



Sustainability and Responsible Sourcing Report **2023**

Table of Contents

01	Message from the CEO	3
02	General Counsel Report	4
03	LBMA at a Glance	6
04	Sustainability and Responsible Sourcing Programme Highlights	8
05	2022 Refiners' Responsible Sourcing Performance	11
06	2022 Auditor Review and Update	16
07	Country of Origin Data for 2021	17
08	The Responsible Sourcing Ecosystem and LBMA Partnerships	22
09	LBMA Key Strategic Initiative: ASM – Breaking New Ground	23
10	The Changing Landscape: Addressing New Sourcing Challenges	25
11	Programme Governance	27
12	LBMA Outreach in 2022	30
13	Matrices	31
14	Useful Links	34

01

Message from the CEO

BY RUTH CROWELL

This year marks a significant milestone for LBMA as we proudly launch a three-year Sustainability Strategy, specifically targeting climate issues and the UN Sustainable Development Goals.

This strategy is in alignment with the Industry Sustainability Declaration, which was jointly launched in Lisbon in 2022.

With the release of this year's Sustainability and Responsible Sourcing Report, we publicly commit to our new strategy as well as reporting on the Responsible Sourcing performance of LBMA, Assurance Providers and Refiners over the past year.

A COALITION OF THE WILLING

Sustainability is a pivotal challenge that will shape the future success of the precious metals industry. LBMA is taking a leading role by coordinating the industry to identify and implement best practices, with the ultimate objective of positioning precious metals as part of the solution, not the problem. Our three-year Sustainability and Responsible Sourcing Strategy reflects our commitment to promoting responsible and sustainable sourcing practices in the precious metals sector. Moreover, we aim to address emerging sustainability issues in the market, focusing on climate, biodiversity and other UN Sustainable Development Goals. Emphasising the urgent need for a coalition of the willing, this strategy acknowledges the importance of collective efforts to achieve real solutions.

Regarding the Responsible Sourcing Assurance Programme, we have achieved significant milestones, including the imminent launch of the second version of the Responsible Silver Guidance and the establishment of an Artisanal and Small-scale Mines (ASM) Task Force. Furthermore, we have applied for EU Recognition of Responsible Gold and have successfully reviewed Assurance Reports and monitored Refiners through our Incident Review Process.


This report includes published Country of Origin information, along with enlightening case studies of special audits and incident review processes.

COLLABORATION DRIVES COLLECTIVE EFFORTS

Beyond our commitment to operating a robust Assurance Programme for the global industry, this year has seen successful collaborations with International Bullion Centres (IBCs) to combat gold laundering and protect the value of the gold we all treasure. Dealing with the challenges posed by Russian gold sanctions has been demanding, but it has also spurred progress and consensus on our technology and transparency initiative, Gold Bar Integrity.

In addition to working closely with banks, ETFs and other financial market players, we are working to enhance and define ESG criteria such as 'low carbon', 'transition aligned', 'Recycled Gold' and 'green gold'. Our aim is to create clear definitions and develop the financial market infrastructure that our esteemed Members and their clients seek.

This year's Sustainability and Responsible Sourcing Report provides extensive context to these workstreams and more, backed by data and evidence. We encourage you to delve into the report to discover the progress and impact we have achieved through our collective efforts.



LBMA IS TAKING A LEADING ROLE BY COORDINATING THE INDUSTRY TO IDENTIFY AND IMPLEMENT BEST PRACTICES, WITH THE ULTIMATE OBJECTIVE OF POSITIONING PRECIOUS METALS AS PART OF THE SOLUTION, NOT THE PROBLEM.

RUTH CROWELL, CEO

02

General Counsel Report

BY SAKHILA MIRZA

LBMA's Sustainability and Responsible Sourcing Programme

If an organisation states that it is satisfied with its current sustainability and responsible sourcing programme, it has a problem.

Today's improvements become tomorrow's status quo and, due to the urgent global context, stopping there can be read only as complacency.

WE LOOK FORWARD TO THE INDUSTRY COMING TOGETHER IN MARCH 2024 AT THE LBMA SUSTAINABILITY AND RESPONSIBLE SOURCING SUMMIT, AND WORKING TOGETHER TO DEFINE AND ACHIEVE AGREED GOALS.

SAKHILA MIRZA, GENERAL COUNSEL

The continuous improvement of standards and business practices, coupled with strong governance, forms the bedrock of the Responsible Sourcing Programme (RSP). Momentum exists to drive this improvement as an organisation and also collaboratively across the market.

Over the past year, the LBMA team has grown. It's overseen the implementation of the first year of the Responsible Gold Guidance version 9 (RGG v9); developed the Responsible Silver Guidance version 2 in alignment with RGG v9; and after extensive consultation with the market, published an ambitious three-year Sustainability and Responsible Sourcing Strategy.

Governance has also been strengthened with a review of internal policies and procedures, including Due Diligence. This year has seen a greater focus on discussion with governments on issues such as combatting fraud and organised crime. This sees a continuation of the work started in 2020 when LBMA published recommendations for International Bullion Centres (IBCs), with the aim of building leverage to eliminate gold laundering. LBMA is engaged with IBCs in a number of jurisdictions including the UK, USA, UAE, China, Turkey, Singapore and India. As with the IBC work, collaboration with government will also be instrumental in giving the ASM initiative a realistic chance of success. Clearly, collaboration is crucial for driving meaningful change.

Strategy

This new three-year strategy reaffirms LBMA's commitment to the continuous improvement of responsible and sustainable sourcing practices in the precious metals sector. The scope is much broader this year, reflecting the urgency of addressing current and emerging sustainability issues in the market, with the climate, biodiversity and other UN Sustainable Development Goals all brought into focus.

THE GOAL

- Maximise our positive contribution to sustainable development; and
- Minimise any adverse ESG impacts of gold mining, refining, trading and other market practices.

LBMA sets out clear deliverables for the next three years and – where deliverables are not possible to define immediately – there is a plan in place on how to approach defining and working towards new goals together. The strategy outlines 'why' and 'what'. Next year will be about defining 'how' in detail, together. LBMA recognises that, as an organisation, it must start with itself and look at where its own practices can be improved, as well as pushing for change in the wider market.

This work includes examining LBMA's ESG practices, governance, equality and diversity, as well as those processes relating to its core sustainability activities. The work also extends to addressing critical sustainability issues in the market, such as climate, biodiversity and UN Sustainable Development Goals.

EU Alignment Assessment

Recognition under the EU Conflict Minerals Regulation remains a high priority for LBMA. This process commenced in January 2020, but due to the challenges of Covid-19, it was delayed. With the original application being based on the Responsible Gold Guidance version 8 – as version 9 was not launched until the end of 2021 – LBMA provided an updated application to the EU earlier this year. The application reflected all the developments that LBMA has worked on across 2021 and 2022. In summary, the updated application includes the following:

- Launched RGG v9 in December 2021, for implementation through 2022.
- Launched the Third-Party Audit Guidance (TPAG) in November 2022 to support the implementation of RGG v9.
- Published a new Disclosure Guidance to support Refiner reporting and transparency, with version 1 launched in December 2020 and version 2 launched in December 2022.
- Updated the Refiners Toolkit to implement the new requirements.
- Developed a new Assurance Providers Toolkit to support consistency across the assurance engagement process in relation to the implementation of the RGG v9 requirements (to note: this will be implemented for assurance engagements commencing 2024).
- Significantly strengthened the oversight and quality control of the RSP, including the quality of Assurance Providers.
- Enhanced training requirements – Assurance Providers are required to undergo LBMA's annual mandatory training totalling six hours, followed by an exam for which they must receive a mark of 70% or higher.
- Improved LBMA's transparency, through LBMA's Annual Responsible Sourcing Report, first published in September 2020, as well as requesting, and publishing, Country of Origin data for all the gold and silver being refined by our GDL Refiners. This enhanced reporting on LBMA, Refiner and Assurance Provider performance during the year provides further clarity on, and confidence in, the RSP.
- LBMA has also enhanced the transparency of the independent governance of the RSP, Whistle Blowing Good Delivery List Rules, the Board SubGroup and LBMA itself. This has enabled LBMA to move much faster in situations which can impact market integrity; for example, LBMA was able to suspend all Russian refiners shortly after the outbreak of the war in Ukraine.
- Enhanced the Incident Review Process (IRP) in order to ensure the integrity of the RSP in between assurance engagements. This includes public reporting when IRPs are announced, concluded and the outcome of those IRPs. These are published as they occur as well as in LBMA's Annual Sourcing Report.
- Published a revised version of the Global Precious Metals Code in December 2022.
- In 2023, through its Special Assurance Process, LBMA introduced a requirement that Chinese Refiners attest to the absence of forced labour in their supply chains and factory operations.

Gold Bar Integrity – Technology to Support Continual Improvement

With the advent of sanctions, increased sophistication in organised crime, complex geopolitical considerations and pressing consumer demand for transparency, the use of technology to address these issues is timelier than ever.

Consumers and investors want to know that their gold has been responsibly and sustainably produced. Consumers want to know where their gold has come from and who produced it, and have certainty over its purity and authenticity. And regulators want to be sure that anti-money laundering/terrorist financing and illicit trade issues are being addressed.

Recent geopolitical events have increased concerns as stakeholders want confidence that they are not sourcing gold from conflict-affected areas or from countries that appear on the UN, US, UK, EU (and any other relevant) trade and economic sanctions lists. In addition, fraudulent and misrepresented bars need to be removed from the market to ensure market integrity.

The Gold Bar Integrity (GBI) initiative can help address these concerns, as it marries together two components: a database and a security feature.

The security feature is a physical feature that establishes the identity and verifies the authenticity of a gold bar and essentially works like a passport, building on the provenance and allowing the movement of the bar to be tracked and traced when used in conjunction with a database.

The GBI database – a transparent ledger of gold bars – will hold information on each gold bar that enters the Loco London market, which will include the information that is currently required under Responsible Gold Guidance version 9. The purpose of this database will be to support vaults, banks, and end-users in meeting sanction requirements, and also to eventually move towards real-time

country of origin report. In 2022, with a view to ensuring the integrity and quality of supply chain provenance data, LBMA and the World Gold Council launched the Gold Bar Integrity (GBI) pilot. The goal of the pilot was to offer participants a chance to better understand the technology, the benefits of data accessibility and the need to collaborate on a shared solution that can demonstrate chain of custody transparency.

GBI BENEFITS

The potential benefits of GBI include improved transparency, prevention of counterfeiting and combatting money laundering, upholding sanctions, improved data sharing, seamless reporting to enable a strong Good Delivery List, and enhanced transparency and reporting to meet consumer and governance demands concerning ESG.

These benefits will provide the global market with the trust and confidence to support the integrity of the market.

What Are the Next Steps?

A number of security features have already been reviewed by the Security Features Panel from the perspective of the technology and it will be for market participants to decide which security features to use. A Request for Proposal was launched in August 2023 for database providers to outline their solutions.

Looking to 2024

With the broadening of the scope to include all that is happening in the Sustainability as well as Responsible Sourcing space, LBMA will grow its core activities to meet the expansion of the remit of the RSP as it develops.

We look forward to the industry coming together in March 2024 at the LBMA Sustainability and Responsible Sourcing Summit, and working together to define and achieve agreed goals.

03

LBMA at a Glance

LBMA is committed to maintaining the highest due diligence standards for sourcing material.

A fundamental aspect of the Good Delivery List is that gold and silver processed through accredited Refiners can be trusted to be responsibly sourced. This chain of integrity is vital to maintaining confidence in the global market and has been the foundation for the continuous development of our Responsible Sourcing Programme.

Loco London

As the global independent precious metals authority, LBMA advances standards for the common good of the industry and is the pre-eminent standard-setting body for the global over-the-counter precious metals market.

The Good Delivery List: RSP Is Commercially Mandatory

LBMA maintains and administers the Good Delivery List (GDL) for gold and silver. This lists the names of Refiners and the details of each respective Refiner's bullion bars that LBMA accredits as acceptable for Good Delivery in the London bullion market and other international markets.

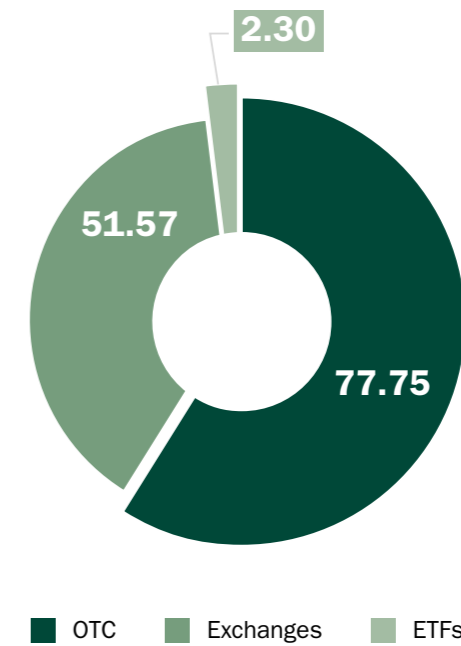
The GDL is widely recognised as the de facto standard for the quality of gold bars and is used by governments, exchanges and investors globally to define, in whole or in part, the Refiners whose production is acceptable in their own markets.

A GDL Refiner must comply and satisfy requirements in three areas – spanning due diligence processes, bar specification and responsible sourcing adherence – not just on application, but on an ongoing basis. Breach of the GDL Rulebook may lead to suspension or removal from the GDL, with consequences for the Refiner's reputation and financial standing. The accreditation is a commercial necessity, which makes it easier for LBMA to enforce its standards.

