1980s gold consumption into hand fabricate jewellery was in the order of 14–16 tons, but this has decreased”<sup>95</sup>. SWISSAID contacted JCA to obtain data, but did not receive any reply.

LBMA figures on imports of “recycled” gold from South Africa (51.9 tonnes in 2018 and 64.8 tonnes in 2019) are twice higher than Metal Focus’s estimates for the same years. More research would be needed to know the exact origin of this gold. But there are good reasons to have doubts about the origin and type of gold declared. Some observers have raised concerns about the possibility that a significant portion may come from dubious sources. A media article advances that “gold in the form of scrap from smaller refiners (...) exceeds tens of tons every year” and quotes Rand Refinery’s CEO, Praveen Baijnath, as having said that “much of this scrap may contain material from illegal miners, illegally mined material from across borders, and stolen gold” ([Engineering News 2021](#)).

## **ILLEGAL GOLD EXPORTS FROM SOUTH AFRICA**

The trade in illegal gold from South Africa involves not only criminal networks, in particular syndicates, but also corrupt and complicit high officials ([GI-TOC 2021: 40](#)), and companies based beyond South Africa’s jurisdiction, which have links to global hubs such as Dubai and export the gold there with impunity ([GI-TOC 2021: 37](#)).

South African authorities acknowledge that gold is exported illegally from South Africa, but are not able to provide details. According to DMRE, “There is no denying that there is [an] illegal gold market”<sup>96</sup>. SARS also acknowledged the issue, but presented by SWISSAID with estimates of its magnitude replied that it “cannot confirm numbers as they do not come from ourselves. We can only confirm Customs Search and Seizures as recorded in our Annual Reports”<sup>97</sup>. SARS’s Annual Report 2023/24 mentions 13 “busts”, valued at ZAR 1.6 billion in the category “precious metals/stones” ([SARS 2024: 42](#)), but does not provide details, so it is impossible to know what part concerned gold. Figures from SARS’s Annual Report 2022/23 are similar ([SARS 2023: 68](#)) and also only available as an aggregate.

Given the opacity of the South African gold trade, it is not possible to estimate the illegal gold exports from South Africa based on available trade data. There are other sources and methods, but their reliability can be questioned. The Minister of Mineral and Petroleum Resources, Gwede Mantashe, stated in January 2025 that South Africa had lost an estimated ZAR 60 billion to illicit precious metal trade in 2024 alone ([DMRE 2025](#)). SWISSAID contacted DMRE to understand how this estimate has been calculated and what part concerns gold, but the agency backtracked: “the

information is not properly documented since illegal operations are not open and transparent with their information. [...] This information and its reliability cannot be guaranteed”<sup>98</sup>. Based on interviews with two local stakeholders, Marcena Hunter estimated South Africa’s “lost gold production” at more than 25 tonnes, worth more than USD 1 billion (Enact 2019b: 14).

Through research conducted in 2019, Alan Martin discovered that Mozambique and Zimbabwe acted as important transit countries for illicit gold flows from South Africa (Enact 2019a: 7, see also Enact 2019b: 11). In the case of Zimbabwe, Martin specifies that smuggled gold from South Africa is shipped to Dubai from Harare International Airport. It should be noted that Zimbabwe has also been identified as an important country of origin for illicit gold flows into South Africa, as discussed above.

In South Africa, unlike in other countries, the problem is not so much illegal exports as legal exports of illegally mined, sourced or processed gold. As Martin writes, “Illicit gold is laundered into the legal system – most of it is believed to be refined within the country before being legally exported abroad”. The researcher further explains that “Intelligence suggests that most illegally mined gold is laundered by buyers who sell it either to scrap-metal dealers or to pawn brokers (often associated with the syndicates), *who melt down the doré to mask its origin*” (ENACT 2019a: 6, emphasis added, see also Enact 2019b: 11). In brief, gold laundering takes place within South Africa before the gold even enters the international market, and local refineries are implicated. Therefore, **even sourcing legally exported gold from South Africa is risky and should be approached as such by potential importers.**

