

SAMSUNG ELECTRONICS' RESPONSIBLE MINERALS REPORT 2023



Samsung Electronics’ Declaration on Conflict Minerals

Respecting and protecting human rights is a top priority for Samsung Electronics Co., Ltd. (“Samsung”), and this commitment is codified and enforced through our Code of Conduct.

We do not tolerate human rights violations or environmental damage caused by mineral mining in conflict-affected and high-risk areas worldwide. We are committed to eliminating such violations and abuses, including child exploitation and sexual violence associated with mineral mining, and minimizing any harm to the health and safety of workers at mining sites around the globe.

For this reason, we ensure that our entire supply chain complies with the OECD¹⁾ Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (hereinafter referred to as the “OECD Due Diligence Guidance”). This requires all of our business partners to follow our Supplier Code of Conduct based on internationally accepted standards.

We work together with other global companies by taking part in umbrella organizations, such as the Responsible Business Alliance’s (RBA) Responsible Minerals Initiative (RMI) and the European Partnership for Responsible Minerals (EPRM), to eliminate conflict minerals and support responsible minerals sourcing.

Through these efforts, we have established a conflict-free minerals management system that prohibits the use of minerals sourced from conflict-affected and high-risk areas in 10 African countries, including the Democratic Republic of the Congo. Additionally, we only use minerals from smelters certified by global, independent third-party organizations.

1) OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas

About this report

Purpose

In recent years, there has been increasing public attention on minerals such as tantalum, tin, tungsten, gold, and cobalt that are often sourced through illegal means from conflict-affected and high-risk areas. This heightened scrutiny has created a growing call for corporate action on responsible minerals sourcing. We fully acknowledge the significance of acting responsibly as a global citizen in terms of our minerals sourcing.

In the manufacturing of our products, we incorporate a diverse range of components that contain minerals like tantalum, tin, tungsten, gold, and cobalt. Throughout this entire process, we are committed to establishing a responsible supply chain management system. We actively encourage our business partners to join us in our efforts to promote human rights and environmental protection in conflict-affected and high-risk regions. The purpose of this Responsible Minerals Report is to highlight our initiatives as a global company and progress toward creating a sustainable future for both humanity and the planet.

Scope and Period

All products commercially marketed to consumers and all materials directly purchased for manufacturing by Samsung Electronics are managed on a yearly basis. Accordingly, this report covers our activities from January 1 through December 31, 2022.

Reporting Target

Suppliers and Product Group

All materials and components sourced from our suppliers and their subcontractors associated with our products manufactured and commercially marketed, regardless of sales region, are held to our standards for conflict minerals.

Suppliers providing equipment, MRO (maintenance, repair, and operations), and other materials indirectly incorporated into the products are not considered within the reporting target. Each supplier is managed on a per facility basis.

* No. of target suppliers	(number of supplier facilities)				
	2018	2019	2020	2021	2022
No.	2,671	2,598	2,490	2,391	2,463

* Key products

Business divisions	Key products
DX (Device eXperience)	TVs, Monitors, Refrigerators, Washers, Air conditioners, HHP, PCs, Network systems, Ultrasound systems
DS (Device Solutions)	DRAM, SSDs, NAND flash, Mobile Aps, Image sensors

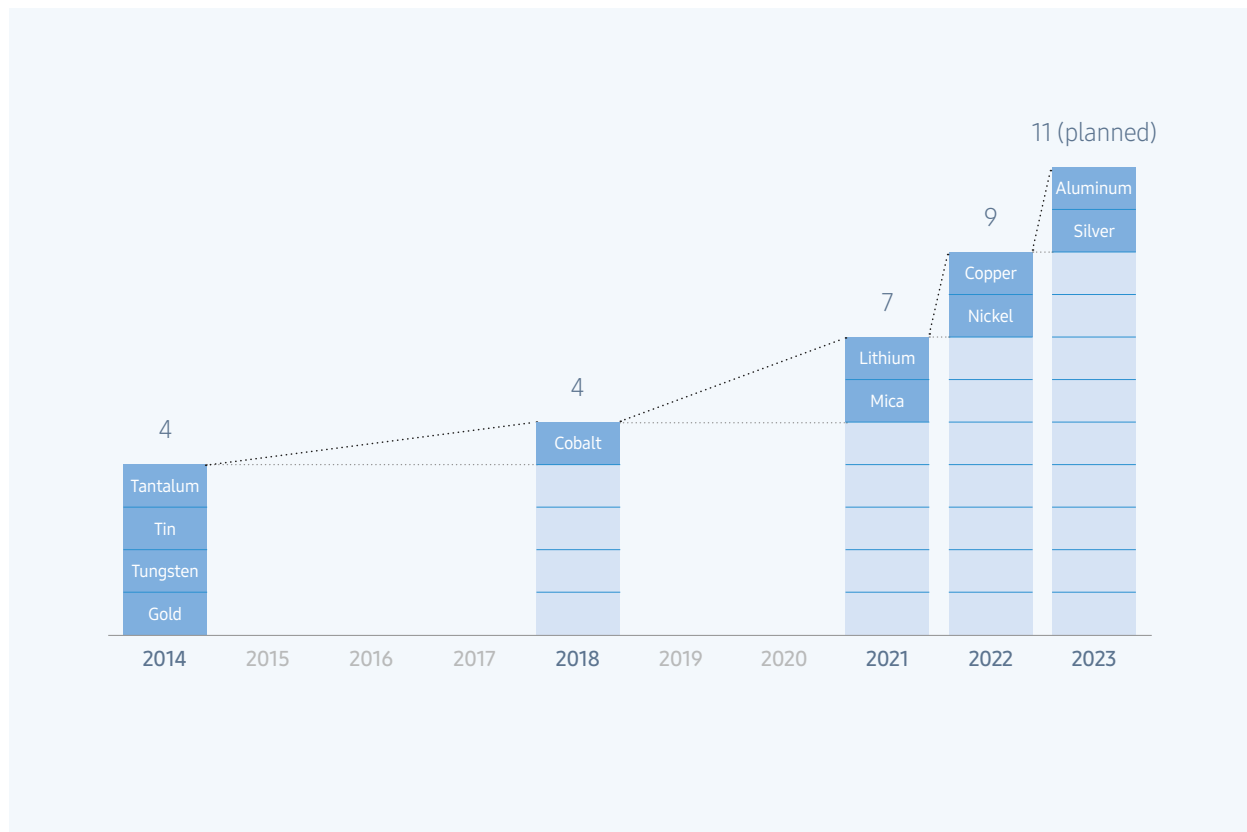
Minerals

We strive to avoid the use of any illegally mined minerals from conflict-affected and high-risk areas and continuously monitor the minerals sourcing practices of our suppliers by expanding the scope of our monitoring efforts.

To this end, through 2021, we monitored seven different minerals in total – four conflict minerals (tantalum, tin, tungsten, gold) and three responsible minerals (cobalt, molybdenum, lithium). Starting from 2022, we expanded our list to include two additional responsible minerals (copper, nickel), resulting in a total of nine minerals under our oversight.

In addition, we are actively exploring the possibility of broadening the scope of monitored minerals to include aluminum and silver, which have recently gained importance as critical concerns. This endeavor reaffirms our commitment to monitoring any minerals that require our oversight.

※ No. of minerals under oversight by year



※ Main Minerals Under Oversight

Conflict Minerals

Conflict minerals, as defined by the US Dodd-Frank Act, include tantalum, tin, tungsten, and gold (3TG) that are illegally mined in the 10 African countries of the Democratic Republic of the Congo, the Republic of Congo, the Central African Republic, South Sudan, Uganda, Rwanda, Burundi, Tanzania, Zambia, and Angola. The characteristics of each mineral are as follows.

① Tantalum (Symbol of element: Ta)

Tantalum is commonly found in electric and electronics products that require high reliability in extreme environments. The metal is typically used in electrical components and precision alloys that are applied to electronics, automotive, and aerospace products. The Democratic Republic of the Congo holds 70-80% of the world's tantalum reserves.

② Tin (Symbol of element: Sn)

Tin is mainly used in solders and extensively applied to many electronic products and components today. It is mostly produced in some Central African countries, China, and Indonesia.

③ Tungsten (Symbol of element: W)

Due to its strength and high melting point, tungsten is widely used in products of the electronics, automotive, and aerospace industries. China is the world's largest producer of tungsten with some produced in Central Africa.

④ Gold (Symbol of element: Au)

Gold is known for its outstanding malleability, ductility, thermal conductivity, and electrical conductivity, making it a widely used material in IT products, semiconductors, and medical devices. As a precious metal, gold is also used for decorations and accessories.

Gold is valuable, malleable, and convenient to transport. As a result, it is easy to smuggle, exchange worldwide, and trade anonymously for cash. Due to these characteristics, the supply chains of gold are complex and not transparent, leading to its use in funding organized crime and terrorism.

Other Minerals in Focus

Samsung Electronics focuses on other minerals beyond 3TG if they are related to global issues such as child labor, human rights, and environmental issues, including conflict minerals. The characteristics of each mineral are as follows.

① Cobalt (Symbol of element: Co)

Cobalt is mostly used in lithium-ion batteries that constitute an integral part of electric vehicles, mobile phones, and laptop computers. It is also frequently used in adhesive joints of electric and electronics products. The Democratic Republic of the Congo, the world's largest producer of cobalt, holds 50% of global cobalt deposits. While cobalt is usually mass produced with machine equipment, it is also extracted through artisanal mining, which has raised concerns in the international community in relation to child labor and unsafe working conditions at cobalt mining sites.

② Mica

Unlike other minerals, mica is a composite of rock-forming minerals like calcium, magnesium, iron, and nitrogen. It can be classified into thin flakes or sheets based on its layered structure. Of these two forms, the latter is primarily utilized for electrical insulation and car paint, and India is responsible for approximately 90% of the global production of mica sheets.