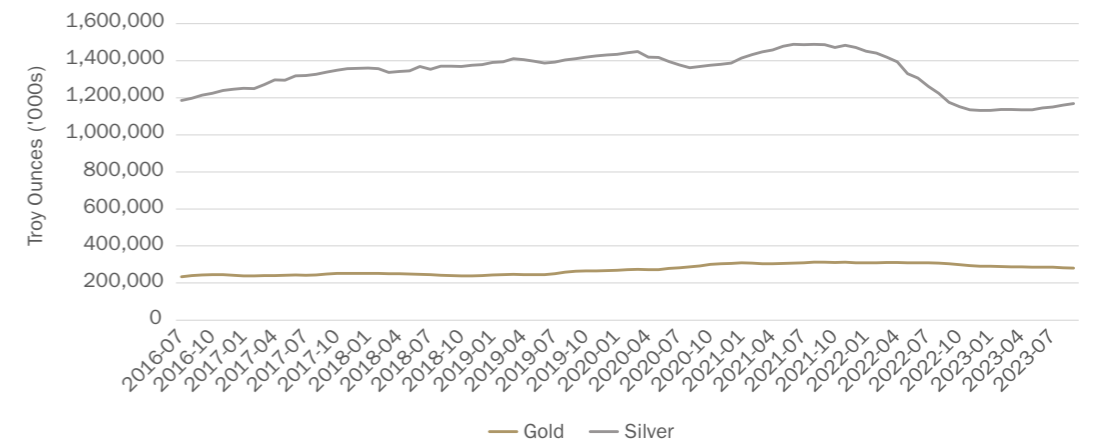
66 gold Refiners
across six continents accounting for **85-90%** of the total annual global mined gold production

78 silver Refiners
across six continents accounting for **~60%** of the total annual global mined silver production

GLOBAL GOLD MARKET 2022 \$131.62 BILLION



LONDON VAULT DATA



LBMA GOOD DELIVERY LIST

Area	Gold and Silver	Gold Only	Silver Only	Total
Africa	1	0	0	1
Americas	7	1	1	9
Asia	25	16	23	64
Europe	11	3	8	22
Oceania	2	0	0	2
Refineries	46	20	32	98

2022 in Review

Gold hit **US\$2,074.60** on 8 March 2022, its highest price ever.

The record-setting price is largely attributed to US monetary policies, geopolitical uncertainty caused by the war in Ukraine and an increase in inflation in leading economies.

The average gold price was **\$1,800**.

As of September 2023, the amount of gold held in London vaults was **8,727 tonnes**, valued at **\$524.8 billion**, which equates to approximately **698,167** gold bars.

Vaults also held **27,594 tonnes** of silver, valued at **\$20.5 billion**, which equates to approximately **919,796** silver bars.

77% of annual industrially mined production refined by GDL Refiners.

Demand for Good Delivery accreditation is at an all-time high, particularly in China, with **12** active applications and approximately **seven** expected by end of 2023.

Central bank purchases of gold totalled **1,136 tonnes** in 2022, the highest level of annual demand on record since 1950.*

Demand was strongest from **emerging market banks**, including Turkey and China.*

As of 4 September 2023, the LBMA Good Delivery List includes **98** gold and silver refineries.



GLOBAL PRECIOUS METALS CODE

The Global Precious Metals Code (the Code) supports the continuous improvement of responsible sourcing business practices across the LBMA membership and Good Delivery Refineries.

Revised in December 2022, all LBMA Members are required to attest their conformance with the Code by signing a Statement of Commitment. The Code sets out the standards and best practices expected from market participants (which includes Refiners) in the global precious metals market.

*Source: WGC <https://www.gold.org/goldhub/research/gold-demand-trends/gold-demand-trends-full-year-2022/central-banks>



04

Sustainability and Responsible Sourcing Programme Highlights

Overview

Gold plays a unique role in the global economy in stimulating economic growth, protecting the financial security of nations, communities and families, and enabling advances in medical, environmental and communication technologies.

Public trust is fundamental to the many positive contributions that gold makes to socio-economic progress. At the heart of this effort lies LBMA's Responsible Sourcing Programme.

In the face of a constantly shifting world of geopolitics, tightening regulatory environments and expanding public expectations of responsible business practices, LBMA can never be complacent.

Looking back over 2022, it was a turbulent year that saw the Responsible Sourcing team respond to various challenges. Unprecedented sourcing threats – such as the Russian invasion of Ukraine, a mercenary group operating in gold-rich but

unstable countries in Africa, illegal miners in the Brazilian Amazon, and forced labour concerns in China – all required quick and meaningful responses from LBMA. You can read more about these challenges and our responses in [Chapter 10: The Changing Landscape: Addressing New Sourcing Challenges](#).

This year also saw the team address two perennial concerns that test the integrity of the Responsible Sourcing Programme (RSP): the sustainability and governance challenges posed by the unregulated Artisanal and Small-scale Mining (ASM) sector; and ways to maintain and enhance the rigour of the assurance process that validates Refiners' conformance against LBMA sourcing and disclosure requirements. An update on our ASM initiative can be found below. Efforts to strengthen the Assurance Programme are detailed in [Chapter 6: 2022 Auditor Review and Update](#).

In a change from past years, readers will note in [Chapter 5: 2022 Refiners' Responsible Sourcing Performance](#) that we extensively highlight the broader due diligence systems LBMA has in place to

complement and reinforce the RSP. Due Diligence is fundamental to LBMA's overall governance and risk management, and challenges the common misperception that a Refiner's compliance with the RSP is decided solely by the annual assurance process.

Since the extensive update to LBMA's due diligence policies and procedures, recent improvements are highlighted as well as the broader governance structure that supports the norms and responsible business practices expected of GDL Refiners. Additional detail is also provided to explain the Incident Review Process and the way in which Assurance Reports are reviewed and approved.

LBMA published its first Sustainability and Responsible Sourcing Report in 2020. We encourage readers to consult past editions to learn more about LBMA and the evolution of the Programme over the course of our journey.

The Highlights

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG): RISE IN STANDARDS

2022 was the first year for Refiners to publicly disclose how they are delivering against new requirements introduced in the Responsible Gold Guidance version 9, with much more detail on their environmental performance.

Refiners were required to address the Environmental, Social and Governance (ESG) factors in their primary gold supply chain, by ensuring that their suppliers had policies and practices to (for example):

- Comply with environmental, health, safety and labour regulations;
- Manage air, water and land pollution;
- Engage with communities and also manage business integrity and support ethical conduct.

Refiners had all of 2021 to implement the new requirements introduced in RGG v9. Overall, Refiners have been actively engaged with suppliers to meet the ESG requirements.

LBMA's review of the assurance process hasn't highlighted any material concerns, but recognises that more work is still needed, which will be reflected in future iterations of the Responsible Gold Guidance. This supports the ongoing commitment of improving standards.

LBMA WILL INCORPORATE THE LATEST THINKING AND INDUSTRY REQUIREMENTS INTO ANY FUTURE VERSIONS OF THE LBMA RESPONSIBLE GOLD GUIDANCE TO ENSURE IT REMAINS FIT FOR PURPOSE.

ESG AT THE CENTRE

Our efforts to promote and measure ESG considerations by Refiners doesn't stop there.

LBMA reaffirmed its commitment to this growing area of concern by placing ESG at the centre of our 2023-2025 Sustainability and Responsible Sourcing Strategy (see [Chapter 2: General Counsel Report](#)).

One of the five pillars of that strategy is LBMA's implementation of the Declaration of Responsibility and Sustainability Principles announced at the LBMA/LPPM Global Precious Metals Conference in Lisbon in October 2022. Convened by LBMA and the World Gold Council, the Declaration is a shared commitment on behalf of the global gold industry.

It commits signatories to ten key sustainability objectives, including responsible sourcing standards, respect for human rights, the advancement of the UN Sustainable Development Goals, and action and disclosures on climate change.

A link to the Sustainability Declaration is included in Useful Links at the back of this report.

ARTISANAL AND SMALL-SCALE MINING – BUILDING LEVERAGE

When LBMA launched its Artisanal and Small-scale Mining (ASM) initiative last year, direct sourcing of ASM material accounted for less than 1% of the combined throughput of GDL Refiners – despite accounting for as much as 20% of annual gold production. While we are aware this unprecedented initiative represents the most ambitious effort ever by an industry group to address the long-standing sourcing obstacles facing the sector, we are realistic and clear-eyed in our expectations.

We do not expect immediate change, nor do we seek to solve the myriad of complex and country-specific challenges of the ASM sector writ large. Instead, we are driven by a sincere desire to examine how the evolution of responsible sourcing frameworks have unwittingly contributed to ASM's exclusion and to create a new sourcing model that would impose credible, practical and realistically attainable due diligence standards on responsibly sourced ASM material that would remove the market barriers to GDL Refiners.

In 2022, LBMA commissioned Phuzumoya Consulting led by Gregory Mthembu-Salter, a former member of the UN Group of Experts on the Democratic Republic of Congo, to undertake a Feasibility Study that could guide our work.

The Study made several recommendations, which Mthembu-Salter and LBMA began operationalising in 2023. Please refer to the LBMA ASM Feasibility Report in [Useful Links](#) at the back of this report. In addition, see [Chapter 8](#) of this report for information on how LBMA is implementing the recommendations provided in the report.

LBMA Training

While significant thought and resources are invested into improving the knowledge base of Approved Service Providers (see [Chapter 6: 2022 Auditor Review and Update](#)), LBMA also recognises how training opportunities for LBMA Members and GDL Refiners supports better implementation of the Responsible Sourcing Programme.

To ensure consistency of knowledge by the compliance teams of GDL Refiners and LBMA Members, we continue to hold introductory training courses in responsible sourcing and the Loco London market. While the former provides an overview of key reporting requirements of the RGG and common sourcing challenges, the latter focuses on educating stakeholders on the historical and current role London plays as the world's pre-eminent gold market. In one instance, LBMA provided a bespoke training that combined both these courses for the entire staff at a GDL refinery that had undergone significant internal restructuring.

Due to the success and demand for such courses, LBMA intends to create a new training module in 2024 directed specifically at the compliance teams within GDL Refiners. While Refiners must offer all relevant employees annual training in the OECD's Five-Step Due Diligence Framework and their obligations under the RGG, this course will be premised on the annual training LBMA offers Approved Service Providers.

RECYCLED GOLD

LBMA continues to reference the definitions of Recycled Gold set out in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (third edition) Supplement on Gold.

However, LBMA recognises the sourcing vulnerabilities and governance challenges posed by the sector. Public and industry calls for a review of the definition have also sparked a valuable debate about how the process could contribute to clearer and more consistently applied classifications across different gold-related industries and jurisdictions.

While the challenges in the ASM and Recycled Gold markets are often approached through separate lenses, they actually share many of the same risks and vulnerabilities and so should be considered two sides of the same coin.

Illicitly mined and traded gold bypasses credible due diligence in trading hubs, where it can be mixed with other legitimate feedstock to obscure its true origin.

In this way, the recycled sector can be exploited by criminal networks to launder their production into the global supply chain.

For reasons like this, RGG v9 clarified LBMA's requirements for Recycled Gold and introduced more granularity when undertaking due diligence on reporting on Recycled Gold as an origin. Among the key changes was to have Refiners disaggregate recycled supplies listed in their Country of Origin report according to different material types (i.e. jewellery, industrial by-products or investment bars). Refiners are also expected to undertake more stringent due diligence on recycled material by going as far down the supply chain as possible.

Most notably, this includes a new requirement that all high-risk suppliers, particularly intermediate refiners in high-risk trading hubs, undergo an OECD-aligned assurance of their supply chains.

Over time, this level of detail will give us a more accurate picture of the market and enhance our ability to spot and respond to either trade anomalies or sourcing concerns.

LBMA also participates in discussions focused on improving implementation of the OECD definition, including but not limited to the Precious Metals Impact Forum.

It must be made clear, however, that participation, support and guidance do not constitute endorsement. LBMA will always consult with Members, GDL Refiners and other interested parties when updating guidance.

LBMA will incorporate the latest thinking and industry requirements into any future versions of the LBMA Responsible Gold Guidance to ensure it remains fit for purpose. To this end, LBMA will endeavour to participate in, support and guide any credible initiatives that seek to reach consensus on any future definition of Recycled Gold. The International Standards Organisation (ISO) Technical Committee 174 (TC 174) that deals with Jewellery and Precious Metals has recently set up a Subgroup to establish a definition for Recycled Gold. LBMA is a 'Liaison' for TC 174, which means that we attend Subgroup meetings as a recognised expert in this field. The Subgroup will also be looking at definitions/standards relating to responsible sourcing of precious metals.

Independently, LBMA is part of the British Standards Institute (BSI) STI/53 Committee, which deals with 'Specifications and test methods for jewellery and horology'. This Committee represents the UK in TC 174.

NOT JUST ABOUT GOLD: REVISION OF RESPONSIBLE SILVER GUIDANCE

At the beginning of 2023, LBMA began revisions to the first version of the Responsible Silver Guidance, in place since September 2017.

Rather than introducing wholesale changes, the revision focused on aligning the standard to the higher requirements outlined in Responsible Gold Guidance version 9, which underwent a comprehensive overhaul in 2021.

One key change that was made was to remove the De Minimis Threshold, which had previously excluded material containing less than 15% silver by weight (kilograms) from the scope of the Silver Guidance.

While the first draft had removed mention to artisanally-mined silver material, following consultations with Refiners, this was reinstated.