A good illustration of this is the massive tax scam that was exposed in February 2022 (AmaBunghane 2022, Tralac 2022) following the publication of a judgement containing details on a “wide-ranging confidential investigation” conducted by SARS. Buying gold scrap in South Africa is submitted to 15 per cent value-added tax (VAT), whereas gold exports are VAT-free. The fraud consisted in buying large amounts of gold without paying the obligatory VAT and then claiming the 15 per cent of the value of the gold as a refund on tax that has never been paid. This kind of scheme was not new; it had been observed and denounced in the past (see, e.g. GI-TOC 2021: 22). However, the volumes involved in that particular case are staggering – which may explain why regulation has been amended since (see LBMA 2023: 9). Between 2012 and mid-2020, Rappa Resources and another, unnamed

company (possibly Aesha Refineries) exported 286 tonnes of gold in total. In 2019, these companies' export sales reached a peak of 83 tonnes (ZAR 53.7 billion), which is the equivalent of 70 per cent of the total gold production of all South African gold mines that year. SARS's investigation demonstrated that these exports consisted mainly in Krugerrands, which can be bought VAT-free but are also illegal to melt, and also included gold illegally mined by *zama zama* and gold smuggled from Zimbabwe, Dubai and elsewhere. The VAT that was allegedly fraudulently claimed amounted to a whopping ZAR 8.16 billion (AmaBunghane 2022).

As the team of investigative journalists who first reported on the case explain: "The essence of the problem is the hundreds of second-hand scrap dealers which are all but unsupervised" (AmaBunghane 2022). More recently, focusing on the source of the Krugerrands used by Rappa Resources and the unnamed company, the same team of journalists wrote: "Zooming out, within the illicit gold trade there are in reality two schemes afoot: the tax fraud just described, but also a formidable, interrelated money laundering service. Essentially anyone with dirty money can buy gold and run it through the system. And the refineries churn so much money that it is easy to mix fake income with real gold sales" (AmaBunghane 2024).

This kind of revelation shows clearly that **there are serious risks associated with sourcing scrap/melted/unprocessed/reprocessed gold from South Africa.**

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1. SARS's response to SWISSAID, 12 January 2022.↩
  2. SARS's response to SWISSAID, 12 January 2022. SACU only has four other member countries: Botswana, Lesotho, Namibia and Eswatini.↩
  3. Since South African statistics do not reflect reality, SWISSAID had no choice but to display imports of gold into South Africa using mirror data, namely figures on gold exports to South Africa reported by the authorities of the other countries.↩
  4. In a 2019 article, Reuters news agency claimed that in 2015, China imported more gold from African countries than the UAE (Reuters 2019). That year, the Chinese authorities did report 377 tonnes of gold imports from South Africa, but detailed analysis of those statistics shows that 314 of those 377 tonnes were actually shipped from Hong Kong and 62 tonnes from the UK while none were shipped directly from South Africa. The same phenomenon occurred in 2016: of the 222 tonnes of gold declared on import into China as originating from South

Africa, 212 tonnes was shipped from Hong Kong and only one tonne was shipped directly from South Africa.↵

5. Among the authorities of the main countries of destination of gold exports from South Africa, those of Canada, the United Kingdom and Turkey have disclosed the countries of dispatch to UN Comtrade for the period 2014–2023. The Swiss authorities did not report this type of data to UN Comtrade, but SWISSAID managed to obtain this data from the Swiss Federal Office of Customs and Border Security (FOCBS). This has enabled SWISSAID to filter out South African bullion imported via a third country from these countries' gold imports. The Indian authorities reported the country of dispatch to UN Comtrade only for 2023. SWISSAID tried to obtain the data for the other years from the Ministry of Commerce and Industry of India, to no avail. The other countries did not report. Likewise, the Chinese authorities reported the countries of dispatch of gold imports to UN Comtrade only from 2015 to 2017. SWISSAID contacted the General Administration of Customs of the People's Republic of China to obtain data for the following years, but did not receive any reply. Finally, the Emirati authorities failed to disclose the countries of dispatch to UN Comtrade, so SWISSAID tried to obtain this type of data from the Federal Centre for Competitiveness and Statistics of the United Arab Emirates, but the latter failed to respond.↵
6. Rand Refinery's response to SWISSAID, 21 November 2022.↵
7. Rand Refinery's response to SWISSAID, 28 March 2025.↵
8. Data received directly from DMRE in February 2022.↵
9. DMRE's response to SWISSAID, 21 February 2022.↵
10. Rand Refinery's response to SWISSAID, 15 February 2023.↵
11. Rand Refinery, Summary version of annual report 2021, p. 2.↵
12. Rand Refinery's response to SWISSAID, 28 March 2025.↵
13. Rand Refinery's response to SWISSAID, 28 March 2025.↵
14. Rand Refinery's response to SWISSAID, 21 November 2022.↵
15. Country of origin data released annually by the London Bullion Market Association (LBMA) is a key source of information on the destination of gold from individual countries, including African countries. It originates from the reports that all refiners certified according to the LBMA standard must submit. However, the LBMA then only releases this data in aggregated form (per country, when four or more refineries are based in the same country, otherwise