③ Lithium (Symbol of element: Li)

Lithium is typically used in lithium-ion batteries, and the glass and ceramics industries are the main consumers of the mineral, which is used to process silica sand.

South American countries, including Argentina, Chile, and Bolivia, account for 70% of the global production of lithium. Reports have highlighted issues such as forced labor and environmental degradation caused by radioactive materials and byproducts of heavy metals at lithium mining sites.

④ Copper (Symbol of element: Cu)

Copper offers many benefits such as excellent electrical conductivity, thermal conductivity, strong corrosion resistance, and high malleability, making it suitable for various purposes. China and Chile are the world's largest producers of copper.

⑤ Nickel (Symbol of element: Ni)

Nickel is a versatile metal widely employed in diverse industries. It has applications in a wide variety of products, ranging from stainless steel and batteries to aircraft and concrete reinforcement. Indonesia ranks among the world's largest producers of nickel, while the Philippines is one of the leading nickel mining countries worldwide.

Samsung Electronics' Responsible Minerals Management Roadmap

We continue to monitor mineral-related regulations as well as the demands from various external stakeholders. As part of this ongoing process, we are actively establishing the list of minerals that necessitate comprehensive oversight.

Considering the specific level of external demands for each mineral, we are implementing distinct approaches to minerals management based on their classification, while consistently expanding the scope of minerals we monitor.



* Source:

- 1) US Dodd-Frank Wall Street Reform and Consumer Protection Act(2010)
- 2) RMI Smelter Database(2022)
- 3) US Mineral Security Partnership(2019)
- 4) EU Critical Raw Materials Act(2014)

Samsung Electronics' Policy on Responsible Minerals Sourcing

We are committed to contributing to a more sustainable future for the public as well as our planet. We believe that establishing a responsible supply chain and encouraging the participation of our suppliers is critical to minimize human rights violations and environmental degradation.

Based on the OECD Due Diligence Guidance, we manage our supply chain on an ongoing basis for ethical and responsible sourcing and mandate our suppliers to adopt our Supplier Code of Conduct, based on international industry standards. We also actively engage other companies and the relevant industry stakeholders to promote responsible sourcing of minerals through initiatives such as RBA, RMI, and EPRM.

Conflict Minerals

We are aware that in some areas of the 10 African countries, where including the Democratic Republic of the Congo, standards to protect the environment and human rights do not adequately safeguard all rights. As a result, we have prohibited the use of conflict minerals such as tantalum, tin, tungsten, and gold that are mined illegally in conflict regions. To ensure that our suppliers are held to the highest standards, we conduct thorough reviews of the minerals used in our products as part of our supply chain management process.

To establish a system for sourcing of conflict-free minerals, we use a due diligence process for conflict minerals that is in line with the OECD Due Diligence Guidance. Additionally, we require that our suppliers work only with smelters that have received RMAP (Responsible Minerals Assurance Process) certifications, and we halt transactions that include any minerals provided by non RMAP-conformant smelters. By only using RMAP-certified smelters, we can ensure that the minerals we are sourcing have been mined ethically regardless of origin. However, we do not outrightly ban sourcing from any specific regions, including Africa, as this may undermine the progress that is being made to mine responsibly.

We also provide suppliers with clear guidelines, training and education support to raise their awareness of conflict minerals. We conduct regular inspections on the use of conflict minerals throughout our supply chain by reviewing the information submitted by suppliers and by carrying out on-site inspections as needed for suppliers that require additional verification.

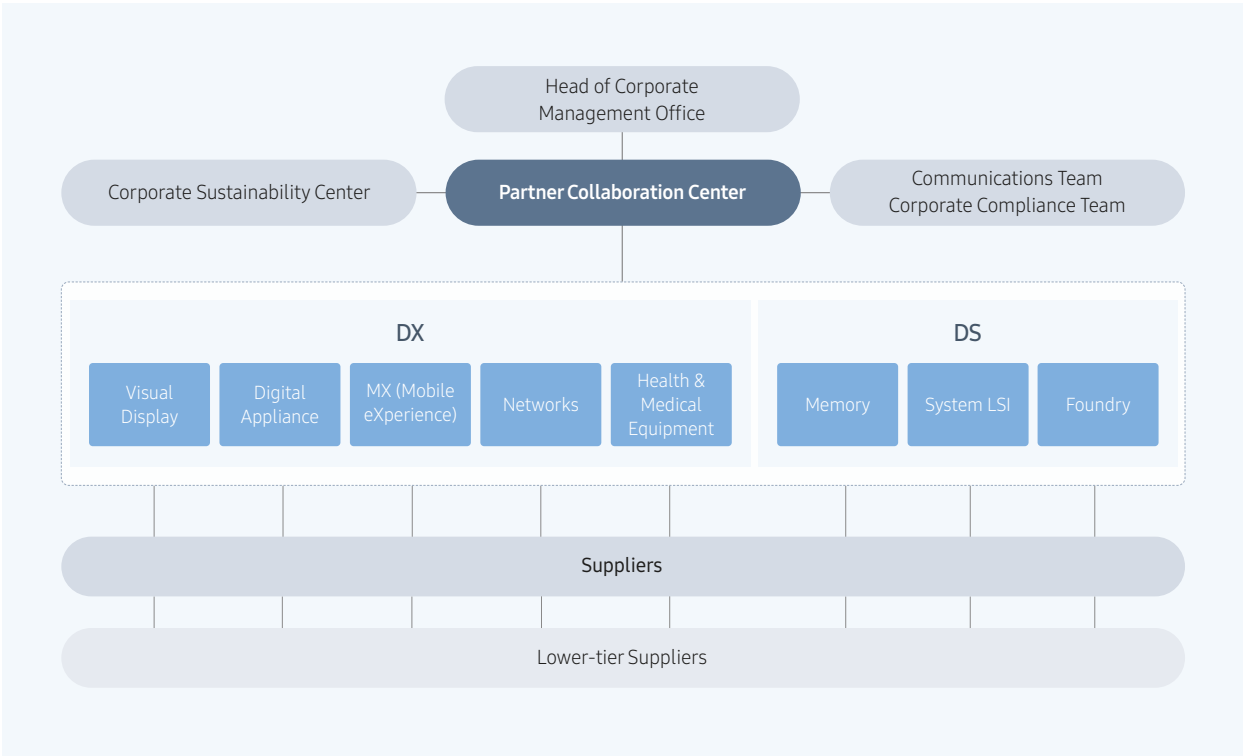
Responsible Minerals

In addition to our commitment to conflict-free minerals, we also extensively manage our supply chain to monitor any mineral mining associated with human rights violations or environmental destruction. In particular, we ensure that the issue of underage workers in cobalt mines in the Democratic Republic of the Congo is managed in accordance with the OECD Due Diligence Guidance. We are also mindful of other potential issues in mining and continually conduct diligent monitoring of these matters as well as collaborating with global organizations to consider additionally required responses.

We work to ensure that mining in our supply chain is not used for funding conflicts and is carried out in ways that respect human rights and the environment, while being mindful of social responsibilities.

Responsible Minerals Management Organization

The Partner Collaboration Center, under the leadership of the head of the Corporate Management Office, is responsible for risks associated with responsible minerals sourcing. In addition, personnel dedicated to responsible minerals in each business division oversee and monitor conflict mineral risks within their respective divisions, as well as those involving their suppliers. The Center also closely cooperates with relevant entities within the company-wide risk management system, including the Corporate Sustainability Center, Corporate Compliance Team, and Communications Team.

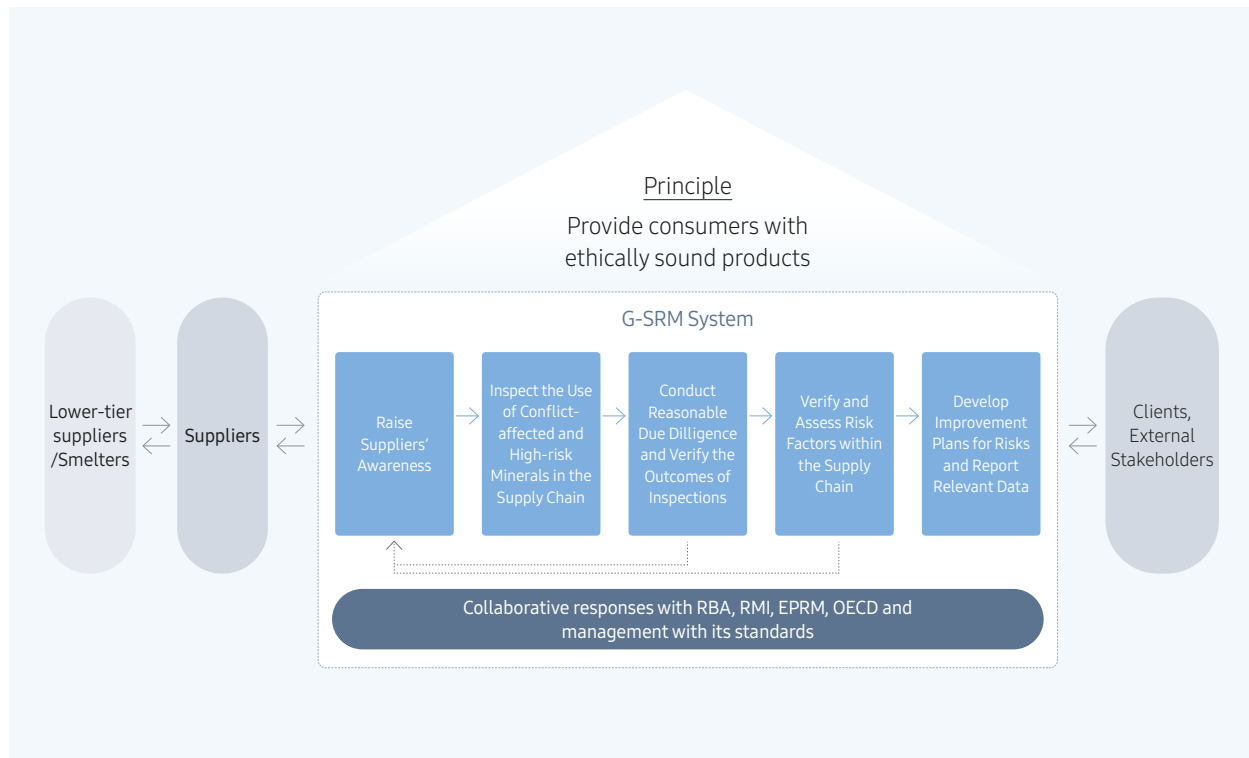


* DX: Device eXperience * DS: Device Solution * MX: Mobile eXperience

Responsible Minerals Management Process

Management System

We operate our minerals management process in accordance with the OECD Due Diligence Guidance. In addition, we proactively communicate the progress and outcomes of our management efforts to different stakeholders, including our customers. We also engage in global coalitions and partnerships to collaborate on addressing conflict and other minerals and to amplify the benefits of responsible sourcing around the world .