The draft of version 2 was released for public consultation in July 2023. Following consideration of feedback received, LBMA intends to launch the final version by the end of the year, for implementation throughout 2024.

05

2022 Refiners' Responsible Sourcing Performance

Since 2012, compliance with the RGG has been a mandatory requirement for all Refiners wishing to remain on the Good Delivery List (GDL).

Every year, each GDL Refiner must undergo an assurance engagement to demonstrate its compliance with the Responsible Gold Guidance (RGG) requirements. Mandatory assurance engagements are conducted on a 12-month basis within three months of the Refiner's financial year-end.

The RGG has been updated nine times since its launch, demonstrating the continuous improvement required by all parties in the supply chain. The RGG assists these parties to minimise risks by adopting the OECD Guidance and its Five-Step Framework for Due Diligence into its management and operational systems.

The annual assurance process is not the only means by which LBMA measures a Refiner's compliance with Responsible Sourcing and Good Delivery standards. Due diligence is a key tool in LBMA's risk management framework. In 2022, in accordance with our commitment to continuous improvement, LBMA reviewed and enhanced its Due Diligence Policy and Procedures.

These procedures examine the various risks presented to LBMA when Members and Refiners first join LBMA, and then on an ongoing risk-based basis. This continuous monitoring works alongside both the Responsible Sourcing Programme (RSP) and the Good Delivery Rules to ensure a further layer of scrutiny.

As part of LBMA's internal due diligence practices, every GDL Refiner is subject to daily screening including PEPs, sanctions, adverse media and legal sources. Market intelligence, gleaned from NGO reports, industry partners or governments, can lead LBMA to engage with GDL Refiners to make them aware of certain sourcing concerns and to request an official response that provides clarity and comfort that no breaches have occurred. If LBMA feels the response or mitigation strategy by a Refiner is insufficient, the issue will be escalated.



How Does LBMA Review Refiners' Assurance Reports?

- Each GDL Refiner is assigned a risk rating (low, medium, high) based against an internal LBMA assessment tool that factors such considerations as the complexity of the Refiner's supply chain and the severity and type of non-conformances or sourcing issues identified during the previous year.
- The Responsible Sourcing team undertakes detailed analysis of the assurance engagements and produces reports on each of these. During the process, Refiners and Approved Service Providers (ASPs) are questioned to gain clarity or comfort regarding sourcing concerns or the omission of any relevant details. High-risk reports are sent to the Compliance Panel for final review. Unanimous agreement is required by Compliance Panel members for these reports to be approved.
- Assessment reports of medium and low-risk Refiners can be approved by the Head of Responsible Sourcing, unless the severity of non-conformances requires an escalation to the Compliance Panel.
- A risk-based approach is applied to each review, taking into consideration the:
 - nature of any identified non-conformances or ASP recommendations;
 - types of material received (and from which countries); and
 - level of description and disclosure of detail set out in the RGG and the Third-Party Assurance Guidance (TPAG).
- As 2022 was the first year for Refiners to be assessed against RGG v9 and the new TPAG, the Responsible Sourcing team paid close attention to how well the new, and substantive, changes are being implemented.
- Country of Origin data is analysed against CAHRAs (conflict-affected and high-risk areas) and sanction regimes lists to ensure no breaches have occurred. A comparison is made against previous years' data to determine any anomalies. Implausible figures or source countries are queried with Refiners. If the total material sourced by a Refiner is below 10 tonnes, the GDL team is notified to investigate its throughput to ensure compliance with the GDL Rules.
- Any sourcing issues that may have come to LBMA's attention during the year in review – perhaps through NGO and media reports or grievances logged on the Mineral Grievance Platform, an online portal hosted by colleagues at the Responsible Minerals Initiative (RMI) – are also considered in the assessment. Where further information is required, this will be requested.
- Where medium, high or zero-tolerance non-conformances with the RGG are identified within assurance engagement deliverables, Refiners must submit a Corrective Action Plan (CAP) to address the gaps in their system. The RGG stipulates that a CAP for medium non-conformances must be fully remediated within 90 days of the assurance engagement, for high-risk non-conformances within a month and for zero-tolerance breaches, immediately. Once completed, CAPs are then reviewed by the Responsible Sourcing Compliance Panel.
- Only once an assurance engagement fully satisfies the requirements of the RGG will a certificate of compliance be issued. Each certificate includes the Refiner's assurance period and the date the review was approved by LBMA. Certificates are published on the LBMA website and Refiners must also publish their policies relating to their gold supply chains, their Assurance Report and Compliance Report. The only exception to this process is if the severity of non-compliances requires the issuance of a CAP, which then necessitates the approval of the Compliance Panel.

REFINER RISK CATEGORISATION

LBMA has developed an internal tool to determine the appropriate level of scrutiny.

	RISK LEVEL		
	Low	Medium	High
Throughput (t)	10-50	50-100	> 100
Material Type	Industrial by-product; Conversion of London Good Delivery Bar	Scrap; LSM*	ASM**
Geographical Risk	Local	Regional	International
Market Intelligence	No Issues	Minor Issues	Known Issues
Location	As per country risk assessment		
Business model	As per KYC and Due Diligence risk assessment***		

*Large-Scale Mining. **Artisanal and Small-scale Mining.

***This takes into account how a Refiner is funded, controlled, owned, etc.

COUNTRY RISK CATEGORISATION

LBMA has also developed an internal Country Risk Categorisation based on publicly available sources combined with market intelligence.

	Description	Source
Category 1	Extreme Risk (US, UK, EU and UN sanctions)	Relevant List
Category 2	Dodd-Frank Act	Section 1502
Category 3	Conflict Areas	Heidelberg Conflict Barometer
Category 4	Known Issues	Market Intelligence
Category 5	No Issues	

It should be noted that the above categorisations are used as guidance and are not definitive or exhaustive.

Performance: Sourcing Changes and Trends

NON-CONFORMANCE ANALYSIS

The following section provides commentary and analysis on the non-conformances (NCs) recorded in the LBMA FY2022 assurance period for gold and silver. A total of 143 NCs were recorded from 91 Assurance Reports as of mid-July 2023.

In previous years, LBMA has reported the NCs according to type of metal (silver or gold) and against the five steps of the OECD Due Diligence Framework. This year, we made the editorial decision to report only the overall number (at the time of publication) and the relevant OECD Step.

We did this to improve the accuracy of the numbers we publicly report and the conclusions that can be drawn from the data. GDL Refiners can be accredited to either one or both metals, and any NCs identified in the course of an annual assurance assessment are tied to the Five Steps and are a reflection of the robustness of a company’s management systems. Calculating NCs for Refiners that process either gold or silver is a straightforward process; however, in the instance of a Refiner that is listed for both metals, there is no provision to identify how a non-conformance relates to a particular metal. In calculating this year’s NCs, we are reorienting the emphasis to be on a Refiner’s management systems – not the metals – that they process.

Assurance Reports received in 2023 also represent the first year of Refiners’ performance being measured against the requirements outlined in Responsible Gold Guidance version 9 (RGG v9). Typically, with the introduction of a new iteration of the RGG, there is a spike in NCs as Refiners’ updated management systems are tested against the new standard. By breaking down the NCs according to OECD Step, the figures offer a more useful way to identify areas of common weaknesses and to guide LBMA in tailoring our outreach and training of Refiners and Assurance Providers, respectively.

WHAT THE NUMBERS TELL US

The ‘Number of Non-Conformances by OECD Step’ graph shows that a high proportion of the NCs were found in Step 1: Establish Strong Company Management Systems (55 NCs) and Step 2: Identify and assess supply chain risks (65 NCs).

FY2022 saw the first full year of implementation of RGG v9, which brought in a significant number of changes to Steps 1-3.

As of September 2023, the data shows a correlation between the number of changes implemented to a Step and the number of NCs reported against it. This can clearly be seen for Step 2, which saw a significant number of changes from version 8 of the Guidance to version 9.

The changes to the Steps can be further examined in detail on the types (high, medium or low) of risk in each sub-Step as shown in the ‘NC Breakdown by Risk Type’ graph.

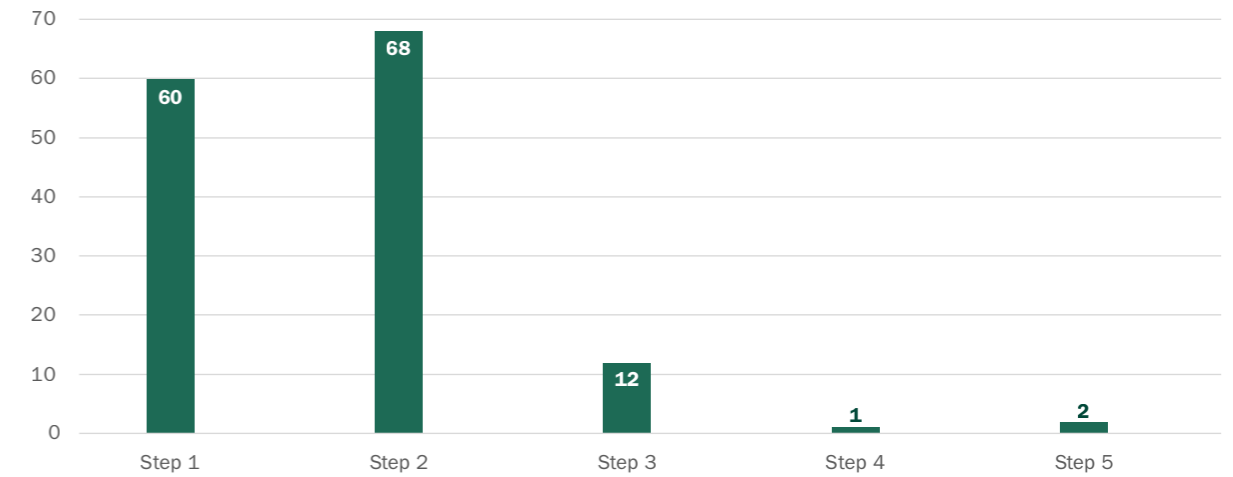
A high number of risks are particularly prevalent for a number of sub-Steps.

Step 1.2 recorded 18 NCs including three high-risk NCs. Changes to Step 1.2 (Management Systems) included payments through official banking channels extended to stipulate no cash transactions and due diligence authority must be assigned to the Board or a Committee.

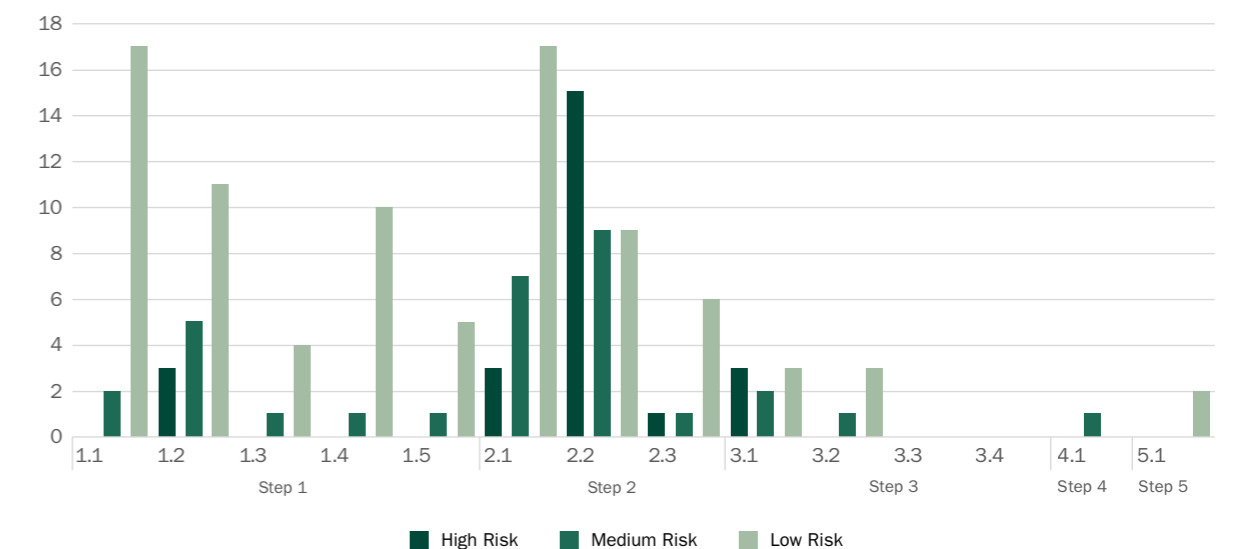
Step 2.1 included changes on risk identification, specifically around an integrated supply chain due diligence process, broken down according to location, supplier and material type risks. This sub-Step recorded a prevalence of 16 low-risk NCs, six medium-risk NCs and three high-risk NCs.

There are a significant number of high-risk NCs (15) in Step 2.2 (Risk Classification), which included changes surrounding zero-tolerance risks, the addition of ESG criteria and better clarification on high-risk criteria – broken down by mined and recycled material and then further defined per location, supplier and type of material risks. This tells us that there was some difficulty in the application of this Step and indicates one area where Refiners need to strengthen their procedures.

NUMBER OF NON-CONFORMANCES BY OECD STEP



NON-CONFORMANCES BY STEP AND RISK LEVEL



Disclosure Showcase: Notable Compliance Reports

In January 2023, LBMA released updated versions of the Third-Party Assurance Guidance (TPAG) and Disclosure Guidance, the documents that support independent Assurance Providers and GDL Refiners, respectively, to meet the reporting requirements expected under the Responsible Sourcing Programme (RSP).