- per region), to avoid disclosing information about each individual refinery. In the past, this data only appeared in the LBMA's Sustainability and Responsible Sourcing Reports (see [LBMA 2020: 37](#) for 2018, [LBMA 2021: 47](#) for 2019, [LBMA 2022: 28](#) for 2020 and [LBMA 2023: 32](#) for 2021). Since 2024, it can be accessed on a dedicated webpage: [LBMA Country of Origin Data](#).↵
16. It should be noted that this region excludes Switzerland and Germany, for which the LBMA aggregates data separately.↵
  17. SWISSAID has repeatedly drawn the LBMA's attention to this questionable practice (see, e.g. [SWISSAID 2024: 90](#)), but at the time of writing (April 2025) the association had not yet abandoned it.↵
  18. DMRE's response to SWISSAID, 21 February 2022.↵
  19. DMRE's response to SWISSAID, 10 March 2025.↵
  20. MCSA's response to SWISSAID, 12 January 2022.↵
  21. MCSA's to SWISSAID, 21 February 2025.↵
  22. Nomsa Mbere's response to SWISSAID, 2 March 2025.↵
  23. DMRE's response to SWISSAID, 10 March 2025.↵
  24. SWISSAID compared Hunter's estimate with official data from DMRE, which reported exports of 42 tonnes of industrially mined gold worth just over ZAR 28 billion from South Africa in 2019. Assuming that the DMRE's export figures are for gold that has already been refined, while zama zama gold can reach a purity grade of up to 90 per cent ([GI-TOC 2021: 20](#)), this gives an approximate production volume of around 18.9 tonnes of gold extracted annually by the artisanal sector in South Africa.↵
  25. DMRE's response to SWISSAID, 10 March 2025.↵
  26. DMRE's response to SWISSAID, 10 March 2025.↵
  27. Noma Mbere's response to SWISSAID, 2 March 2025.↵
  28. DMRE's response to SWISSAID, 21 February 2022.↵
  29. Noma Mbere's response to SWISSAID, 2 March 2025.↵
  30. DMRE's response to SWISSAID, 7 April 2025.↵
  31. DMRE's response to SWISSAID, 7 April 2025. For many actors, the revision of the MPRDA (still ongoing at the time of writing, in April 2025) is the opportunity to tackle illegal mining activities in South Africa's gold sector. MCSA, in particular, hopes that the updated act will include sharper definitions of illegal mining within the law so it can allow for harsher sanctions ([Business Live 2025](#)).↵
  32. DMRE's response to SWISSAID, 21 February 2022.↵



33. Rand Refinery's response to SWISSAID, 21 November 2022.↩
34. Rand Refinery's response to SWISSAID, 28 March 2025.↩
35. SADPMR's responses to SWISSAID, 4 March 2025.↩
36. By way of comparison, research conducted by Alan Martin revealed that there were more than 100 small refineries in the Gauteng region alone, according to the police ([Enact 2019a: 6](#)).↩
37. SADPMR's full answer reads: "Unfortunately, we are not able to give you such names because of constraints imposed by the Promotion of Access to Information Act. If you want such information, you will have to formally make an application in terms of the Act in question and of course indicate what right of yours you seek to exercise by accessing the information in question".↩
38. SADPMR's full answer reads: "We do not have statistics on the volume of metal processed by licensed refineries because currently licensees submit manual register of transactions and the SADPMR does not have sufficient human capital to capture such registers. The SADPMR currently employs a risk-based approach in selecting high risk precious metals refining licensees whose registers are captured and analysed as part of implementing our Strategy to Combat Illicit Trade in Precious Metals. The capturing and analysis of such registers is primarily for purposes of identifying anomalies that could potentially indicate illegally mined metal being laundered through precious metals refinery licensees. Furthermore, the SADPMR is currently working on automating the submission of a register of transactions as prescribed by the Precious Metals Act which will go a long way in minimising eliminating the capturing and focusing on analysis. The automated system will also enable us to know at the click of a button relevant statistics such as the total volume of gold processed by South African Refineries."↩
39. SA Precious Metals's response to SWISSAID, 25 February 2025.↩
40. SA Precious Metals's response to SWISSAID, 2 March 2025.↩
41. Gauta Refinery's response to SWISSAID, 27 February 2025.↩
42. SARS's response to SWISSAID, 12 January 2022.↩
43. As far as SWISSAID can tell, SARS only used the term "hybrid" on this webpage.↩
44. Rand Refinery's response to SWISSAID, 21 November 2022.↩
45. SARS's response to SWISSAID, 7 April 2025.↩
46. SARS's response to SWISSAID, 7 April 2025.↩