* G-SRM: Global Supplier Relationship Management System

Management Procedure

We ensure that the minerals used in our products have been mined ethically in accordance with the OECD Due Diligence Guidance and require that our suppliers adopt the Guidance as well.

Samsung Electronics' Responsible Minerals Management Process

	Raise Suppliers' Awareness	<ul style="list-style-type: none">- Require that all first-tier suppliers commit to banning the use of conflict-affected and high-risk minerals by submitting a written pledge- Distribute the conflict-affected and high-risk minerals management guide and support working-level training- Require that lower-tier suppliers expand their policies to ban the use of conflict-affected and high-risk minerals and to source ethically and responsibly
	Inspect the Use of Conflict-Affected and High-Risk Minerals in the Supply Chain	<ul style="list-style-type: none">- Monitor data on all first-tier suppliers' use of conflict-affected and high-risk minerals as well as smelters' use of such minerals in the supply chain
	Conduct Reasonable Due Diligence and Verify the Outcomes of Inspections	<ul style="list-style-type: none">- Conduct on-site inspections for the verification of data submitted by suppliers
	Verify and Assess Risk Factors Within the Supply Chain	<ul style="list-style-type: none">- Categorize suppliers into four rating groups based on inspection results
	Develop Improvement Plans for Risks and Report Relevant Data	<ul style="list-style-type: none">- Restrict transactions with suppliers that work with any smelters not certified by third-party organizations- Recommend smelters in the supply chain to become third-party certified

Samsung Electronics' Activities by Stage

Step 1: Raise Suppliers' Awareness

We require that all of our suppliers pledge in writing not to use minerals that contribute to human rights violations and environmental problems in conflict-affected and high-risk areas and monitor their practices through an integrated system.

※ Samsung Electronics' Global Supplier Relationship Management (G-SRM) System

Korean English Chinese

[\(click for URL\)
G-SRM website](#)

In line with our responsible minerals sourcing policy, we demand that our suppliers extend the ban on the use of minerals from conflict-affected and high-risk areas to their own suppliers.

※ Declaration of non-use (DNU) of conflict minerals for suppliers

Korean English Chinese

As part of our conflict-free minerals management, we provide both online and offline training for our employees who are responsible for global procurement. The online courses on conflict minerals are mandatory for all procurement employees. In 2022, our training sessions went fully online due to the extended pandemic situation, and a total of 219 procurement employees successfully completed the training program on the conflict and responsible minerals policy and our management process.

We also focus on training and guiding our suppliers. Our Conflict Minerals Management Guidance includes the conflict minerals policy that we share with our suppliers. In 2022, in a bid to further awareness among our suppliers, we provided training sessions to a total of 474 employees representing 440 different suppliers. These sessions covered various areas, such as our conflict minerals policy, instructions on how to use the conflict minerals management system, and the process required to become an RMAP-certified smelter. Notably, we conducted additional training programs for suppliers that displayed vulnerabilities during our on-site assessments, aiming to support them in effectively addressing such gaps.

※ Conflict minerals training completed (2018-2022) (persons)

Year	2018	2019	2020	2021	2022
Total	864	594	440	551	693
Samsung Electronics	652	212	127	181	219
Suppliers	212	382	313	370	474

Step 2: Inspect the Use of Conflict-Affected and High-Risk Minerals in the Supply Chain

Using the RMI's templates on conflict and responsible minerals, including but not limited to the Conflict Minerals Reporting Template (CMRT), Extended Minerals Reporting Template (EMRT), and Pilot Reporting Template (PRT), we collected data from all suppliers that we conduct business with through our Global Supplier Relationship Management (G-SRM) system on various minerals as well as other information on smelters within the supply chain. In addition, we required our suppliers to extend the ban on conflict minerals to their own suppliers in accordance with our conflict minerals policy.

(number of supplier facilities)

Year	2018	2019	2020	2021	2022
No. of suppliers	2,671	2,598	2,490	2,391	2,463
Inspection rate	100%	100%	100%	100%	100%
3TG-using suppliers	1,001	944	888	871	885

※ Status of smelters within the supply chain (2018-2022)

(number of smelters)

Year	2018	2019	2020	2021	2022
Tantalum	40	40	38	38	36
Tin	73	76	53	55	59
Tungsten	41	41	42	40	39
Gold	104	104	107	107	99
Cobalt	-	30	27	35	42
Mica	-	-	-	10	19
Lithium	-	-	-	16	11
Copper	-	-	-	-	33
Nickel	-	-	-	-	22

* During the investigation, the available international standard and investigation standard smelter lists for lithium, copper, and nickel were inadequate. As a result, we focused the investigation solely on suppliers based in Korea. However, our plan is to expand the investigation to encompass all suppliers conducting business with us once global-level standardization is established across companies.

Step 3: Conduct Reasonable Due Diligence and Verify the Outcomes of Inspections

Following an immediate internal review of the data submitted by suppliers, in 2022, we conducted on-site audits on 438 global suppliers. These audits were carried out to ensure the reliability of their submitted data, as well as to verify the effective implementation of conflict minerals-related policies.

Starting from 2020, we transitioned our on-site audits to an online format in response to the COVID-19 pandemic. At the same time, we expanded the number of suppliers included in the inspection to ensure that the change in audit format would pose minimal risk to the reliability of the assessment results.

For the audits conducted in 2022, we employed the same criteria that are used annually to select the target suppliers. This included new trading companies, underperformers from the previous year, and suppliers that provided inadequate responses for the 2022 survey.

※ No. of on-site supplier audits (2018-2022) (number of on-site audits)

Year	2018	2019	2020	2021	2022
On-site audits	244	225	427	493	438

* During 2020-2022, audits were conducted via “contact-free” review of evidential documents due to COVID-19.

※ No. of on-site audits by region in 2022 (number of on-site audits)

Total	Korea	China	Other Asia	North America	Latin America	Africa
438	70	103	154	45	61	5

According to the results, 96% of suppliers demonstrated effective management controls over their operations and complied with 80% of the audit standards. Based on the breakdowns, 98% of suppliers conducted inspections on their own suppliers following RMI standards, and 98% reported the inspection results to Samsung Electronics without any data omissions. These results reflect the robust management of our suppliers on their sub-tier suppliers in terms of addressing conflict minerals information. However, it was observed that some suppliers were unable to properly conduct on-site inspections on their suppliers as they had done in the previous year due to the prolonged impact of the pandemic, which is expected to improve in line with the evolving COVID-19 situation.

In addition, we implemented follow-up improvement measures to assist suppliers identified with vulnerabilities during the inspection to help them address their gaps. As a result, all suppliers eventually satisfied the criteria for their management of conflict minerals. In addition, we will continue to monitor the progress of the suppliers that were initially rated “insufficient” in 2022 by including them in our on-site audits once again in 2023.

All information regarding our on-site audits, including historical records and results, is systematically managed and archived through our G-SRM system.

Step 4: Verify and Assess Risk Factors Within the Supply Chain

We manage the responsible minerals information provided by our suppliers through G-SRM – our integrated procurement system – and track information on conflict minerals in real-time by each material unit purchased.

If a supplier fails to submit the required information for a particular material or includes a mineral sourced from a non-RMAP-certified smelter, we immediately block their access to the procurement system. Simultaneously, we send a notification email to both the person of contact from Samsung Electronics and the supplier involved in responsible minerals procurement to ensure that they are aware of the issue and take action for improvement. We then send out periodic notices and follow-up reminders to encourage prompt action.

Moreover, we conduct on-site audits on suppliers identified with vulnerabilities in their management standards and processes. Based on the credibility of the submitted data and the actual on-site conditions, we implement tailored follow-up measures. We instruct suppliers with lower rankings to submit supporting documents and/or provide them with on-site guidance when necessary. Through such activities, we assist our suppliers in the review of their conflict minerals policies, organizational management, and conflict minerals information management systems. This helps them improve in their areas of vulnerability, which in turn enables them to enhance their management capabilities.

As a result of our efforts, in 2022, all product categories manufactured by Samsung Electronics are in full compliance with our Conflict Minerals Management Guidance.

※ Responsible minerals compliance rate by product category

	VD	Digital Appliance	MX	Networks	Medical Device	Memory Semi conductor	LSI System LSI	Foundry	LED
Key product category	TVs, monitors	Refrigerators, laundry machines	Smart phones, tablets	Repeaters, modem chips	Ultrasound systems	DRAM, SSD	APs, CMOS	Mobile SoC	LED
Compliance rate	100%	100%	100%	100%	100%	100%	100%	100%	100%

Step 5: Develop Improvement Plans for Risks and Report Relevant Data

We require that all of our suppliers pledge to avoid the use of conflict minerals. We maintain real-time monitoring of each material through the G-SRM system and block any materials from access to our supply chain if they are found to use minerals sourced from non-RMAP-certified origins.