The revised Guidance is fully aligned with RGG v9, against which 2023 assurances are measured. The TPAG provides a lot more detail and clarity to Assurance Providers on the application of the assurance concepts and requirements specific to these types of engagements as well as practical steps to address potential issues that may arise.

All three documents expand the reporting requirements expected of Refiners in their public-facing Compliance Report, issued as part of their annual assurance assessment. By encouraging more transparent and meaningful communication, Refiners have found greater alignment with the Step 5 reporting requirements specified in the OECD Due Diligence Guidance.

While Refiners have until the end of 2023 to fully meet the new disclosure requirements, the 2022 Compliance Reports demonstrate a positive embrace of greater transparency and detail by Refiners.

This is particularly the case for incoming reporting obligations on Refiners to disclose to LBMA sensitive information such as the identities of high-risk suppliers, in line with the transparency requirements outlined in Step 5 of the OECD Guidance.

In addition, it is also worth noting that in accordance with RGG v9 (Step 1.4), suppliers themselves should commit to the Refiner's supply chain policy, or have their own OECD Annex II aligned policy in place, either of which is to be incorporated in the agreement between the supplier and Refiner. All Refiners have been given until the end of 2023 to amend commercial agreements with existing suppliers to fully satisfy this requirement.

Following are highlights of some of the new disclosures made by a selection of Refiners:

CHIMET

At the end of 2021, an issue arose with one of Chimet's Brazilian suppliers, which was accused by the authorities of misrepresenting the origin of illegally mined material. Chimet put in place a robust mitigation plan that was highlighted in last year's Sustainability and Responsible Sourcing Report. One of the key aims of the new disclosure requirements that LBMA introduced last year was to grow Refiners' transparency and detail around the sourcing challenges they may experience. Chimet's Assurance Report outlined the circumstances surrounding the issue and the mitigation steps taken, and confirmed that it had severed its commercial relationship with the supplier.

DAYE NON-FERROUS

In a clear and comprehensive Compliance Report, each of the Steps and sub-Steps of its due diligence framework are clearly defined, including how its supply chain due diligence policy was brought into alignment with RGG v9. In Step 2, for example, the Refiner sets out a KYC checklist for risk identification for its suppliers, including ESG provisions such as mercury use. The Company also applies risk management strategies for all gold and silver sourced indirectly from high-risk intermediate refiners.

SOLAR TECH

SOLAR's Compliance Report emphasises its efforts to mitigate ESG issues and combat climate change. This includes obtaining carbon footprint data for eight key products to serve as improvement for production. The report also sets out clear reporting lines and management positions. Risk identification of potential suppliers is particularly strong, with KYC documents tailored to the profile of suppliers and covering a range factors including details of their supply chain, production capacity, due diligence procedures, and financial, sanctions and UBO checks.

ISHIFUKU

While ESG factors were expanded in RGG v9, Ishifuku was ahead of the curve and updated its supply chain policy to reflect such considerations in 2020. Its Compliance Report provides significant detail on its risk identification process, providing information on supplier, location and material risks. There is also good detail on its risk mitigation measures, including criteria for termination, suspension and continuation of business with suppliers.

Best Practice: Refiner Mitigation

The increased disclosure of information by GDL refiners is not limited to just assurance reports. From time to time, issues arise that require a refiner to respond to public concerns regarding suppliers in their supply chain. While often these internal deliberations are never made public, we would like to showcase one example of how a GDL refiner proactively mitigated and investigated a potential sourcing concern to a successful conclusion.

ASAHI NORTH AMERICA (NGO COMPLAINT AGAINST HONDURAN SUPPLIER)

In February 2023, Asahi North America proactively shared with LBMA an NGO press release and media report alleging human rights violations and corruption by one of its suppliers, a mining company in Honduras.

The allegations claimed that the mining company had acted illegally and against community wishes to move a community cemetery in order to proceed with an open pit mine.

The Refiner immediately engaged with the supplier, reviewed its KYC documents and sought an independent legal review of earlier government approvals the mining company had received

in order to proceed with the project, including documentation outlining the affected community's support for the cemetery relocation.

This review concluded that the mining company had met all legal requirements and had received the necessary social licence from the community to proceed with the project, and that the allegations were without merit.

Asahi North America shared its findings with LBMA, which agreed no further action was needed.

Case Studies: Mitigation and Enforcement

Over the last year, LBMA engaged three Refiners and one Affiliated Member to address either potentially serious sourcing issues or a failure to meet the standards set out in the Responsible Gold Guidance and the LBMA Rules for Members.

EMIRATES GOLD (SUSPENSION)

On 14 July 2023, Emirates Gold, an Affiliated Member based in Dubai, was suspended after a due diligence review.

THE PERTH MINT (IRP)

The Incident Review Process was invoked against The Perth Mint on 9 March 2023, following media allegations about The Perth Mint's historical conduct.

The IRP focused on The Perth Mint's conformance with LBMA requirements, and concerns regarding the refining quality at its assay lab were found to be unwarranted and in keeping with industry practices. As an iterative process, this IRP involved extensive discussions with the Refiner, auditor and market participants.

The IRP found no zero-tolerance non-conformances, and The Perth Mint remained on the Good Delivery List.

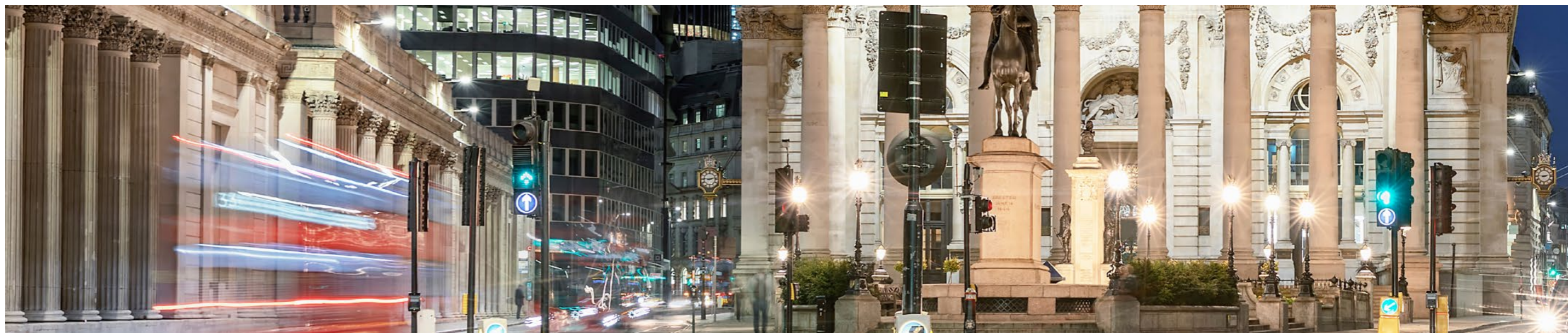
Elements of The Perth Mint's management systems continue to be strengthened through its remediation plan.

HINDUSTAN ZINC (SUSPENSION)

Hindustan Zinc Ltd was suspended from the LBMA Good Delivery List on 18 July 2022 for failing to meet the requirements of the Responsible Sourcing Programme.

The Refiner was reinstated to the GDL on 4 October 2022, following the satisfactory submission of its 2021 annual Assurance Reports.

All silver refined during the suspension is considered compliant with the GDL Rules and, therefore, is Good Delivery.



06

2022 Auditor Review and Update

Safeguarding Auditor Quality: Oversight and Training

A critical measurement of a Refiner's compliance with the Responsible Sourcing Programme is its annual Assurance Reports.

Undertaken by a select number of firms approved by LBMA, these assurances examine and stress test a Refiner's management systems and controls to ensure they conform with the requirements set out in the Responsible Gold Guidance.

For LBMA, the quality of our assurance scheme is only as good as those implementing it. For this reason, LBMA places a significant emphasis on safeguarding the independence, integrity and professional training of recognised Assurance Providers.

As previously described, LBMA has always used a multi-factor verification approach that considers a broad range of factors before achieving comfort with the assurance deliverables. This verification process – first by the Responsible Sourcing team, then by the Compliance Panel – provides a crucial layer of scrutiny to any possible failings in the assurance system, and ensures that no assurance engagements are approved until full comfort with the rigour and findings of the Approved Service Providers (ASPs) has been found.

LBMA has significantly advanced the oversight and quality control processes governing Assurance Providers and the vital role they play in validating Refiners' adherence to the RGG. The steps LBMA has taken include:

- **Enhanced training requirements:** Assurance Providers are required to undergo LBMA's annual mandatory training, totalling six hours, followed by an exam for which they must receive a mark of 70% or higher. In 2022, nine individuals who did not pass the test were removed from the Approved Service Provider List.
- **Digging deeper with shadow audits:** As part of the 2023 assurance process, LBMA staff shadowed six audits of GDL Refiners to observe how Assurance Providers carry

out their work and to better understand how Refiners apply internal controls and due diligence practices into their operations. First-hand observations like this not only expose staff to the diversity of supply chains and the inner workings of Refiners but also provide LBMA with an additional layer of oversight that Assurance Providers satisfactorily challenge and examine Refiners in their implementation of RGG requirements. Going forward, LBMA commits to undertaking shadow audits as part of its focus on quality control. This represents a significant and unprecedented commitment of time and resources to the continual improvement of standards and their universal implementation by Assurance Providers.

- **Applying oversight measures to underperforming firms and Assurance Providers:** Only Assurance Providers who appear on LBMA's Approved Service Provider (ASP) List are authorised to undertake third-party assurance engagement reviews under the RGG. This ASP List is maintained and updated regularly to ensure the expertise and independence of the ASP remains sufficient. Firms and individuals that do not meet LBMA expectations can be subject to a range of measures, ranging from the imposition of remedial work plans, removal from the ASP List or curtailing the geographical remit where a firm may perform LBMA assurances. In 2022, two firms were impacted by the latter two measures.
- **Revised application criteria for prospective ASPs:** To join the ASP List, firms must complete LBMA's application form, which requires applicants to demonstrate, among other things, their independence and appropriate

capacity to undertake assurances for clients as large as a GDL Refiner. The firms' individual Assurance Providers must also provide evidence of their personal competencies and subject matter expertise. In 2022, a new requirement was introduced requiring all new Assurance Providers to be ISAE 3000 certified. The change seeks to harmonise auditor qualifications and familiarity with the standard that underpins the RGG.

- **Collaboration with the other industry assurance programmes:** In the first half of 2023, LBMA participated in two meetings of industry partners, convened by the OECD, to consider ways to improve the knowledge and performance of Assurance Providers. Based on these discussions, LBMA, the Responsible Mineral Initiative (RMI) and CopperMark agreed to hold a joint training session in 2024 that will focus on growing the soft skills of Assurance Providers. Similar trainings with other industry schemes for which Assurance Providers could receive professional development credits through standards bodies such as APSCA are possible once agreement is found on the service provider, funding and curriculum.
- **Introduced supporting guidance documents:** In addition to publishing a much-expanded Third-Party Assurance Guidance in January 2023 that supports Assurance Providers to meet the new disclosure requirements introduced in RGG v9, LBMA will issue an Assurance Providers Toolkit before the end of 2023 that provides a list of the minimum key questions Assurance Providers should consider during an assurance and provides additional guidance on when and how to seek additional clarity and comfort from Refiners.

07

Country of Origin Data for 2021

The Country of Origin (CoO) data grants LBMA assured clarity regarding the origin, form and volume of the feedstock that Good Delivery List (GDL) Refiners acquire.

This data underscores the credibility of LBMA's Responsible Sourcing Programme, providing a vivid insight into the global dynamics of the gold and silver movement.

A standout narrative from the 2021 data is the remarkable surge in Artisanal and Small-scale Mining (ASM) material. Specifically, ASM gold saw a dramatic ascent of 312%, from 16 to 66 tonnes. This means ASM material now accounts for almost 2% of GDL production (previously this was less than 1%). Approximately 32 tonnes of this notable increase could be attributed to a heightened emphasis on accurately reporting ASM material driven by RGG v9. There is still work to be done as ASM gold accounts for 20% of global mined material and GDL Refiners only processed a mere 9% of this global 20% in 2021, even with the significant increase.

With four years of data at our disposal, the importance of advocating for ASM in steering the course of sustainability and responsible sourcing becomes unambiguously clear. Furthermore, ASM silver sourcing did not lag, marking a substantial 440% growth, from 2.5 to 13.7 tonnes.

Conversely, gold from LSM (Large-Scale Mining) saw a 12% contraction, and Recycled Gold declined by 7%. The shadow of the pandemic unquestionably lingered over the precious metals industry in 2021. Moreover, it is pivotal to highlight that Russia is conspicuously absent as a destination in this year's report. Though six Russian Good Delivery Refiners were present in 2021, they were suspended due to sanctions before their assurance, impacting data submission.