47. The figure for gold exports from Mali to South Africa in 2023 was not available at the time of writing. However, these exports have consistently been around 30 tonnes in the five years leading to 2023, so SWISSAID assumed that exports have remained at that level. Regarding exports of gold from the DRC to South Africa, data reported to UN Comtrade is not reliable, but SWISSAID was able to establish a link between the Kibali Gold Mine in the DRC and Rand Refinery (see [SWISSAID 2024: 138](#)). Kibali produces around 25 tonnes of gold per year.↵
48. From 2012 until 2018, Peru regularly reported to UN Comtrade exports of 1-2 tonnes of gold to South Africa per year.↵
49. Rand Refinery's response to SWISSAID, 21 November 2022.↵
50. Rand Refinery's response to SWISSAID, 28 March 2025.↵
51. Rand Refinery's response to SWISSAID, 28 March 2025.↵
52. SARS's response to SWISSAID, 7 April 2025.↵
53. SARS's response to SWISSAID, 7 April 2025.↵
54. DMRE's response to SWISSAID, 10 March 2025. The full answer reads: "The information is not properly documented since illegal operations are not open and transparent with their information. Moreover, their records if any are not open to scrutiny by government officials, Customs and SAPS may provide some information, but will only be limited to declared goods and confiscated goods".↵
55. The sentence has disappeared from that webpage but can still be found in DMRE's recent Mineral Statistics Tables (B1-2023 Mineral Statistics Tables 2000-2022 and B1-2024 Mineral Statistics Tables 2001-2023, see [DMRE n.d.](#), accessed in April 2025).↵
56. DMRE's response to SWISSAID, 21 February 2022.↵
57. To access DTIC's statistics on gold exports, click Public Reports/Trade Data/Trade Statistics/SA Export Value HS8.↵
58. SARS's response to SWISSAID, 7 April 2025.↵
59. SARS's response to SWISSAID, 7 April 2025.↵
60. SARS's response to SWISSAID, 7 April 2025.↵
61. SARS's response to SWISSAID, 7 April 2025.↵
62. SARS's response to SWISSAID, 7 April 2025.↵
63. Statistics South Africa's response to SWISSAID, 3 November 2021.↵
64. Rand Refinery's response to SWISSAID, 28 March 2025.↵
65. *Ibid.* This information is corroborated by data on "official coin fabrication" released by Metal Focus, which shows that 68 tonnes of gold coins have been