We also conduct regular monitoring of the RMI website to stay informed of any changes in the RMAP list of certified smelters and to promptly update the information in G-SRM accordingly. If any materials are found to be associated with uncertified smelters, we take immediate action by suspending the contracts and share this information with relevant suppliers and business divisions in order to encourage and support the necessary improvements. In 2022, a total of 54 smelters were removed from the RMAP-conformant list, and we promptly communicated this information to 411 relevant suppliers, ensuring that they took appropriate follow-up measures regarding the affected smelters.

※ Smelters removed from the RMAP-conformant list in 2022

Minerals	Reference No.	Smelter Name
Gold	CID000343	Daye Non-Ferrous Metals Mining Ltd.
Gold	CID000493	JSC Novosibirsk Refinery
Gold	CID000929	JSC Uralelectromed
Gold	CID001029	Kyrgyzaltyn JSC
Gold	CID001204	Moscow Special Alloys Processing Plant
Gold	CID001326	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)
Gold	CID001386	Prioksky Plant of Non-Ferrous Metals
Gold	CID001756	SOE Shyolkovsky Factory of Secondary Precious Metals
Gold	CID001909	Great Wall Precious Metals Co., Ltd. of CBPM
Gold	CID002562	International Precious Metal Refiners
Gold	CID002777	SAXONIA Edelmetalle GmbH
Gold	CID002850	AU Traders and Refiners
Gold	CID003421	C.I Metales Procesados Industriales SAS
Gold	CID002606	Marsam Metals
Tantalum	CID000456	Exotech Inc.
Tantalum	CID001769	Solikamsk Magnesium Works OAO
Tin	CID000309	PT Aries Kencana Sejahtera
Tin	CID000942	Gejiu Kai Meng Industry and Trade LLC
Tin	CID001421	PT Belitung Industri Sejahtera
Tin	CID001428	PT Bukit Timah
Tin	CID001457	PT Panca Mega Persada
Tin	CID001486	PT Timah Nusantara
Tin	CID002015	VQB Mineral and Trading Group JSC
Tin	CID002455	CV Venus Inti Perkasa

Tin	CID002478	PT Tirus Putra Mandiri
Tin	CID002500	Melt Metais e Ligas S.A.
Tin	CID002572	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company
Tin	CID002573	Nghe Tinh Non-Ferrous Metals Joint Stock Company
Tin	CID002574	Tuyen Quang Non-Ferrous Metals Joint Stock Company
Tin	CID002703	An Vinh Joint Stock Mineral Processing Company
Tin	CID002756	Super Ligas
Tin	CID002816	PT Sukses Inti Makmur
Tin	CID002858	Modeltech Sdn Bhd
Tin	CID003208	Pongpipat Company Limited
Tin	CID003356	Dongguan CiEXPO Environmental Engineering Co., Ltd.
Tin	CID003380	PT Masbro Alam Stania
Tin	CID003397	Yunnan Yunfan Non-ferrous Metals Co., Ltd.
Tin	CID003409	Precious Minerals and Smelting Limited
Tin	CID003410	Gejiu City Fuxiang Industry and Trade Co., Ltd.
Tin	CID003449	PT Mitra Sukses Globalindo
Tin	CID003486	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda
Tin	CID002570	CV Ayi Jaya
Tin	CID000313	PT Premium Tin Indonesia
Tin	CID001908	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.
Tin	CID002776	PT Bangka Prima Tin
Tin	CID001305	Novosibirsk Processing Plant Ltd.
Tin	CID001419	PT Bangka Tin Industry
Tungsten	CID003427	Albasteel Industria e Comercio de Ligas Para Fundicao Ltd.
Tungsten	CID002724	Unecha Refractory metals plant
Tungsten	CID002649	Hydrometallurg, JSC
Tungsten	CID003408	JSC "Kirovgrad Hard Alloys Plant"
Tungsten	CID003416	NPP Tyazhmetprom LLC
Tungsten	CID003612	OOO "Technolom" 2
Tungsten	CID003614	OOO "Technolom" 1

We have established a range of voice of customer channels and provided 24/7 support to assist suppliers in resolving their feedback related to conflict minerals. In 2022, we received and handled 303 cases in total.

※ No. of VoC cases handled in 2022

(number of cases)

	Total	Survey	Operating system	Smelter	Data transmission	Letter of consent	Other
Total	303	128	65	9	8	8	85
Conflict minerals	298	125	65	9	8	8	83
Responsible minerals	5	3	-	-	-	-	2

We conduct thorough verification to determine the presence of any conflict minerals in our products and to trace their origins using the smelter information submitted by our suppliers. In cases where the country of origin is uncertain or the smelters are not certified by RMAP, we investigate whether conflict minerals have been used and request that such smelters obtain RMAP certification. As a result of these efforts, in 2022, all of our suppliers sourced minerals exclusively from RMAP-certified smelters.

※ Conflict minerals-related RMAP certification of smelters in the supply chain

(number of smelters as of 2022)

	Total	Tantalum	Tin	Tungsten	Gold
No. of smelters	233	36	59	39	99
RMAP certification rate	100%	100%	100%	100%	100%

※ Responsible minerals-related RMAP certification of smelters in the supply chain

(number of smelters as of 2022)

	Cobalt	Mica	Lithium	Copper	Nickel
No. of smelters	42	19	11	33	22

* We conduct annual on-site inspections on the responsible sourcing of cobalt, mica, lithium, copper, and nickel, while also carrying out RMAP certification for cobalt smelters. We are working with the RMI to invite more cobalt smelters to participate in the RMAP.

We disclose all relevant information in a transparent manner every year through our website, Sustainability Management Report, and Responsible Minerals Report. In addition, we actively respond to direct requests from various global stakeholders for related information.

※ External inquiries handled on the responsible minerals sourcing of suppliers (2018-2022)

(number of cases)

Year	2018	2019	2020	2021	2022
Customer	85	190	242	332	420
NGO/Rating agency, etc.	9	17	11	14	7

Through prior consultation with our suppliers, we have secured their consent to publicly disclose their information on the use of conflict minerals and provide that information to Samsung Electronics' stakeholders.

Cooperative Activities with External Parties

To effectively operate responsible minerals sourcing policies and address related issues, we work with companies in the same industry and actively gather insights from relevant stakeholders. We also engage in a variety of initiatives, including social contribution activities and private-public partnership programs, in a bid to seek fundamental solutions for issues related to human rights and environmental degradation.

Responsible Minerals Initiative (RMI)

The RMI is a coalition of global companies dedicated to addressing issues related to the sourcing of minerals from conflict-affected and high-risk areas. As an RMI member, we strive to identify the origins of minerals that move through the global supply chain. To this end, we have developed the CMRT and EMRT – our templates on conflict and responsible minerals – to survey our suppliers and enhance the collection and disclosure of information on smelters in the supply system. Leveraging the RMAP, a validation program for responsible minerals sourcing, we encourage smelters that have been validated as conflict-free to undergo independent third-party certification.



Moreover, as an RMI Steering Committee Member, we are actively engaging in establishing the RMI industrial management standards for responsible minerals and continuously improving the RMAP and other related programs of the RMI, while also communicating with external stakeholders and experts to discuss their concerns or seek advice.

※ RMAP Assessment Introduction

The flagship program of the RMI, the Responsible Minerals Assurance Process (RMAP) takes a unique approach to helping companies make informed choices about responsibly sourced minerals in their supply chains. Focusing on a “pinch point” (a point with relatively few actors) in the global metals supply chain, the RMAP uses an independent third-party assessment of smelter/refiner management systems and sourcing practices to validate conformance with RMAP standards. The assessment employs a risk-based approach to validate smelters' company-level management processes for responsible minerals procurement.

The RMAP standards are developed to meet the requirements of the OECD Due Diligence Guidance, Regulation (EU) 2017/821 of the European Parliament, and the US Dodd-Frank Wall Street Reform and Consumer Protection Act.

*Source: <http://www.responsiblemineralsinitiative.org/responsible-minerals-assurance-process/>

European Partnership for Responsible Minerals (EPRM)

The EPRM is a multi-stakeholder partnership set up in May of 2016 that serves as a platform for cooperation between EU governments, companies, and civil society to enhance the transparency of supply chains dealing with conflict minerals and responsible minerals. We joined the EPRM in December 2018 as part of our commitment to complying with regulations on conflict and responsible minerals sourcing and fulfilling our social responsibility together with industry partners. With the support of governments and companies around the world, the EPRM advances a variety of initiatives including conducting fact-finding research and suggesting solutions to human rights issues in conflict-affected areas such as the Democratic Republic of the Congo.



The EPRM finances different projects for conflict-affected and high-risk areas (CAHRAs) under the aim of:

- raising awareness about responsible production and regulations at mining sites;
- improving their productivity and capacity for more responsible mining; and
- enabling producers to access formal markets.

Encouraging Korean Urban Smelters to Participate in RMAP Certification

As part of our ongoing commitment to responsible minerals management, we have strengthened our waste management standards to ensure that waste generated at manufacturing sites in Korea is transferred only to RMAP-certified smelters. We are also encouraging RMAP participation from the mining industry in Korea, which includes smelters and refiners involved in the extraction of metal substances from collected e-waste.

Inter-Industry Collaboration Project for Sustainable Cobalt Mining: Cobalt for Development

To contribute to the sustainable development of cobalt mining in the Democratic Republic of the Congo, we joined hands with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Samsung SDI, BMW Group, and BASF to initiate a pilot project called Cobalt for Development in 2019.