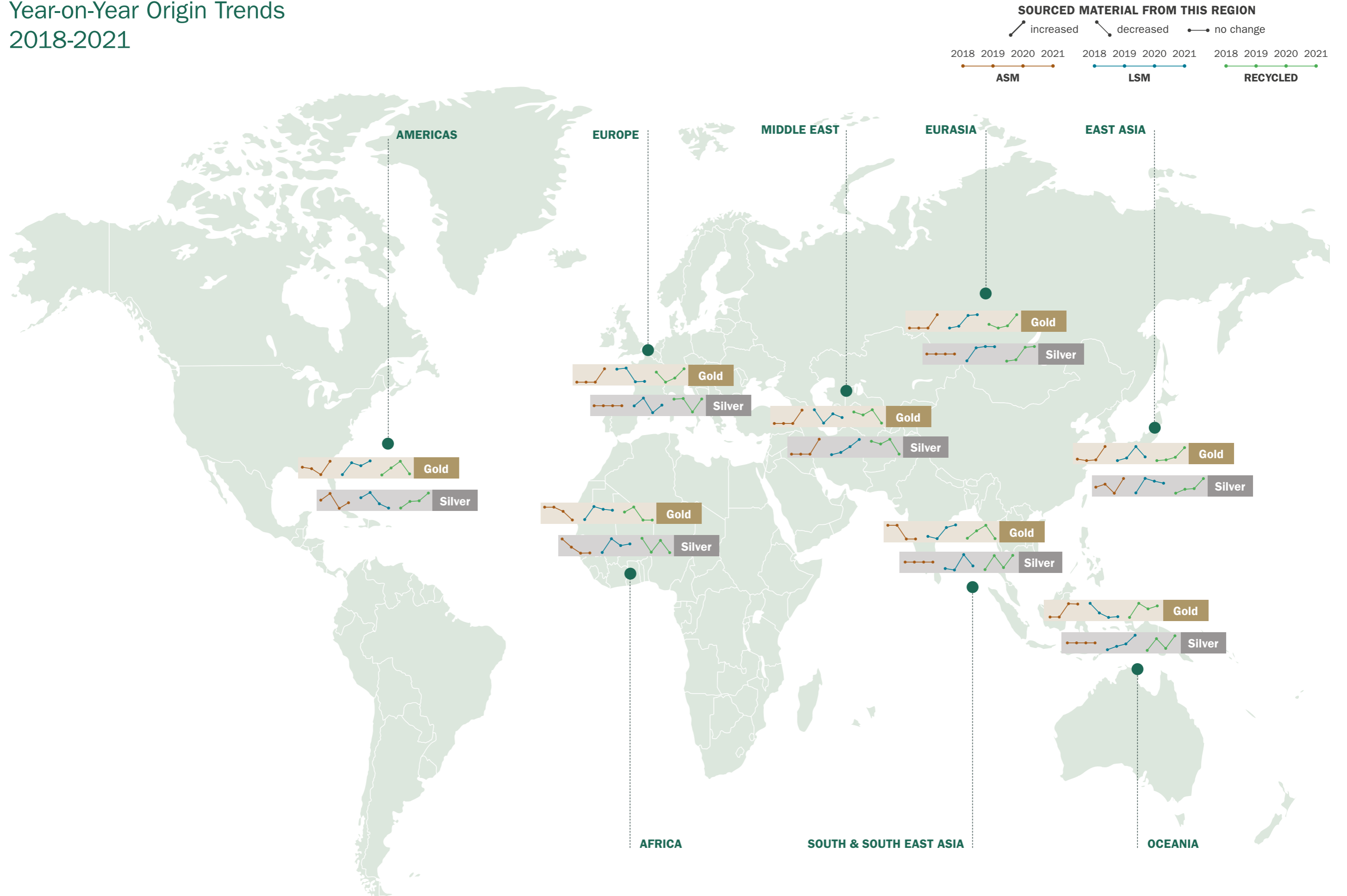
To provide context, in 2020, Russian GDL Refiners accounted for 6% of the total material sourced by Good Delivery Refiners.

Mined silver sourcing mirrored gold's trajectory, but recycled silver markedly diverged, witnessing a robust 33% growth year-on-year, amounting to 12,982 tonnes, most likely due to the uplift in the silver price in 2021 versus 2020. When gauged against 2019 and 2020, LSM-sourced silver continued its downward trend, decreasing by 9% to 15,749 tonnes. But in a similar vein as above, in 2020, Russian GDL Refiners constituted 3% of the material sourced by Good Delivery Refiners, contributing to the observed decrease in the 2021 data.

The publication of this data exemplifies LBMA's unwavering dedication to transparency and disclosure.

Metals Focus has prepared a report analysing LBMA's Country of Origin data against its independent research. This report delves into the disparities and similarities in the data and discusses the methodologies applied. [You can read the full report here.](#)

Year-on-Year Origin Trends 2018-2021



Gold Flow Transparency



ASM



LSM



RECYCLED

The smaller icons represent countries that refined less than 200kg. The unit of measure for data in this table is kgs.

Refinery Location

Place of Origin

	CHINA	GERMANY	JAPAN	SWITZERLAND	ASIA & AUSTRALIA	EUROPE & AFRICA	AMERICAS
AFRICA		 197.40  87.00	 6,382.00	 172,027.23  197.75	 1.00  57,067.56  7,463.13	 208,137.12  5,946.75	 92.20  39.00
AMERICAS	 70,710.96  370.00	 1.16  129.90  2,192.49	 7,271.65  128,412.56  11,224.12	 9,859.42  183,182.75  51,164.35	 3,184.00  33,537.57  10,629.19	 187.47  25,153.21  14,689.12	 3,959.36  361,170.72  87,162.37
EAST ASIA	 28,813.00  242,946.82  578,940.17	 27.89	 5,881.04  294,087.41	 8,250.00  10,531.72  42,883.80	 155.00  30,743.58	 36.48  393.51	 15,863.50
EURASIA		 41.82	 16.00	 4,407.46  3,642.53	 47.90  173,476.88  25,687.65	 74.89  0.64	
EUROPE	 5,586.81	 694.10  86,005.42	 264.00  2,905.01	 78.00  8,826.35  963,680.55	 1,931.00  22,333.51	 11,306.84  194,566.39	 24.47
MIDDLE EAST	 163.00	 5.65	 12,249.00	 7,096.28  142,385.08	 1,648.16  25,979.10  119,399.64	 51.63  21,615.17	
OCEANIA	 9,257.03  31.00	 76.38	 10,252.09  35.33	 3,974.04  17,326.35	 1,344.76  281,389.26  13,992.00	 1,485.99  132.11  368.23	 2,655.40
SOUTH & SOUTH EAST ASIA	 17,587.00  16,918.26	 404.90	 22,883.09  1,991.30	 9,753.44  34,195.41	 56,020.46  44,237.69	 9.04  250.89	 145.70

Silver Flow Transparency



ASM



LSM



RECYCLED

The smaller icons represent countries that refined less than 200kg.
The unit of measure for data in this table is kgs.

Refinery Location

Place of Origin

	CANADA	CHINA	GERMANY	JAPAN	SWITZERLAND	ASIA & AUSTRALIA	EUROPE & AFRICA	AMERICAS
AFRICA	 6,445.61	 13,850.70	  356.64 2.75			  98,492.30 857.00	  8,050.06 1,200.79	  49,160.02 22,333.35
AMERICAS	  584,182.67 405,048.19	   787.65 2,695,807.42 11,945.00	  48,257.84 246,961.90	   844.90 447,354.48 15,412.18	   7,271.65 671,658.10 62,695.24	  328,440.55 201,770.77	  473,284.82 225,252.99	   2,605.00 2,172,862.05 602,476.49
EAST ASIA		  3,142,236.80 1,483,129.01	 13,999.05	   2,230.00 124,439.74 1,770,705.95	  2,113.00 762,116.25	  10,030.69 1,063,451.01	  17,679.43 511,235.41	
EURASIA		 11,503.21	 3,575.37	 1,719.00	  4,776.50 3,275.21	  1,176,093.76 70,755.16	   10,924.74 6.83	 316.00
EUROPE	 491.60	  72,920.16 1,514.00	 2,419,011.30	  68,624.87 48,377.89	  5,912.80 250,568.01	  50,164.28 258,114.56	  2,090,107.39 995,710.24	
MIDDLE EAST	 12,249.00	 51,768.82	 231.84	  2.00 776.00	  1,620.30 5,618.06	  21,223.09 48,739.78	  4,395.26 53,979.49	
OCEANIA	 22,786.55	  200,813.99 144,919.05	 588.69	  99,155.58 320.06	 20,032.58	  469,187.70 278,427.97	  207,020.93 2,888.28	
SOUTH & SOUTH EAST ASIA		  115,887.28 33,282.00	 19,321.31	  115,063.92 9,110.36	  14,305.60 50,475.76	  21,987.11 842,603.55	  5,403.97 17,256.51	

Gold and Silver 2020 vs 2021



Refinery Location

Place of Origin

Gold

Silver

	CANADA	CHINA	GERMANY	JAPAN	SWITZERLAND	ASIA & AUSTRALIA	EUROPE & AFRICA	AMERICAS
AFRICA		▼ -100% ▼ -100%	▼ -15% ▲ >100%	NEW FLOW	▼ -100% ▼ -3% ▼ -98%	NEW FLOW ▲ 36% ▲ >100%	▼ -8% ▲ 25%	▼ -96% ▼ -71%
EAST ASIA		NEW FLOW ▼ -23% ▲ 5%	▼ -44%	▼ -1% ▲ 41%	▲ 15% ▲ 28% ▼ -72%	▼ -1% ▲ >100%	NEW FLOW ▼ -35%	▲ >100%
EURASIA			▲ 39%	NEW FLOW	▼ -40% ▼ -63%	NEW FLOW ▲ 6% ▲ >100%	▲ >100% ▼ -99%	
MIDDLE EAST		▼ -100% ▼ -81%	▼ -24%	NEW FLOW	▲ 7% ▼ -32%	NEW FLOW ▼ -26% ▲ 1%	NEW FLOW ▼ -74%	▼ -100%
SOUTH & SOUTH EAST ASIA		▼ -46% ▼ -54%	▼ -33%	▲ >100% ▲ 2%	▲ 31% ▼ -81%	▲ 10% ▼ -77%	NEW FLOW ▼ -49%	NEW FLOW
EUROPE		▼ -67%	▼ -6%	▲ 4% ▲ >100%	NEW FLOW ▲ 14% ▲ 51%	NEW FLOW ▲ 56%	▲ 54% ▲ 12%	NEW FLOW ▼ -100%
AMERICAS		▲ >100% ▼ -99%	NEW FLOW ▼ -64% ▲ 11%	NEW FLOW ▲ >100% NEW FLOW	▲ >100% ▲ 7% ▲ >100%	NEW FLOW ▲ 11% ▲ >100%	▼ -65% ▲ 94% ▼ -14%	NEW FLOW ▼ -28% ▼ -52%
OCEANIA		▲ 30% ▼ -52%	▲ 26%	▲ >100% NEW FLOW	▼ -60% ▼ -9%	▼ -22% ▼ -1% ▲ >100%	▲ 20% ▼ -78% ▲ >100%	▲ 30%
AFRICA	▲ >100% ▼ -100%	▼ -22% ▼ -100%	▼ -47% ▲ >100%		▲ 24% ▼ -21%	▼ -59% NEW FLOW	▲ 1% ▼ -21%	
EAST ASIA		▼ -9% ▲ 13%	▲ 64%	NEW FLOW ▲ >100% ▼ -4%	▼ -0.3% ▲ >100%	▲ 57% ▲ >100%	NEW FLOW ▲ 46%	
EURASIA		▼ -25% ▼ -100%	▲ >100%	NEW FLOW	▼ -0.03% ▲ 2%	▼ -1% ▲ 12%	▲ >100% ▼ -100%	NEW FLOW
MIDDLE EAST	▲ >100%	▲ 38%	▼ -90%	NEW FLOW ▼ -18%	▼ -40% ▼ -73%	▲ 32% ▼ -58%	▲ >100% ▲ 42%	
SOUTH & SOUTH EAST ASIA		▼ -13% ▲ 76%	▲ 3%	▲ >100% ▲ >100%	▲ >100% ▲ >100%	▼ -97% ▲ >100%	▲ 22% ▲ >100%	
EUROPE	NEW FLOW	▼ -43% ▼ -52%	▼ -100% ▲ 23%	▲ 16% ▲ >100%	▲ >100% ▲ 16%	▲ >100% ▲ 69%	▲ 17% ▼ -6%	▼ -100%
AMERICAS	▼ -43% ▲ 61%	NEW FLOW ▲ 21% ▲ >100%	▼ -21% ▲ 98%	NEW FLOW ▲ >100% ▲ 74%	NEW FLOW ▼ -10% ▲ >100%	▲ 3% NEW FLOW	▲ 28% ▼ -36%	NEW FLOW ▼ -38% ▼ -11%
OCEANIA	▲ >100% ▼ -100%	▲ 38% ▲ >100%	▼ -99%	▲ >100% ▲ >100%	▼ -100% NEW FLOW	▲ >100% NEW FLOW	▲ 25% ▼ -44%	

08

The Responsible Sourcing Ecosystem and **LBMA** Partnerships

Building leverage across the value chain and with key actors in the responsible sourcing ecosystem has always been an ongoing focus for LBMA. Although LBMA administers the Good Delivery system, ultimately, the responsibility to ensure gold/silver is ethically sourced is shared across the entire industry and with the authorities in relevant jurisdictions. The LBMA Programme is therefore part of a much wider ecosystem which has four key components: national authorities; downstream and upstream actors; civil society; and the industry programmes.

There has been strong engagement with national authorities this year through the Intentional Bullion Centres work. We continue to improve our understanding of what other jurisdictions are doing to support the responsible sourcing agenda, as well as provide updates on the progress we are making.

Close collaboration and coordination with key industry partners and stakeholders is critical to nurturing trust and making progress toward the shared goal of building more sustainable and responsible business practices and outcomes in the global precious metals market.

In 2022, these partnerships helped LBMA advance many of the activities and objectives covered in this report. In addition to the multi-stakeholder effort witnessed in LBMA's ASM Task Force, we outline below a few of the more significant collaborations of the last year.