- fabricated in 2018 and 81 tonnes in 2019. Metal Focus, Gold Focus 2023, p. 74.↵
66. Statistics South Africa's response to SWISSAID, 9 November 2021.↵
67. Or, in another formulation: "Please note that some of the locally bought minerals will end up being exported, but for the DMRE reporting the sale will remain a local sale as initially reported". DMRE's response to SWISSAID, 21 February 2022.↵
68. According to Statistics South Africa, "the DMRE and SARS exports data will always not be the same". Statistics South Africa's response to SWISSAID, 9 November 2021.↵
69. "It is not possible to provide this information at this stage". SARS's response to SWISSAID, 7 April 2025.↵
70. Rand Refinery's response to SWISSAID, 21 November 2022.↵
71. Rand Refinery's response to SWISSAID, 28 March 2025.↵
72. Rand Refinery's response to SWISSAID, 21 November 2022.↵
73. Rand Refinery's response to SWISSAID, 28 March 2025.↵
74. Rand Refinery's response to SWISSAID, 28 March 2025.↵
75. SARS's response to SWISSAID, 7 April 2025.↵
76. SARS's response to SWISSAID, 7 April 2025.↵
77. Rand Refinery's response to SWISSAID, 28 March 2025.↵
78. SARS's response to SWISSAID, 7 April 2025.↵
79. SARS's response to SWISSAID, 7 April 2025.↵
80. SARS's response to SWISSAID, 12 January 2022.↵
81. SARS's response to SWISSAID, 15 February 2022.↵
82. SARS's response to SWISSAID, 15 February 2022. However, for years up to 2011, some countries of destination (which are not SACU members) do appear in UN Comtrade. The amounts are low and may be explained by the fact that prior to 2011, SARS classified all gold under HS7108.20, which is monetary gold and thus excluded from UN Comtrade database. SARS's response to SWISSAID, 7 April 2025.↵
83. Response from SARS to SWISSAID, 7 April 2025.↵
84. Of the 222 tonnes of gold declared on import into China as originating from South Africa, 212 tonnes was shipped from Hong Kong and only one tonne directly from South Africa.↵
85. Had SWISSAID been able to correct the whole dataset, the discrepancies of approximately 20 tonnes in 2016 and 10 tonnes in 2017 might even have

disappeared.↩

86. The Chinese authorities only reported the countries of dispatch to UN Comtrade until 2017. SWISSAID contacted the General Administration of Customs of the People's Republic of China to obtain data for the following years, but its request went unanswered.↩
87. The British authorities have reported the countries of dispatch of gold imports into the UK to UN Comtrade for the years 2017 and 2019-2024, so SWISSAID could factor out South African bullion imported via a third country.↩
88. The Swiss authorities have not reported the countries of dispatch of gold imports to UN Comtrade, the Swiss Federal Office of Customs and Border Security (FOCBS) accepted to communicate this data to SWISSAID for the period 2012–2023. So, in this case too, SWISSAID could factor out South African bullion imported via a third country.↩
89. In an email exchange with SWISSAID, Metalor acknowledged that it had sourced so-called “recycled” gold from South Africa until 2020. The Swiss refinery explained that this flow consisted exclusively in old jewelry, that material analysis indicated it did not contain any mined gold, and that this type of sourcing stopped in January 2020. Metalor's response to SWISSAID, 28 March 2022. In an email exchange with SWISSAID, Argor Heraeus acknowledged that it had sourced so-called “recycled” gold from South Africa until 2020. The Swiss refinery explained that Heraeus South Africa, a subsidiary of the same group, collected gold from recycled sources (including old jewellery, teeth gold, coins, medals, and industrial scraps) in South Africa, inspected and melted it before exporting it to Switzerland (or Hong Kong) for refining. Heraeus South Africa had to stop sourcing recycled gold due to “changes in the South African law”. Argor Heraeus's response to SWISSAID, 6 October 2022. None of these Swiss refineries accepted to share figures on the volumes of gold involved with SWISSAID.↩
90. Rand Refinery's response to SWISSAID, 15 November 2022.↩
91. Asked by SWISSAID about its gold exports to the UAE, Rand Refinery not only provided figures on the quantities involved but also specified that these exports consisted exclusively in “finished products (i.e. bank bars / minted bars / coins)”. Rand Refinery's response to SWISSAID, 15 November 2022.↩
92. SWISSAID's exchange with a player in the UAE gold sector, 14 February 2022. Also mentioned in **SWISSAID 2024: 45**.↩

93. There seems to be an error in LBMA data, which SWISSAID highlighted in red: the figure for imports of gold from South Africa by LBMA-certified refineries based in “the Americas” is the same in 2020 as in 2019 (2,116 kg), which is not plausible – but not impossible either.↩
94. It should be noted, however, that the LBMA’s categorisation has changed with the publication of 2022 data. In the table above, SWISSAID disregarded that change for comparability purposes – even though it welcomes it.↩
95. Rand Refinery’s response to SWISSAID, 21 November 2022.↩
96. DMRE’s response to SWISSAID, 21 February 2022↩
97. SARS’s response to SWISSAID, 12 January 2022.↩
98. DMRE’s response to SWISSAID, 10 March 2025.↩

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