The project aims to seek solutions for improving the labor conditions of artisanal cobalt mining and the living conditions in the neighboring communities. In 2020, Volkswagen newly joined the initiative.

Through the end of 2021, we provided education and training programs on safety to over 1,000 mine workers from 14 associations and distributed personal protective gear such as helmets. In addition, we offered agricultural and financial education to 3,000 local residents and supported the opening of 72 small bakeries and sewing shops.

“Cobalt for Development” Project Started Trainings for Mining Cooperatives in Kolwezi, Democratic Republic of Congo

Korea on October 30, 2020

Audio Share

Trainings for twelve artisanal mining cooperatives involve more than 1,500 miners
Community activities have already reached more than 1,800 people
Volkswagen joined cross-industry initiative of BMW, BASF, Samsung SDI and Samsung Electronics

The cross-industry initiative “Cobalt for Development” has started trainings for twelve artisanal mining cooperatives in October in Kolwezi, Democratic Republic of Congo (DR Congo). The trainings cover major environmental, social and governance aspects for responsible mining practices. This includes mine site management and legal compliance, human rights, health and safety as well as environmental management. The initiative intends to train more than 1,500 artisanal cobalt miners by mid-2021. BMW, BASF, Samsung SDI and Samsung Electronics has initiated the project “Cobalt for Development” to better understand and address challenges for responsible artisanal mining in the region. Since January 2019, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is commissioned to implement the project together with non-governmental organizations. Volkswagen recently joined the initiative as a new partner. “For our e-mobility strategy, sustainable and responsible sourcing of raw materials is of utmost importance. In this regard, cobalt plays a vital role, despite a decreasing amount of the raw material in newer generations of batteries for electric vehicles. Through this initiative, we would like to add to our sustainable raw material strategy by delivering impact on the ground – in close cooperation with strong partners,” said Ullrich Gereke, Head of Procurement Strategy of Volkswagen Group.

In 2019, the project began testing how living and working conditions in Kolwezi’s artisanal cobalt mines and in the surrounding communities can be improved. The project has developed interactive training methods and materials that can be adapted to any artisanal cobalt mining cooperative in DR Congo. “The training curricula offer practical risk mitigation guidelines for occupational and environmental risks. They are benchmarked with Congolese and international law and standards,” explained Steven Hofmann, project director “Cobalt for Development”. The project implements the trainings in close collaboration with artisanal mining cooperatives and with SAMAPE, the government authority in charge of artisanal and small-scale mining. “This partnership with experienced artisanal mining actors is the essence of our approach,” Steven Hofmann emphasized. “We jointly implement our training methodology and strictly avoid duplicating existing services.” On-site coaching will begin in the upcoming months to support technical improvements in the areas of occupational safety, environmental management and legal conformity at mine sites.

Creating additional income opportunities for families in artisanal mining areas will reduce the dependence on their children contributing to family income and enable them to attend school. Therefore “Cobalt for Development” has been carrying out impactful community activities in Kisoto and neighboring villages with its partner Ben Pasteur/Forest Shepherd International Foundation since September 2019. So far, more than 1,800 residents of these communities – children, their parents and other community members – have benefitted from improved access to education and new income opportunities. A new, seven-classroom building for Kisoto’s public elementary and secondary school was inaugurated on October 26. The former school building will be renovated and converted into a vocational training center. The members of two women associations already successfully completed a vocational training course in breadmaking. Trainings in farming and financial literacy as well as the establishment of money savings groups support further income-generating activities. Additional activities include training in positive parenting, women’s rights and conflict resolution.

While the partners do not intend to operate artisanal mines, it is planned to test at a specific pilot site under what conditions responsible artisanal mining could be viable. The project has so far screened 56 artisanal mines to identify a suitable site that fulfills two minimum requirements: legality as well as accessible and sufficient cobalt deposits. One of these mining sites currently under evaluation is located next to Kisoto. “Cobalt for Development” is engaging with private and public concession holders of cobalt mines to select a viable, legally operating pilot site. Learnings and insights gained from trainings and community engagement will contribute to a better understanding of responsible artisanal mining and how to improve the working and living conditions for miners and their communities. This project also contributes to the goals of global initiatives, such as the Global Battery Alliance, to foster sustainable supply chains.



The four-day training covers health and safety, environmental management, protective equipment and cooperative management processes

Key Achievements in Responsible Minerals Sourcing in 2022

Category		Status	
No. of target suppliers		2,463	
Conflict minerals	CMRT survey	No. of smelters	233
		Tantalum	36
		Tin	59
		Tungsten	39
		Gold	99
	No. of on-site assessments	438	
Responsible minerals	EMRT survey	No. of smelters	Cobalt 42
			Mica 19
	PRT survey	No. of smelters	Lithium 11
			Copper 33
			Nickel 22
Training	No. of trainees	Samsung Electronics	219
		Suppliers	474
External requests (customers)	No. of suppliers	221	
	No. of requests	420	
	No. of models	458	

※ 3TG minerals (Tantalum, Tin, Tungsten, Gold) sourcing countries (143 in total)

Algeria; Andorra; Angola; Antigua and Barbuda; Argentina; Armenia; Australia; Austria; Azerbaijan; Bahamas; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Benin; Bolivia (Plurinational State of); Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Canada; Cayman Islands; Chile; China; Taiwan; Colombia; Congo, Democratic Republic of the; Côte d'Ivoire; Croatia; Curacao; Czech Republic; Denmark; Dominican Republic; Ecuador; Egypt; El Salvador; Eritrea; Estonia; Ethiopia; Fiji; Finland; France; French Guiana; Georgia; Germany; Ghana; Greece; Grenada; Guatemala; Guinea; Guyana; Honduras; Hong Kong; Hungary; Iceland; India; Indonesia; Ireland; Israel; Italy; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Korea, Republic of; Kyrgyzstan; Kuwait; Laos; Latvia; Lebanon; Liberia; Liechtenstein; Lithuania; Luxembourg; Macao; Malaysia; Mali; Malta; Mauritania; Mexico; Mongolia; Morocco; Mozambique; Myanmar; Namibia; Netherlands; New Zealand; Nicaragua; Niger; Nigeria; Norway; Oman; Pakistan; Panama; Papua New Guinea; Peru; Philippines; Poland; Portugal; Puerto Rico; Romania; Russian Federation*; Rwanda; Saint Kitts and Nevis; San Marino; Saudi Arabia; Senegal; Serbia; Sierra Leone; Singapore; Sint Maarten; Slovakia; Slovenia; South Africa; Spain; St Vincent and the Grenadines; Sudan; Suriname; Swaziland; Sweden; Switzerland; Tanzania; Thailand; Togo; Trinidad and Tobago; Tunisia; Turkey; Turks and Caicos; Uganda; Ukraine; United Arab Emirates; United Kingdom of Great Britain and Northern Ireland; United States of America; Uruguay; Uzbekistan; Venezuela; Viet Nam; Yemen; Zambia; Zimbabwe

* Before February 2022

Smelter and Refiner List in Samsung Electronics' supply chain(as of 2022)