WORLD GOLD COUNCIL (WGC)

The WGC is a co-convenor with LBMA on the Gold Bar Initiative (GBI), the Sustainability Declaration, and the biannual Sustainability and Responsible Sourcing Summit.

The WGC is also an invaluable partner in our efforts to draft an ASM sourcing framework, and representatives of WGC participate in the ASM Task Force.

At the 2022 OECD Forum on Responsible Minerals, LBMA and the WGC co-hosted a panel discussion around how to build cooperation and co-existence between large-scale miners and ASM actors operating close to industrial concessions.



LONDON METAL EXCHANGE (LME)

In late 2022, the Responsible Gold Guidance (RGG) was conditionally approved by the LME as a Track A standard under its Policy on Responsible Sourcing of Listed Brands. Effective 1 January 2023, the cross-recognition agreement serves to reduce assurance duplication for GDL Refiners that process both precious and base metals. Participating Refiners must meet the requirements specified in the 'multi-site assurance and standards equivalence' section of the RGG.



UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)

LBMA was pleased to partner with the United Nations Environment Programme (UNEP) and Planet Gold in Guinea and Cote d'Ivoire by providing in-kind contributions to their efforts to reduce the use of mercury and support the holistic formalisation of the ASM sector.



ALIGNED ASSURANCE PROGRAMMES

With growing public and regulatory scrutiny of the assurance schemes that validate the supply chains of conflict-affected metals, LBMA joined industry partners to consider ways to improve the training and knowledge base of Assurance Providers.

In early 2023, LBMA attended two meetings convened by the OECD and the LME to consider common limitations to assurances and how assurance programmes could collaborate to address them.

As each industry scheme has different supply chain challenges and sourcing requirements, it was agreed that a one-size-fits-all model would not help. An immediate outcome of these meetings was for LBMA to partner with the Responsible Mineral Initiative (RMI) and CopperMark to plan a joint training in early 2024 for Assurance Providers – many of whom work across the three industry schemes – to build the 'soft skills' required to better identify and respond to common sourcing issues.

09

LBMA Key Strategic Initiative: ASM – Breaking New Ground

Since the advent of international efforts to create more responsible sourcing practices and break the link between high-value minerals and deadly conflicts, a lot of lip service has been paid to ensuring that the most vulnerable in the affected mineral supply chains do not carry the oversized brunt of these efforts.

Despite the best of intentions and significant financial and human investments by donor governments, policy makers and technical experts, the reality is that those working within the Artisanal and Small-scale Mining (ASM) sector – including an estimated 40 million gold miners – remain largely cut out of legal markets, criminalised or ignored by their governments, and forced to operate in highly exploitative, legally precarious and unsafe conditions.

This legal, financial and market exclusion becomes a self-fulfilling, and repeating, vortex from which ASM miners can never escape. With limited to no alternatives, they rely on environmentally unsustainable practices, and sell their production to buyers in the illicit market who make no due diligence demands and smuggle their gold to trading hubs with less onerous regulations. Once there, this material is recycled into other feedstock, blurring its potentially criminal origins and posing a governance challenge to GDL Refiners that source from these countries.

The ASM Task Force Led by LBMA

A critical part of the ASM initiative is the role served by the Task Force. First convened in May 2023, its members represent some of the most knowledgeable and experienced minds in the ASM sector.

Some members have created innovative model ASM supply chains in conflict zones, others have formalised ASM miners or navigated often contested co-existence arrangements with ASM miners close to industrial concessions. LBMA is extremely lucky to count on this voluntary body to support us in identifying and defining several

foundational elements over the course of the Initiative, including:

- the credible, yet attainable, due diligence criteria that will underpin a new sourcing framework;
- incentives that may influence behaviour change;
- potential unintended consequences;
- how the standards in the framework could be progressively improved over time;
- how and who to engage with in identified target countries.

LBMA Outreach

Responses to the ASM Initiative have been positive. LBMA executive members attended the Mining Indaba in Cape Town, the Prospectors and Developers Association of Canada's annual conference in Toronto, and the OECD Forum on Responsible Minerals in Paris to explain the objectives of the Initiative and seek the support of targeted governments and partners.

At the OECD Forum, LBMA CEO Ruth Crowell met with the Minister of Mines of Ghana and the Deputy Governor of the Central Bank of Ghana to exchange ideas on how their plans to formalise the sector and suppress the illicit trade could be supported by our Initiative.

Since last October's public launch of the Feasibility Study, several legitimate intermediate refiners (IRs) and aggregators

in both Latin America and Africa have approached LBMA to learn more about how they could be recognised under the Initiative. The assurance scheme run by our industry partner, the Responsible Minerals Initiative (RMI), offers financial support for the costs of RMI's OECD-aligned RMAP assessments that IRs and aggregators are required to complete prior to achieving RMAP conformance.

Once conformant to RMI's RMAP, these IRs and aggregators should be recognised by GDL Refiners through a cross-recognition agreement between our respective organisations. LBMA and RMI are currently reviewing the cross-recognition document, with a view to strengthening the language and offering more explicit endorsement to ASM material coming through RMI-approved intermediate refiners and aggregators.

Looking Ahead

By year end, LBMA intends to have a revised ASM Toolkit in place for GDL Refiners to begin using in 2024 and a Sourcing Framework for consultation.

The Framework will provide guidance to GDL Refiners and their suppliers on credible, yet attainable, ASM-specific due diligence and sourcing requirements that satisfy Refiners' compliance efforts yet also remove current market barriers that currently prevent ASM material directly entering the legal global supply chain.

As LBMA considers the 10th revision of the Responsible Gold Guidance, a critical element of that process will be to hardwire the ASM framework and toolkit into the new edition.

Changing Perceptions

LBMA is under no illusions that our ambitions may well be dented along the way. Changing the entrenched sourcing practices and business networks of miners, as well as public and industry perceptions of the sector, will take time.

ASM undoubtedly has a PR problem – largely due to its close proximity to a host of serious human rights and environmental threats. But the sector is not homogenous.

The complex and dysfunctional scenario in the DRC is not representative of the entire sector. Our initiative aims to focus efforts on the 'low hanging fruit' – those countries that are demonstrating promise – and perhaps present an alternative to the current status quo that can be replicated elsewhere.

Once the ASM sourcing and policy framework is in place, efforts will turn to growing a public awareness and embrace of progressivity – the system by which standards can be incrementally elevated over time. This will involve the whole value chain – including media and campaign NGOs – accepting a certain level of imperfection as the cost of improved sourcing practices and behaviours.

LBMA will work with GDL Refiners to reassure them they will not be abandoned at the first sign of trouble. In turn, Refiners will be encouraged to accept risk mitigation, rather than avoidance, as a critical contribution to their support of responsible supply chains and the broader governance of the global gold sector.



10

The Changing Landscape: Addressing New Sourcing Challenges

A given assumption of a credible responsible sourcing system is that change is a constant variable. While certain sourcing threats or conflict-affected and high-risk areas (CAHRAs) will remain ever-present – ASM gold funding militia groups in Eastern Congo, for example – new vulnerabilities can emerge at any time.

Established suppliers or seemingly low-risk countries can suddenly require enhanced due diligence measures or remediation plans as new threats or information emerges or geopolitical dynamics shift.

Over the last year, LBMA and GDL Refiners have responded to a range of new sourcing challenges. While some of these can be criminal in nature and come to light through

investigative reporting or enforcement action by authorities, others come to the fore thanks to changing public norms and expectations of responsibly sourced supply chains. Others still can emerge due to legislative or regulatory changes in key trading or consumer markets.

With the growth of the Responsible Sourcing team, LBMA uses these vulnerabilities not only to enforce our sourcing standards, but as teachable moments for both Refiners and Approved Service Providers (ASPs), both outside and in the lead-up to the annual assurance period.

Cases like those highlighted here are also incorporated into LBMA's annual training for ASPs to grow their awareness of nascent threats and when to apply greater scrutiny to Refiners with potentially exposed supply chains.

Brazil

Illegally-mined gold represents the second most profitable environmental crime after logging. Brazilian authorities estimate that up to 30% of exports could be improperly sourced from wildcat miners illegally operating in protected environmental and cultural areas in the Amazon.

One contributing factor behind this phenomenon is Law 12844 (2013), commonly known as the 'Good Faith Law', which allows gold miners and traders to provide written self-declarations of origin and conformance with legal requirements at the time they sell their production to Brazilian financial entities known as DTVMs. There is currently no way to reconcile these self-declarations against electronic mining licences or the cadastre.

Compounding matters is Brazil's shared border with Suriname and Venezuela, both of which have sizeable illicit gold markets and weak government oversight. The OECD and NGOs have raised credible concerns about inflows of material from these two countries into Brazil – a sourcing burden made more complex due to multiple international economic sanctions imposed on Venezuela due to governance and human rights concerns.

Following the 2023 change in political administration, the new government adopted a dual-track approach to aggressively remove miners from illegal mine sites in the Amazon and overhaul sections of the law that currently thwart traceability and due diligence expected of the gold supply chain.

LBMA RESPONSE

When this issue came to LBMA's attention, the Responsible Sourcing team engaged all GDL Refiners with Brazilian material in their Country of Origin reports to inform them of these sourcing vulnerabilities and advise them to apply enhanced due diligence on their supply chains.

The issue was further highlighted in the monthly Responsible Sourcing Newsletter to reinforce awareness among Refiners and Approved Service Providers (ASPs). In one instance, a GDL Refiner had to sever a long-standing relationship with a Brazilian supplier, after the latter was charged by authorities with misrepresenting the origin of some of its production (see [Case Studies in the 2022 Sustainability and Responsible Sourcing Report](#)).

In monitoring this issue, LBMA liaised directly with Brazilian NGOs and enforcement authorities to better understand their efforts to close this loophole and improve traceability requirements. The Brazilian National Police have also incorporated the Geoforensic Passport, a scientific tool developed by Metalor, a Swiss GDL Refiner, to validate the origin of doré exports against a complex signature profile of each mined gold supplier.

Russia

Prior to the February 2022 invasion of Ukraine, Russia accounted for approximately 10% of the global total of mined production annually and had six GDL Refiners.

Since the war began, G7 countries have issued multiple rounds of economic sanctions against Russian entities, including several large mining companies. While none of the sanctions targeted GDL Refiners inside Russia, LBMA nevertheless took the step in March 2022 of suspending all Russian Refiners on the GDL in the interests of market stability.

Complying with all relevant economic and trade sanctions is an obligation for all LBMA Members and Refiners, and any breach of such measures can have significant commercial impacts, including removal from the GDL.

In addition to the Ukraine War, Refiners have also had to consider the operations of the Kremlin-backed Wagner Group, a mercenary group active in several gold-rich African countries including Central African Republic, Mali and Sudan. Several Western governments designated Wagner a terrorist organisation in 2022 and added it to their sanctions regimes. Wagner is believed to profit by as much as \$1 billion annually from its role in African conflicts – funnelling the revenues into its operations in Ukraine.

LBMA RESPONSE

While it is the responsibility of each Refiner – especially those with historical relationships with the Russian precious metals market – to assess their potential legal jeopardy and undertake enhanced due diligence of their supply chains, LBMA has supported GDL Refiners by:

- Informing them of each new gold and silver sanctions announcement;
- Establishing a watchlist to monitor for any adverse news or trade anomalies that could signify a breach of sanctions;
- Speaking with Assurance Providers that work with Russian-linked entities in advance of their audits to ensure close attention is given to scrutinising sanctions compliance.

During the 2023 assurance assessment, LBMA staff sought full comfort that no Refiner took receipt of or processed Russian material after 7 March 2022, when economic measures were first announced.

Throughout the conflict, LBMA has maintained an open dialogue with several governments with a view to understanding and complying with the ever-expanding economic measures and listed entities.

The threat of Wagner material entering the legal supply chain and the iterative economic measures against Russian entities are communicated to Refiners by email and through the monthly Responsible Sourcing Newsletter.

Forced Labour

Concerns from downstream partners in key consumer markets regarding the potential use of forced labour in certain areas of China led LBMA to introduce additional assurance requirements on GDL Refiners operating in that country.

As part of their 2022 Assurance Reports, Refiners were required to provide an independently audited statement verifying the absence of forced labour in their supply chain and physical operations. Refiners were obligated to publish these statements on their websites.

While the issue of forced labour has always been covered in the RGG and is considered a zero-tolerance risk under Annex II of the OECD Guidance, LBMA took this additional step to provide the necessary comfort to the market and avert potential impacts to existing commercial relationships.

Amplified concerns about forced labour have also led the European Commission to introduce draft legislation to ban all products made by forced labour from EU markets. LBMA continues to monitor legislative developments that could potentially impact the market.

11

Programme Governance

Programme Management

Over the last year, LBMA has prioritised growing the size, experience and skill set of our team so that we can broaden the coverage of sourcing and sustainability issues, as well as be more responsive to the needs and inquiries of Refiners, Approved Service Providers (ASPs) and stakeholders with whom we work.

In meeting this objective, today, the Responsible Sourcing team (RS team) comprises a core Responsible Sourcing team of three supported by the Policy Manager, the Compliance Officer and the Senior Compliance Associate.

The growth in LBMA's bench strength is largely attributable to the constantly expanding regulatory and sustainability demands placed on the global precious metals sector, and a need to refresh and codify internal policies and practices that strengthen the overall governance and effectiveness of the Programme.

The core team is the first point of contact for all responsible sourcing queries, dealing directly with stakeholders, and also Refiners and Assurance Providers, to ensure a consistent application of the Responsible Sourcing Programme (RSP).

While the team has the primary responsibility to assess Refiner's annual Assurance Reports, its remit is much wider. Routine tasks and activities include:

- Managing the ASP List, by ensuring that Assurance Providers adhere to the TPAG and maintaining regular contact with the Assurance Providers. The team has the responsibility to escalate any issues with the ASP List to the Compliance Panel;
- Planning the annual training of Assurance Providers;
- Liaising with ASPs, industry partners, NGOs and governments to support joint efforts that improve sourcing policies and practices;
- Responding to concerns regarding Refiner's sourcing practices raised in public reports or from whistle-blowers;
- Undertaking preliminary inquiries when serious sourcing breaches by Refiners are brought to our attention and contributing to the Incident Review Process if warranted.

The Responsible Sourcing team is here to support Refiners and LBMA Members understand the expected best practices by which to responsibly source the metals through their respective supply chains. The RS team ultimately reports to the General Counsel, who has responsibility for the Sustainability and Responsible Sourcing Strategy.



Responsible Sourcing Compliance Panel: Supporting the Programme Review

PURPOSE

The Compliance Panel was established to support the Assurance Review process. Its purpose is to monitor adherence to the Programme, to review zero-tolerance non-compliance immediately, as well as risks and incidents emanating from Refiners' annual assurances, and to address any concerns and issues. In addition, the Compliance Panel also reviews the performance of the Assurance Providers and ensures that they remain suitable as Approved Service Providers.

When an incident has been raised, the Compliance Panel may consult the Physical Committee, which will provide industry intelligence for guidance. The Compliance Panel will also determine when to raise an Incident Review Process (IRP), and a full comprehensive report will be submitted to LBMA's independent Non-Executive Directors and the Executive Directors, to review and make a final determination.

INCIDENT REVIEW PROCESS

The Compliance Panel is also responsible for reviewing the IRP, which is led by the Compliance Officer and overseen by the General Counsel. The Compliance Panel determines whether a particular set of facts warrants an IRP. Once the IRP has been initiated, the Compliance Panel supports the review process.

It is responsible for reviewing the relevant information being provided, raising questions on process and information obtained, as well as providing the final recommendation for the Sub-Board Group to consider. The Sub-Board Group takes the final decision on the outcome of the IRP. See below for more information on decision-making. Refer to page 29 for further details about the IRP.

COMPLIANCE PANEL: TERMS OF REFERENCE

The Compliance Panel has authority to determine the outcome of the high-risk Assurance Reports only. The decision must be unanimous. If the decision is unanimous, then there is no further escalation. If the decision is based on a majority, then this will be escalated to the Executive Committee and ultimately to the Sub-Board Group, which has the final right to decide the outcome.

The Compliance Panel convenes every four to six weeks, depending on the agenda. It is composed of the CEO, General Legal Counsel, Chief Technical Officer, Head of Responsible Sourcing, Head of the Good Delivery, and Senior Compliance Associate.

Several internal committees and groups serve to apply a layered and reinforcing level of governance oversight to the Responsible Sourcing Programme. The various groups and their roles support the credibility, robustness and evolution of the Programme.

LBMA Physical Committee: Guiding the LBMA Executive

The Physical Committee comprises representatives from the physical services delivered within the precious metals market, which include the Chair of the Vault Managers Group. The representatives from the Bank of England are appointed as independent observers of the Committee's work.

The Committee is primarily responsible for monitoring, developing and enforcing the GDL. With an emphasis on continuous improvement and transparency, the Committee works to improve disclosures, scrutiny and risk management of both LBMA and the wider market. The Committee aims to ensure that the integrity, quality and standards set by the GDL are maintained, which involves collaboration with the LBMA Executive on all matters relating to the Programme and Refiners' compliance.

LBMA Board: Setting and Reviewing Strategy

The LBMA Board is chaired by an independent Non-Executive Director (NED) and comprises two additional independent NEDs, six market representatives and two LBMA Executive Committee members (Chief Executive and General Counsel). The role of the LBMA Board is to set the strategic and business vision for LBMA. The overall aim of the Board is to enhance the governance and achieve the performance of LBMA's short- and long-term objectives in full support of its membership's needs.

The LBMA Executive Committee ultimately oversees the development and implementation of the Responsible Sourcing Programme and Strategy. The Executive Committee ensures that the Programme management and governance remain appropriate.

Sub-Board Group: Decision-making

The ultimate decision to remove a GDL Refiner for Responsible Sourcing failures lies with the Sub-Board Group. Elected members of the Board are not involved in any decision involving Refiners on the Good Delivery List.

The Sub-Board Group is defined in the LBMA Rules for Members as: "The independent members of the Board, which include the independent Non-Executive Directors (NEDs), Chief Executive and the Executive Directors of the Board with the delegated authority to review matters arising in relation to Incidents or Enforcement with regard to members. Any decision by this group is considered final."

Additional Measures that Support the RSP

WHAT IS AN IRP AND HOW DOES IT WORK?

The Incident Review Process (IRP) is an effective tool to address incidents which are brought to LBMA. It also supports the LBMA Rules and Guidance by ensuring that GDL Refiners and Members adhere to our stringent guidelines and requirements.

Escalation to an IRP may come from a variety of sources, such as industry press and civil society, as well as LBMA’s own proactive monitoring achieved through our internal Due Diligence Procedures. LBMA will seek corroboration wherever possible; however, due to the sensitivities involved, LBMA may keep the information received under the process confidential. Overseen by the General Counsel, the process is designed to ensure a thorough and fair review of the Refiner’s and Member’s activities and involves follow-up communications with the ASP, the Refiner or Member and any other stakeholder related to the incident.

Each step within the IRP is a high priority for LBMA. Upon receipt of relevant information, the Compliance Panel reviews whether to instigate the IRP. The Refiner or Member will then be notified of the identified issue before LBMA publicly notifies the market via its website.

LBMA will urge the Refiner or Member to demonstrate transparency on the allegations reported, publicly. LBMA requests the Refiner or Member to disclose the challenges and identified risks, and how those risks have been mitigated, as well as what further action the Refiner is taking. LBMA will also undertake another thorough review of the Refiner’s assurance engagement report, contextualised by the alleged incident. It is an iterative process, particularly in situations where new information is produced, or as the situation escalates or deteriorates.

The outcome of an IRP can involve a Refiner being removed from the GDL or a Member having its Membership revoked. Other outcomes include an independent Assurance Provider developing a Corrective Action Plan (CAP) for the Refiner’s future activities or a special re-assurance of the Refiner’s activities that were originally reviewed.

The 2022 enhancements of the IRP ensure our signature investigative and disciplinary tool remains responsive, effective and current with industry best practices. This includes public reporting when IRPs are announced and concluded, and the outcome of those IRPs. These are published as they occur, as well as in LBMA’s Annual Sustainability and Responsible Sourcing Report.

Special Assurances

A Special Assurance has a very specific focus and helps to provide a second opinion to confirm the GDL Refiner’s compliance with the Responsible Sourcing Programme during the reporting period. It can arise from:

- queries arising from Country of Origin data reported confidentially to LBMA;
- media allegations;
- whistle-blowing;
- part of an Incident Review Process;
- market intelligence.

Under a Special Assurance, LBMA may select another Assurance Provider, who is independent of the original Assurance Provider, or ask the existing Assurance Provider to carry out an assurance engagement with a specific focus.

For example, LBMA requires additional Special Assurances from certain Refiners with respect to specific concerns raised about the sectoral-wide vulnerabilities in their respective countries.

The Incident Review Process (IRP) comprises 11 steps for LBMA to take in response to any incidents or issues that put the credibility of the GDL and wholesale bullion market in doubt.



12

LBMA Outreach in 2022

DATE	EVENT	HOST	LOCATION	REPRESENTATIVE
Feb-22	LBMA Webinars: CEO Strategy Consultation – Members' Town Hall	LBMA	Virtual	Chief Executive
Mar-22	LBMA Sustainability & Responsible Sourcing Summit	LBMA	London	Chief Executive, Executive Board Director, Head of Responsible Sourcing, Chief Technical Officer
	India International Bullion Summit	IBJA	Virtual	Chief Executive
	Nasdaq Trade Talks	Nasdaq	Virtual	Chief Executive
Apr-22	Webinar: Responsible Business Conduct in the context of the Russian invasion of Ukraine	OECD	Virtual	Chief Executive
May-22	15 th OECD Forum on Responsible Mineral Supply Chains	OECD	Virtual	Chief Executive, Executive Board Director, Head of Responsible Sourcing, Chief Technical Officer
	LBMA Webinars: CEO – Members' Town Hall	LBMA	Virtual	Chief Executive
Jun-22	IPMI Responsible Sourcing Session	IPMI	Orlando, Florida, USA	Chief Executive
Jul-22	LBMA Annual General Meeting	LBMA	Virtual	Chief Executive
Aug-22	China Gold Association Summit	CGA	Virtual	Chief Executive
Sep-22	Jewellery Show	Responsible Jewellery Council	London	Chief Technical Officer
	Platinum Week	LPPM	New York	Chief Executive, Executive Board Director, Chief Technical Officer, Head of Responsible Sourcing
	Vienna Gold Summit	Austrian Mint	Vienna	Chief Executive
Oct-22	Invesco Podcast	Invesco	Virtual	Executive Board Director, Chief Technical Officer
	LBMA/LPPM Global Precious Metals Conference 2022	LBMA/LPPM	Lisbon	Chief Executive, Executive Board Director, Chief Technical Officer, Head of Responsible Sourcing
	Basel Gold Day II	Office Pieth	Basel	Executive Board Director
Nov-22	OECD's Global Forum on Environment (GFENV) on Mercury	OCED	Paris	Chief Technical Officer
	The European Chapter of the IPMI: Members – IPMI Annual Conference 2022 (EC-IPMI)	IPMI	Lisbon	Chief Technical Officer
	Swiss Precious Metals Institute Webinar	SPMI	Virtual	Chief Executive

13

Matrices

The unit of measure for data in the following tables is kgs.

The matrices show the gold and silver flows from the Country of Origin to the Country/Region of Destination.

Country of Origin data is by individual countries and type of material.

Country of Destination information is broken down to individual countries when there are four or more Refiners in one country.

LBMA recognises that the published numbers emanate from a large and diverse dataset. We endeavour to ensure accuracy; however, we welcome any corrections or clarifications. The numbers are, therefore, subject to change.



Silver Country of Origin and Country of Destination Matrix

Responsible sourcing audits must contain a confidential annex that details where every kilogram of silver was sourced and the type of process used to produce it.

This information has enabled LBMA to produce a matrix showing where silver is produced against where silver is refined.

The data is provided on a confidential basis and therefore a method to protect confidentiality has been developed.

In order to respect the source data, destination countries and regions are grouped according to the following:

- Countries that have four or more Refiners can be listed as the individual country
- Regions with only one Refiner are grouped with the nearest geographical region
- Geographical regions are simply defined to enable the data to be presented and no political agenda is implied
- Countries are excluded from the region if they fall under the first criteria, to avoid double accounting.