3TG Smelter and Refiner List

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
1	Gold	CID000015	Advanced Chemical Company	USA	Conformant	LR, R/S	N/A
2	Gold	CID000019	Aida Chemical Industries Co., Ltd.	Japan	Conformant	R/S	N/A
3	Gold	CID000035	Agosi AG	Germany	Conformant	See aggregated data below for RJC Sourcing	N/A
4	Gold	CID000041	Almalyk Mining and Metallurgical Complex (AMMC)	Uzbekistan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
5	Gold	CID000058	AngloGold Ashanti Corrego do Sitio Mineracao	Brazil	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
6	Gold	CID000077	Argor-Heraeus S.A.	Switzerland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
7	Gold	CID000082	Asahi Pretec Corp.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
8	Gold	CID000090	Asaka Riken Co., Ltd.	Japan	Conformant	R/S	N/A
9	Gold	CID000113	Aurubis AG	Germany	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
10	Gold	CID000128	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	Philippines	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
11	Gold	CID000157	Boliden AB	Sweden	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
12	Gold	CID000176	C. Hafner GmbH + Co. KG	Germany	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
13	Gold	CID000185	CCR Refinery - Glencore Canada Corporation	Canada	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
14	Gold	CID000189	Cendres + Metaux S.A.	Switzerland	Conformant	-	-
15	Gold	CID000233	Chimet S.p.A.	Italy	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
16	Gold	CID000264	Chugai Mining	Japan	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
17	Gold	CID000359	DSC (Do Sung Corporation)	Korea, Republic of	Conformant	R/S	N/A
18	Gold	CID000362	DODUCO Contacts and Refining GmbH	Germany	Conformant	-	-
19	Gold	CID000401	Dowa	Japan	Conformant	LR, HR, R/S	See aggregated data below for LBMA Good Delivery Sourcing
20	Gold	CID000425	Eco-System Recycling Co., Ltd. East Plant	Japan	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
21	Gold	CID000689	LT Metal Ltd.	Korea, Republic of	Conformant	LR, R/S	L1
22	Gold	CID000694	Heimerle + Meule GmbH	Germany	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
23	Gold	CID000707	Heraeus Metals Hong Kong Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
24	Gold	CID000711	Heraeus Germany GmbH Co. KG	Germany	Conformant	LR, R/S	See aggregated data below for LBMA Good Delivery Sourcing
25	Gold	CID000801	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
26	Gold	CID000807	Ishifuku Metal Industry Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
27	Gold	CID000814	Istanbul Gold Refinery	Turkey	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
28	Gold	CID000823	Japan Mint	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
29	Gold	CID000855	Jiangxi Copper Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
30	Gold	CID000920	Asahi Refining USA Inc.	USA	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
31	Gold	CID000924	Asahi Refining Canada Ltd.	Canada	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
32	Gold	CID000937	JX Nippon Mining & Metals Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
33	Gold	CID000957	Kazzinc	Kazakhstan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
34	Gold	CID000969	Kennecott Utah Copper LLC	USA	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
35	Gold	CID000981	Kojima Chemicals Co., Ltd.	Japan	Conformant	LR, R/S	LR, HR, R/S; Additionally, see aggregated data below for LBMA Good Delivery Sourcing
36	Gold	CID001078	LS-NIKKO Copper Inc.	Korea, Republic of	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
37	Gold	CID001113	Materion	USA	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
38	Gold	CID001119	Matsuda Sangyo Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
39	Gold	CID001147	Metalor Technologies (Suzhou) Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
40	Gold	CID001149	Metalor Technologies (Hong Kong) Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
41	Gold	CID001152	Metalor Technologies (Singapore) Pte., Ltd.	Singapore	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
42	Gold	CID001153	Metalor Technologies S.A.	Switzerland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
43	Gold	CID001157	Metalor USA Refining Corporation	USA	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
44	Gold	CID001161	Metalurgica Met-Mex Penoles S.A. De C.V.	Mexico	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
45	Gold	CID001188	Mitsubishi Materials Corporation	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
46	Gold	CID001193	Mitsui Mining and Smelting Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
47	Gold	CID001220	Nadir Metal Rafineri San. Ve Tic. A.S.	Turkey	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
48	Gold	CID001236	Navoi Mining and Metallurgical Combinat	Uzbekistan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
49	Gold	CID001259	Nihon Material Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
50	Gold	CID001325	Ohura Precious Metal Industry Co., Ltd.	Japan	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
51	Gold	CID001352	MKS PAMP SA	Switzerland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
52	Gold	CID001397	PT Aneka Tambang (Persero) Tbk	Indonesia	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
53	Gold	CID001498	PX Precinox S.A.	Switzerland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
54	Gold	CID001512	Rand Refinery (Pty) Ltd.	South Africa	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
55	Gold	CID001534	Royal Canadian Mint	Canada	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
56	Gold	CID001555	Samduck Precious Metals	Korea, Republic of	Conformant	LR, R/S	N/A
57	Gold	CID001585	SEMPA Joyeria Plateria S.A.	Spain	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
58	Gold	CID001622	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
59	Gold	CID001736	Sichuan Tianze Precious Metals Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
60	Gold	CID001761	Solar Applied Materials Technology Corp.	Taiwan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
61	Gold	CID001798	Sumitomo Metal Mining Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
62	Gold	CID001875	Tanaka Kikinzoku Kogyo K.K.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
63	Gold	CID001916	Shandong Gold Smelting Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
64	Gold	CID001938	Tokuriki Honten Co., Ltd.	Japan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
65	Gold	CID001955	Torecom	Korea, Republic of	Conformant	LR, R/S	N/A
66	Gold	CID001980	Umicore S.A. Business Unit Precious Metals Refining	Belgium	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
67	Gold	CID001993	United Precious Metal Refining, Inc.	USA	Conformant	LR, R/S	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
68	Gold	CID002003	Valcambi S.A.	Switzerland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
69	Gold	CID002030	Western Australian Mint (T/a The Perth Mint)	Australia	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
70	Gold	CID002100	Yamakin Co., Ltd.	Japan	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
71	Gold	CID002129	Yokohama Metal Co., Ltd.	Japan	Conformant	R/S	N/A
72	Gold	CID002224	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
73	Gold	CID002243	Gold Refinery of Zijin Mining Group Co., Ltd.	China	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
74	Gold	CID002290	SAFINA A.S.	Czechia	Conformant	R/S	N/A
75	Gold	CID002314	Umicore Precious Metals Thailand	Thailand	Conformant	See aggregated data below for RJC Sourcing	N/A
76	Gold	CID002459	Geib Refining Corporation	USA	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
77	Gold	CID002509	MMTC-PAMP India Pvt., Ltd.	India	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
78	Gold	CID002511	KGHM Polska Miedz Spolka Akcyjna	Poland	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
79	Gold	CID002516	Singway Technology Co., Ltd.	Taiwan	Conformant	-	-
80	Gold	CID002560	Al Etihad Gold Refinery DMCC	UAE	Conformant	HR, R/S	N/A
81	Gold	CID002561	Emirates Gold DMCC	UAE	Conformant	LR, HR, CC, R/S	N/A
82	Gold	CID002580	T.C.A S.p.A	Italy	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
83	Gold	CID002582	REMONDIS PMR B.V.	Netherland	Conformant	R/S	See aggregated data below for LBMA Good Delivery Sourcing
84	Gold	CID002605	Korea Zinc Co., Ltd.	Korea, Republic of	Conformant	LR, R/S	N/A
85	Gold	CID002615	TOO Tau-Ken-Altyn	Kazakhstan	Conformant	See aggregated data below for LBMA Good Delivery Sourcing	N/A
86	Gold	CID002761	SAAMP	France	Conformant	See aggregated data below for RJC Sourcing	N/A
87	Gold	CID002762	L'Orfebre S.A.	Andorra	Conformant	R/S, HR	N/A
88	Gold	CID002763	8853 S.p.A.	Italy	Conformant	-	-
89	Gold	CID002765	Italpreziosi	Italy	Conformant	See aggregated data below for LBMA Good Delivery Sourcing and RJC Sourcing	N/A
90	Gold	CID002778	WIELAND Edelmetalle GmbH	Germany	Conformant	See aggregated data below for RJC Sourcing	N/A
91	Gold	CID002779	Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH	Austria	Conformant	See aggregated data below for RJC Sourcing	N/A
92	Gold	CID002863	Bangalore Refinery	India	Conformant	LR, R/S	N/A
93	Gold	CID002918	SungEel HiMetal Co., Ltd.	Korea, Republic of	Conformant	R/S	N/A
94	Gold	CID002919	Planta Recuperadora de Metales SpA	Chile	Conformant	LR	N/A
95	Gold	CID002973	Safimet S.p.A	Italy	Conformant	-	-
96	Gold	CID003189	NH Recytech Company	Korea, Republic of	Conformant	LR, R/S	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
97	Gold	CID003424	Eco-System Recycling Co., Ltd. North Plant	Japan	Conformant	R/S	N/A
98	Gold	CID003425	Eco-System Recycling Co., Ltd. West Plant	Japan	Conformant	R/S	N/A
99	Gold	CID003575	Metal Concentrators SA (Pty) Ltd.	South Africa	Conformant	See aggregated data below for RJC Sourcing	N/A
100	Tantalum	CID000211	Changsha South Tantalum Niobium Co., Ltd.	China	Conformant	LR, R/S	LR, HR, DRC, CC
101	Tantalum	CID000291	Guangdong Rising Rare Metals-EO Materials Ltd.	China	Conformant	-	-
102	Tantalum	CID000460	F&X Electro-Materials Ltd.	China	Conformant	LR, HR, CC	LR, CC, DRC, HR
103	Tantalum	CID000616	XIMEI RESOURCES (GUANGDONG) LIMITED	China	Conformant	LR, HR, CC, DRC	N/A
104	Tantalum	CID000914	Jiujiang JinXin Nonferrous Metals Co., Ltd.	China	Conformant	LR, HR, DRC, CC	L1
105	Tantalum	CID000917	Jiujiang Tanbre Co., Ltd.	China	Conformant	DRC, HR, R/S, LR, CC	LR, HR, CC, DRC
106	Tantalum	CID001076	AMG Brasil	Brazil	Conformant	LR	N/A
107	Tantalum	CID001163	Metallurgical Products India Pvt., Ltd.	India	Conformant	LR, R/S	L1
108	Tantalum	CID001175	Mineracao Taboca S.A.	Brazil	Conformant	L1	N/A
109	Tantalum	CID001192	Mitsui Mining and Smelting Co., Ltd.	Japan	Conformant	HR, CC, R/S	L1
110	Tantalum	CID001200	NPM Silmet AS	Estonia	Conformant	R/S, LR	L1
111	Tantalum	CID001277	Ningxia Orient Tantalum Industry Co., Ltd.	China	Conformant	LR, HR, DRC, CC	HR, LR, DRC, CC, R/S
112	Tantalum	CID001508	QuantumClean	USA	Conformant	R/S	N/A
113	Tantalum	CID001522	Yanling Jincheng Tantalum & Niobium Co., Ltd.	China	Conformant	LR	L1, LR, HR, CC, DRC, R/S
114	Tantalum	CID001869	Taki Chemical Co., Ltd.	Japan	Conformant	R/S	N/A
115	Tantalum	CID001891	Telex Metals	USA	Conformant	LR, R/S	LR, HR, DRC, CC, R/S
116	Tantalum	CID001969	Ulba Metallurgical Plant JSC	Kazakhstan	Conformant	LR, HR, CC, DRC, R/S	LR
117	Tantalum	CID002492	Hengyang King Xing Lifeng New Materials Co., Ltd.	China	Conformant	LR, HR	N/A
118	Tantalum	CID002504	D Block Metals, LLC	USA	Conformant	R/S, LR	LR, CC, DRC, R/S, HR
119	Tantalum	CID002505	FIR Metals & Resource Ltd.	China	Conformant	LR, HR, DRC, R/S	LR, R/S, HR, CC, DRC
120	Tantalum	CID002506	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	China	Conformant	LR	N/A
121	Tantalum	CID002508	XinXing HaoRong Electronic Material Co., Ltd.	China	Conformant	HR	L1
122	Tantalum	CID002512	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	China	Conformant	LR	LR, HR, DRC, R/S
123	Tantalum	CID002539	KEMET de Mexico	Mexico	Conformant	LR, R/S	LR, CC, DRC, HR, R/S
124	Tantalum	CID002544	TANIOBIS Co., Ltd.	Thailand	Conformant	LR, CC, DRC, HR, R/S	LR, HR, CC, DRC, R/S
125	Tantalum	CID002545	TANIOBIS GmbH	Germany	Conformant	LR, CC, DRC, HR, R/S	LR, R/S and Mined (See aggregated data below for TI-CMC Sourcing)
126	Tantalum	CID002547	H.C. Starck Hermsdorf GmbH	Germany	Conformant	R/S	R/S, LR
127	Tantalum	CID002548	H.C. Starck Inc.	USA	Conformant	LR, R/S	LR, HR, CC, DRC, R/S
128	Tantalum	CID002549	TANIOBIS Japan Co., Ltd.	Japan	Conformant	LR	LR, CC, HR, DRC, R/S
129	Tantalum	CID002550	TANIOBIS Smelting GmbH & Co. KG	Germany	Conformant	LR, R/S	LR, CC, DRC, HR, R/S
130	Tantalum	CID002557	Global Advanced Metals Boyertown	USA	Conformant	DRC, CC, HR, LR, R/S	LR, CC, HR, R/S
131	Tantalum	CID002558	Global Advanced Metals Aizu	Japan	Conformant	R/S, LR	DRC, CC, HR, LR, R/S
132	Tantalum	CID002707	Resind Industria e Comercio Ltda.	Brazil	Conformant	LR	LR
133	Tantalum	CID002842	Jiangxi Tuohong New Raw Material	China	Conformant	LR	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
134	Tantalum	CID002847	Meta Materials	Macedonia	Conformant	-	-
135	Tantalum	CID003583	RFH Yancheng Jinye New Material Technology Co., Ltd.	China	Conformant	LR	N/A
136	Tin	CID000228	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	China	Conformant	LR, R/S	N/A
137	Tin	CID000292	Alpha	USA	Conformant	LR, R/S	L1, LR, CC, DRC, HR, R/S
138	Tin	CID000402	Dowa	Japan	Conformant	R/S	N/A
139	Tin	CID000438	EM Vinto	Bolivia	Conformant	LR	N/A
140	Tin	CID000448	Estanho de Rondonia S.A.	Brazil	Conformant	LR	N/A
141	Tin	CID000468	Fenix Metals	Poland	Conformant	LR, R/S	N/A
142	Tin	CID000538	Gejiu Non-Ferrous Metal Processing Co., Ltd.	China	Conformant	L1	N/A
143	Tin	CID000555	Gejiu Zili Mining And Metallurgy Co., Ltd.	China	Conformant	-	-
144	Tin	CID001070	China Tin Group Co., Ltd.	China	Conformant	LR, R/S	LR
145	Tin	CID001105	Malaysia Smelting Corporation (MSC)	Malaysia	Conformant	L1, HR, CC, DRC, R/S	L1, R/S
146	Tin	CID001142	Metallic Resources, Inc.	USA	Conformant	LR, R/S	LR, R/S
147	Tin	CID001173	Mineracao Taboca S.A.	Brazil	Conformant	L1	N/A
148	Tin	CID001182	Minsur	Perú	Conformant	LR	N/A
149	Tin	CID001191	Mitsubishi Materials Corporation	Japan	Conformant	R/S	N/A
150	Tin	CID001231	Jiangxi New Nanshan Technology Ltd.	China	Conformant	LR, R/S	L1
151	Tin	CID001314	O.M. Manufacturing (Thailand) Co., Ltd.	Thailand	Conformant	R/S	N/A
152	Tin	CID001337	Operaciones Metalurgicas S.A.	Bolivia	Conformant	LR	N/A
153	Tin	CID001399	PT Artha Cipta Langgeng	Indonesia	Conformant	LR	N/A
154	Tin	CID001402	PT Babel Inti Perkasa	Indonesia	Conformant	LR	N/A
155	Tin	CID001406	PT Babel Surya Alam Lestari	Indonesia	Conformant	LR	N/A
156	Tin	CID001428	PT Bukit Timah	Indonesia	Conformant	LR	N/A
157	Tin	CID001453	PT Mitra Stania Prima	Indonesia	Conformant	LR	N/A
158	Tin	CID001458	PT Prima Timah Utama	Indonesia	Conformant	LR	N/A
159	Tin	CID001460	PT Refined Bangka Tin	Indonesia	Conformant	LR	N/A
160	Tin	CID001463	PT Sariwiguna Binasentosa	Indonesia	Conformant	LR	N/A
161	Tin	CID001468	PT Stanindo Inti Perkasa	Indonesia	Conformant	LR	N/A
162	Tin	CID001477	PT Timah Tbk Kundur	Indonesia	Conformant	LR	N/A
163	Tin	CID001482	PT Timah Tbk Mentok	Indonesia	Conformant	LR	N/A
164	Tin	CID001490	PT Tinindo Inter Nusa	Indonesia	Conformant	L1	N/A
165	Tin	CID001539	Rui Da Hung	Taiwan	Conformant	L1, R/S	L1
166	Tin	CID001758	Soft Metais Ltda.	Brazil	Conformant	-	-
167	Tin	CID001898	Thaisarco	Thailand	Conformant	LR, CC, HR, DRC, R/S	L1, LR, HR, CC, DRC, R/S
168	Tin	CID002036	White Solder Metalurgia e Mineracao Ltda.	Brazil	Conformant	L1	L1
169	Tin	CID002158	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	China	Conformant	L1	N/A
170	Tin	CID002180	Tin Smelting Branch of Yunnan Tin Co., Ltd.	China	Conformant	LR, HR, DRC, R/S	L1, HR, CC, DRC, R/S
171	Tin	CID002468	Magnu's Minerai's Metais e Ligas Ltda.	Brazil	Conformant	LR, R/S	L1, LR, R/S
172	Tin	CID002503	PT ATD Makmur Mandiri Jaya	Indonesia	Conformant	LR	N/A
173	Tin	CID002517	O.M. Manufacturing Philippines, Inc.	Philippines	Conformant	R/S	R/S
174	Tin	CID002593	PT Rajehan Ariq	Indonesia	Conformant	LR	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
175	Tin	CID002696	PT Cipta Persada Mulia	Indonesia	Conformant	LR	N/A
176	Tin	CID002706	Resind Industria e Comercio Ltda.	Brazil	Conformant	LR	LR
177	Tin	CID002773	Aurubis Beerse	Belgium	Conformant	N/A	L1, LR, CC, HR, DRC, R/S
178	Tin	CID002774	Aurubis Berango	Spain	Conformant	R/S	LR
179	Tin	CID002816	PT Sukses Inti Makmur	Indonesia	Conformant	LR	N/A
180	Tin	CID002834	Thai Nguyen Mining and Metallurgy Co., Ltd.	Vietnam	Conformant	LR	N/A
181	Tin	CID002835	PT Menara Cipta Mulia	Indonesia	Conformant	LR	N/A
182	Tin	CID002844	HuiChang Hill Tin Industry Co., Ltd.	China	Conformant	L1	N/A
183	Tin	CID003116	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	China	Conformant	LR, R/S	N/A
184	Tin	CID003190	Chifeng Dajingzi Tin Industry Co., Ltd.	China	Conformant	L1, R/S	N/A
185	Tin	CID003205	PT Bangka Serumpun	Indonesia	Conformant	L1	N/A
186	Tin	CID003325	Tin Technology & Refining	USA	Conformant	R/S	LR, R/S
187	Tin	CID003379	Ma'anshan Weitai Tin Co., Ltd.	China	Conformant	R/S	N/A
188	Tin	CID003381	PT Rajawali Rimba Perkasa	Indonesia	Conformant	LR	N/A
189	Tin	CID003387	Luna Smelter, Ltd.	Rwanda	Conformant	HR, CC	N/A
190	Tin	CID003449	PT Mitra Sukses Globalindo	Indonesia	Conformant	LR	N/A
191	Tin	CID003486	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda	Brazil	Conformant	R/S	N/A
192	Tin	CID003524	CRM Synergies	Spain	Conformant	R/S	N/A
193	Tin	CID003582	Fabrica Auricchio Industria e Comercio Ltda.	Brazil	Conformant	LR	N/A
194	Tin	CID003868	PT Putera Sarana Shakti (PT PSS)	Indonesia	Conformant	LR	N/A
195	Tungsten	CID000004	A.L.M.T. Corp.	Japan	Conformant	See aggregated data below for TI-CMC Sourcing	R/S, LR, HR, DRC, CC, See aggregated data below for TI-CMC Sourcing
196	Tungsten	CID000105	Kennametal Huntsville	USA	Conformant	See aggregated data below for TI-CMC Sourcing	HR, CC, R/S
197	Tungsten	CID000218	Guangdong Xianglu Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	See aggregated data below for TI-CMC Sourcing
198	Tungsten	CID000258	Chongyi Zhangyuan Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
199	Tungsten	CID000568	Global Tungsten & Powders Corp.	USA	Conformant	CC, See aggregated data below for TI-CMC Sourcing	LR, CC, HR, R/S
200	Tungsten	CID000766	Hunan Chenzhou Mining Co., Ltd.	China	Conformant	LR	N/A
201	Tungsten	CID000769	Hunan Chunchang Nonferrous Metals Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
202	Tungsten	CID000825	Japan New Metals Co., Ltd.	Japan	Conformant	See aggregated data below for TI-CMC Sourcing	LR, HR, CC, R/S and Mined; See aggregated data below for TI-CMC Sourcing
203	Tungsten	CID000875	Ganzhou Huaxing Tungsten Products Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
204	Tungsten	CID000966	Kennametal Fallon	USA	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
205	Tungsten	CID002044	Wolfram Bergbau und Hutten AG	Austria	Conformant	CC, See aggregated data below for TI-CMC Sourcing	See aggregated data below for TI-CMC Sourcing
206	Tungsten	CID002082	Xiamen Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	LR, R/S, DRC, CC, HR
207	Tungsten	CID002315	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing, R/S	N/A

No	Metal	ID	Smelter Name	Location	RMAP status	Direct Sourcing	Indirect Supplying Smelter Sourcing
208	Tungsten	CID002316	Jiangxi Yaosheng Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
209	Tungsten	CID002317	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
210	Tungsten	CID002318	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
211	Tungsten	CID002319	Malipo Haiyu Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
212	Tungsten	CID002320	Xiamen Tungsten (H.C.) Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	LR, R/S, HR, CC
213	Tungsten	CID002321	Jiangxi Gan Bei Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
214	Tungsten	CID002494	Ganzhou Seadragon W & Mo Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
215	Tungsten	CID002502	Asia Tungsten Products Vietnam Ltd.	Vietnam	Conformant	L1, HR, CC, DRC	N/A
216	Tungsten	CID002513	Hunan Shizhuyuan Nonferrous Metals Co., Ltd. Chenzhou Tungsten Products Branch	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
217	Tungsten	CID002541	H.C. Starck Tungsten GmbH	Germany	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
218	Tungsten	CID002542	TANIOBIS Smelting GmbH & Co. KG	Germany	Conformant	LR	L1, LR, CC, HR, DRC, R/S and Mined (See aggregated data below for TI-CMC Sourcing)
219	Tungsten	CID002543	Masan High-Tech Materials	Vietnam	Conformant	DRC, CC, See aggregated data below for TI-CMC Sourcing	N/A
220	Tungsten	CID002551	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	See aggregated data below for TI-CMC Sourcing
221	Tungsten	CID002589	Niagara Refining LLC	USA	Conformant	See aggregated data below for TI-CMC Sourcing	R/S
222	Tungsten	CID002641	China Molybdenum Tungsten Co., Ltd.	China	Conformant	LR	N/A
223	Tungsten	CID002645	Ganzhou Haichuang Tungsten Co., Ltd.	China	Conformant	LR	LR, R/S
224	Tungsten	CID002827	Philippine Chuangxin Industrial Co., Inc.	Philippines	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
225	Tungsten	CID002830	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	N/A
226	Tungsten	CID002833	ACL Metais Eireli	Brazil	Conformant	-	-
227	Tungsten	CID002845	Moliren Ltd.	Russia	Conformant	-	-
228	Tungsten	CID003388	KGETS CO., LTD.	Korea, Republic of	Conformant	R/S	N/A
229	Tungsten	CID003401	Fujian Ganmin RareMetal Co., Ltd.	China	Conformant	LR	N/A
230	Tungsten	CID003407	Lianyou Metals Co., Ltd.	Taiwan	Conformant	R/S	N/A
231	Tungsten	CID003417	Hubei Green Tungsten Co., Ltd.	China	Conformant	R/S	See aggregated data below for TI-CMC Sourcing
232	Tungsten	CID003468	Cronimet Brasil Ltda	Brazil	Conformant	HR	N/A
233	Tungsten	CID003609	Fujian Xinlu Tungsten Co., Ltd.	China	Conformant	See aggregated data below for TI-CMC Sourcing	LR, R/S and Mined (See aggregated data below for TI-CMC Sourcing)