DESINATION →	CANADA		CHINA		GERMANY		JAPAN		SWITZERLAND		ASIA & AUSTRALIA		EUROPE & AFRICA		AMERICAS		TOTAL	
	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED	LSM	RECYCLED
AFRICA TOTAL	6,445.6	-	13,850.7	-	356.6	2.7	-	-	98,492.3	857.0	8,050.1	1,200.8	49,160.0	22,333.4	-	-	176,355.3	24,393.9
Algeria	-	-	-	-	-	-	-	-	-	-	-	-	-	57.2	-	-	-	57.2
Botswana	-	-	-	-	-	-	-	-	-	-	-	-	91.9	-	-	-	-	91.9
Burkina Faso	-	-	-	-	-	-	-	-	1,683.7	857.0	1,594.9	-	8,213.3	-	-	-	11,491.9	857.0
Congo*	-	-	859.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	859.9
Congo, Democratic Republic of the	-	-	-	-	-	-	-	-	-	-	-	-	4,205.6	-	-	-	-	4,205.6
Côte d'Ivoire	-	-	-	-	-	-	-	-	-	-	909.5	-	10,887.4	-	-	-	-	11,796.9
Ghana	-	-	-	-	-	-	-	-	3,460.1	-	1,124.4	-	2,512.4	21.0	-	-	-	7,096.9
Guinea	-	-	-	-	-	-	-	-	71.5	-	329.9	-	999.9	-	-	-	-	1,001.3
Kenya	-	-	-	-	-	-	-	-	-	-	-	-	58.5	22.2	-	-	-	93.5
Liberia	-	-	-	-	-	-	-	-	730.9	-	-	-	-	-	-	-	-	730.9
Mali	-	-	-	-	-	-	-	-	76.0	-	485.6	-	2,165.1	-	-	-	-	2,726.7
Mauritania	6,382.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,382.0
Mauritius*	-	-	-	-	-	-	-	-	-	-	-	-	63.9	-	-	-	-	63.9
Morocco	-	-	4,353.0	-	-	-	-	-	87,848.4	-	-	1,200.8	763.6	15.4	-	-	-	92,965.0
Namibia	-	-	-	-	-	-	-	-	-	-	-	-	1,704.0	11.4	-	-	-	1,704.0
Niger	-	-	-	-	-	-	-	-	-	-	-	-	82.9	-	-	-	-	82.9
Nigeria*	-	-	-	-	-	-	-	-	-	-	-	-	5.3	234.6	-	-	-	234.6
Senegal	-	-	-	-	-	-	-	-	-	-	318.8	-	1,037.7	-	-	-	-	1,356.5
South Africa	-	-	7,845.4	-	356.6	2.7	-	-	-	-	-	<0.1	15,299.3	21,659.8	-	-	-	23,492.3
Tanzania, United Republic of	-	-	-	-	-	-	-	-	-	-	-	-	1,507.6	222.2	-	-	-	9,381.2
Tunisia*	-	-	-	-	-	-	-	-	4,586.7	-	3,286.9	-	-	25.6	-	-	-	25.6
Zambia	63.6	-	792.4	-	-	-	-	-	-	-	-	-	34.6	-	-	-	-	890.7
EAST ASIA TOTAL	-	-	3,142,236.8	1,483,129.0	13,999.1	2,230.0	124,439.7	1,770,706.0	2,113.0	762,116.3	10,030.7	1,063,451.0	17,679.4	511,235.4	-	-	2,230.0	3,296,499.6
China	-	-	3,138,131.1	1,400,229.0	-	-	-	143.0	-	20,069.1	62.7	184,303.6	19.5	18,347.3	-	-	-	3,138,213.2
Hong Kong	-	-	78,187.0	9,750.6	-	-	-	-	-	-	692,805.4	433,871.6	486,993.2	-	-	-	-	1,701,608.0
Japan	-	-	-	683.0	-	-	124,439.7	1,737,135.7	-	-	100.4	-	206,948.9	2,163.4	-	-	-	128,603.1
Korea, Republic of	-	-	883.6	280.0	-	-	17,645.0	-	-	-	49,141.4	9,968.0	73,364.0	-	-	-	-	10,851.6
Macao*	-	-	491.0	-	-	-	-	-	-	-	-	-	-	3.0	-	-	-	494.0
Mongolia	-	-	3,222.2	-	-	2,230.0	-	-	2,113.0	-	-	-	15,115.0	-	-	-	2,230.0	20,460.1
Taiwan, Province of China	-	-	-	3,259.0	-	-	-	-	-	-	-	-	381.6	2,178.2	-	-	-	2,559.8
EURASIA TOTAL	-	-	11,503.2	3,259.0	3,575.4	-	-	-	4,776.5	3,275.2	1,176,093.8	70,755.2	10,924.7	8.8	-	316.0	-	1,203,614.2
Armenia	-	-	7,040.0	-	-	-	-	-	-	-	-	-	-	-	-	316.0	-	7,356.0
Azerbaijan	-	-	-	-	-	-	-	-	4,776.5	-	856.0	-	-	-	-	-	-	5,632.5
Georgia	-	-	2,804.6	-	6.0	-	-	-	-	-	415.4	-	778.3	6.8	-	-	-	3,588.2
Kazakhstan	-	-	1,658.7	-	3,569.4	-	1,719.0	-	-	44.0	1,043,640.8	70,339.7	3,789.9	-	-	-	-	1,049,089.3
Kyrgyzstan	-	-	-	-	-	-	-	-	-	-	3,231.2	8,115.0	-	-	-	-	-	8,215.0
Tajikistan	-	-	-	-	-	-	-	-	-	-	-	-	6,356.6	-	-	-	-	7,199.6
Uzbekistan	-	-	-	-	-	-	-	-	-	-	122,639.0	-	-	-	-	-	-	122,639.0
MIDDLE EAST TOTAL	12,249.0	-	51,768.8	-	231.8	2.0	-	776.0	1,620.3	5,618.1	21,223.1	48,739.8	4,395.3	53,979.5	-	-	2.0	91,256.5
Cyprus	-	-	-	-	1.7	-	-	-	-	-	-	-	-	-	-	-	-	1.7
Egypt	12,249.0	-	-	-	-	-	-	-	-	-	-	998.6	-	1,012.4	-	-	-	12,249.0
Israel	-	-	-	-	50.0	-	-	30.0	-	-	-	-	-	12.0	-	-	-	92.0
Jordan	-	-	-	-	-	-	-	-	-	-	4.4	-	-	1,883.0	-	-	-	1,887.4
Lebanon	-	-	-	-	-	-	-	-	-	1,879.9	-	-	-	915.8	-	-	-	2,795.7
Oman*	-	-	-	-	-	2.0	-	-	-	-	-	-	-	-	-	2.0	-	2,795.7
Saudi Arabia	-	-	4,455.0	-	-	-	-	-	1,620.3	9.5	445.6	-	5.0	-	-	-	-	6,520.9
Turkey	-	-	47,313.8	-	-	-	746.0	-	-	20,777.5	47,344.2	3,881.6	48,591.3	-	-	-	-	71,972.9
United Arab Emirates	-	-	-	-	180.1	-	-	-	-	3,724.3	397.0	513.7	1,560.0	-	-	-	-	5,137.0
SOUTH & SOUTH EAST ASIA TOTAL	-	-	115,887.3	33,282.0	19,321.3	-	115,063.9	9,110.4	14,305.6	50,475.8	21,987.1	842,603.6	5,404.0	17,256.5	-	-	-	272,647.9
Bangladesh*	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	-	-	-	5.7
Cambodia*	-	-	-	-	-	-	-	-	-	-	-	33.6	-	-	-	-	-	33.6
India	-	-	-	-	0.1	-	6,222.0	-	-	-	-	743,977.2	-	65.9	-	-	-	750,265.2
Indonesia	-	-	21,595.6	6,673.0	646.9	-	115,062.5	-	-	37,100.9	600.0	-	-	-	-	-	-	137,258.1
Lao People's Democratic Republic	-	-	321.0	-	-	-	-	-	12,771.4	-	11,840.0	-	187.2	-	-	-	-	25,119.6
Malaysia	-	-	4,871.2	3,448.0	1,386.7	-	-	737.0	-	82.8	46.0	3,257.1	-	511.7	-	-	-	4,917.2
Pakistan	-	-	-	-	-	-	-	-	-	-	-	-	58.2	-	-	-	-	58.2
Philippines	-	-	89,099.5	568.0	-	1.4	545.0	-	130.2	-	9,467.5	2,068.5	5,218.8	-	-	-	-	103,915.4
Singapore	-	-	22,336.0	-	27.4	-	283.0	-	-	13,274.9	4,117.7	-	-	13,251.1	-	-	-	53,290.1
Sri Lanka	-	-	-	-	-	-	-	-	-	-	-	-	-	2,466.2	-	-	-	2,466.2
Thailand	-	-	257.0	-	15,241.4	-	18.0	-	1,404.0	17.2	-	85,936.9	-	749.9	-	-	-	1,404.0
Viet Nam	-	-	-	-	2,018.8	-	1,305.4	-	-	-	-	1,069.0	-	4,393.1	-	-	-	4,393.1
EUROPE TOTAL	491.6	-	72,920.2	1,514.0	2,419,011.3	-	68,624.9	48,377.9	5,912.8	250,568.0	50,164.3	258,114.6	2,090,107.4	995,710.2	-	-	-	2,288,221.1
Austria	-	-	-	-	48,899.7	-	-	-	-	-	-	129.6	-	7,241.1	-	-	-	56,270.4
Belarus	-	-	-	-	-	-	-	-	-	-	-	-	-	1,483.5	-	-	-	1,483.5
Belgium	-	-	-	-	112,425.5	-	-	-	-	-	295.0	11,650.0	97,585.2	51,587.4	-	-	-	175,985.2
Bosnia and Herzegovina	-	-	6,871.4	-	329.4	-	-	-	-	-	-	-	-	51.8	-	-	-	6,871.4
Bulgaria	-	-	-	-	46,528.4	-	14.0	-	-	-	2,534.0	-	4,251.0	-	-	-	-	53,327.4
Croatia	-	-	-	-	11.2	-	-	-	-	-	-	-	-	310.0	-	-	-	321.2
Czechia	-	-	-	-	17,375.7	-	37.0	-	-	-	-	-	38.3	6,702.1	-	-	-	24,114.8
Denmark	-	-	1,430.0	-	5,492.8	-	-	-	-	-	-	56.7	-	9,443.8	-	-	-	16,423.3
Estonia	-	-	-	-	3,123.9	-	566.7	-	367.1	353.0	-	-	6,743.8	62,212.7	-	-	-	7,002.5
Finland	491.6	-	-	-	138,944.4	-	97.0	-	-	13.9	-	-	4,055.4	70,907.2	-	-	-	66,256.2
France	-	-	-	-	1,622,695.5	-	822.0	-	-	6								

14

Useful Links

Supplementary reading recommendations include:

Auditor Documentation and Approved List of Assurance Providers

<https://www.lbma.org.uk/auditors>

Global Precious Metals Code

<https://www.lbma.org.uk/global-precious-metals-code>

Good Delivery Lists

<https://www.lbma.org.uk/good-delivery-list>

Good Delivery Rules

<https://www.lbma.org.uk/good-delivery-rules>

LBMA report in Calling on Support for Artisanal/Small Scale Miners

<https://www.lbma.org.uk/emergency-support-needed-for-artisanal-small-scale-miners>

Responsible Sourcing Programme and Guidance Documents

<https://www.lbma.org.uk/guidance-documents>

Declaration of Responsibility and Sustainability Principles

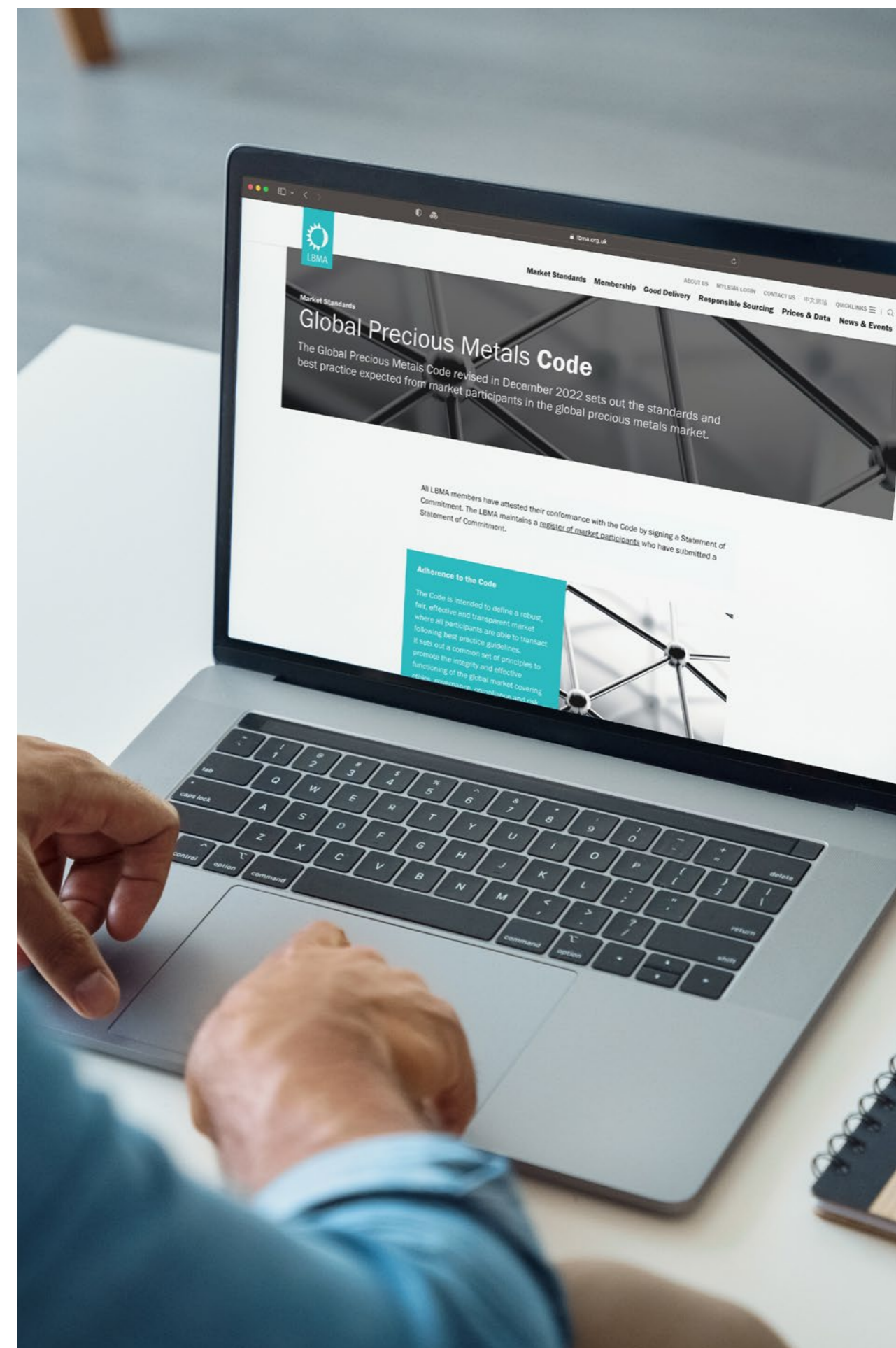
<https://cdn.lbma.org.uk/downloads/Publications/2022/Ten-Sustainability-Principles.pdf>

Third-Party Assurance Guidance

<https://www.lbma.org.uk/publications/responsible-sourcing-programme-third-party-assurance-guidance>

Summary of changes to Disclosure Guidance

<https://cdn.lbma.org.uk/downloads/Disclosure-Guidance-2022-Summary-of-Changes-FINAL.pdf>





Sustainability & Responsible Sourcing Summit 2024

REGISTER NOW

This event aims to promote engagement on the many challenges facing the global precious metals industry regarding sustainability and responsible sourcing – and to help pave the way for another decade of action.

www.lbma.org.uk/events

Interested in sponsoring or exhibiting? Enquire now at events@lbma.org.uk



20 – 22 March, Hilton London Tower Bridge