* Source: <http://www.responsiblemineralsinitiative.org/rcoi-data/>

* Data Key

L1	Level 1 countries are not identified as conflict regions or plausible areas of smuggling or export from the DRC and its nine adjoining countries.
L2	Level 2 countries are known or plausible countries for smuggling, export out of region or transit of materials containing tantalum, tin, tungsten or gold.
CC	Covered countries are the 9 countries adjoining the Democratic Republic of Congo.
DRC	The Democratic Republic of Congo.
Low Risk (LR)	Countries identified by smelters and refiners as low-risk. Those marked with an ** have been disclosed by some smelters to be low-risk but disclosed by other smelters to be high-risk.
High Risk (HR)	Countries identified by smelters and refiners as Conflict-Affected and High-Risk (HR). Those marked with an ** have been disclosed by some smelters to be low-risk but disclosed by other smelters to be high-risk.
Recycled Scrap (R/S)	Secondary sources of material (non-mined) Gold only: Those followed by (HR) have been disclosed by refiners to be high-risk. Those followed with an ** have been disclosed by some refiners to be low-risk but disclosed by other refiners to be high-risk.

Known Countries from which Conformant Gold Refiners Source

L1	
L2	
CC	Tanzania
DRC	
Low Risk (LR)	Canada, Chile, Ghana**, Guinea**, Guyana**, India, Mexico**, Peru**, Philippines, United States of America, South Africa**, South Korea, Sweden, Uzbekistan
High Risk (HR)	Benin, Bolivia (Plurinational State of), Brazil**, Colombia, Ecuador, Eritrea, Ghana**, Guinea**, Guyana** Mexico**, Mozambique, Niger, Peru**, South Africa**, Swaziland, Tanzania, Russian Federation
Recycled Scrap (R/S)	Andorra, Antigua and Barbuda, Australia, Austria, Bahamas, Barbados, Belgium, Benin (HR), Brazil**, Bulgaria, Canada, Cayman Islands, Chile**, China, Chinese Taipei, Colombia**, Curacao, Czech Republic, Denmark, Dominican Republic**, El Salvador (HR), France, Germany, Grenada, Guatemala (HR), Honduras (HR), Hong Kong**, Hungary, India**, Indonesia**, Ireland, Israel, Italy, Japan, Jordan (HR), Lithuania, Luxembourg, Malaysia, Mexico (HR), Netherlands, New Zealand, Panama (HR)**, Peru, Philippines**, Poland, Puerto Rico, Romania, Saint Kitts and Nevis, Saudi Arabia (HR), Singapore**, Sint Maarten, Slovakia, South Africa**, South Korea, Spain, St Vincent and Grenadines, Sweden, Switzerland**, Thailand, Trinidad and Tobago, Turkey (HR), Turks and Caicos, United Arab Emirates**, United Kingdom**, United States of America**, Uruguay, Uzbekistan (HR), Vietnam

Known Countries from which LBMA Good Delivery List Refiners Source - Mined Material (Provided by LBMA)

All COI	Argentina, Armenia, Australia, Azerbaijan, Bolivia (Plurinational State of), Botswana, Brazil, Burkina Faso, Canada, Chile, China, Colombia, Côte d'Ivoire, Dominican Republic, Ecuador, Egypt, Ethiopia, Fiji, Finland, Germany, Ghana, Guatemala, Guinea, Guyana, Honduras, Indonesia, Japan, Kazakhstan, Kenya, Lao People's Democratic Republic, Mali, Mauritania, Mexico, Mongolia, Namibia, New Zealand, Nicaragua, Niger, Oman, Papua New Guinea, Peru, Philippines, Russian Federation, Saudi Arabia, Senegal, Slovakia, South Africa, Spain, Sudan, Suriname, Sweden, Thailand, Turkey, United States of America, Uzbekistan
CC	Tanzania, Zambia
DRC	Congo, Democratic Republic of the

* Notes

* Dates marked with an asterisk represent smelters that are currently enrolled in the risk-based audit program and have not undergone an on-site audit for this compliance period. While these smelters have sent in their Line Item Summary and Declaration of Sourcing to show their full sourcing information, the information provided has not been validated by a third party auditor.

Known Countries from which LBMA Good Delivery List Refiners Source - Recycled Material (Provided by LBMA)

All COI	Algeria, Andorra, Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Bolivia (Plurinational State of), Brazil, Bulgaria, Canada, Chile, China, Chinese Taipei, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Egypt, Estonia, Finland, France, Georgia, Germany, Ghana, Greece, Guyana, Hong Kong, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea, Republic of, Kyrgyzstan, Lao People's Democratic Republic, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao, Malaysia, Mali, Malta, Mexico, Morocco, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Romania, Russian Federation, San Marino, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Trinidad and Tobago, Turkey, Ukraine, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, Uruguay, Viet Nam, Zimbabwe
CC	Tanzania, Zambia
DRC	Congo, Democratic Republic of the

Known Countries from which RJC Refiners Source - Mined Material (Provided by RJC)

All COI	Argentina, Azerbaijan, Brazil, Burkina Faso, Canada, Chile, Colombia, Dominican Republic, Ecuador, Finland, Guinea, French Guiana, Ghana, Honduras, Lao People's Democratic Republic, Liberia, Mexico, Morocco, Nicaragua, Panama, Peru, Philippines, Saudi Arabia, Senegal, Spain, South Africa, United States of America
CC	Tanzania
DRC	

Known Countries from which Conformant Tantalum Smelters Source

Please refer to the Data Key above for descriptions of each RCOI designation.

L1	Brazil
L2	
CC	Burundi, Rwanda
DRC	Congo, Democratic Republic of the
Low Risk (LR)	Australia, Brazil**, China, Ethiopia**, Mozambique, Nigeria**, Sierra Leone, Spain, Zimbabwe
High Risk (HR)	Brazil**, Burundi, Congo, Democratic Republic of the, Ethiopia**, Nigeria**, Rwanda
Recycled Scrap (R/S)	Belarus, Canada, China, Chinese Taipei, Czech Republic, El Salvador, Estonia, France, Germany, Hong Kong, India, Indonesia, Israel, Ireland, Japan, Kazakhstan, Mexico, Russia, Singapore, South Korea, Thailand, United Kingdom of Great Britain and Northern Ireland, United States of America

Known Countries from which Conformant Tin Smelters Source

Please refer to the Data Key above for descriptions of each RCOI designation.

L1	Australia, Bolivia (Plurinational State of), Brazil, China, Chinese Taipei, Colombia, Indonesia, Malaysia, Myanmar, Russian Federation, United Kingdom of Great Britain and Northern Ireland, Venezuela
L2	
CC	Burundi, Rwanda
DRC	Congo, Democratic Republic of the
Low Risk (LR)	Australia, Bolivia, Brazil**, China, France, Indonesia**, Laos, Malaysia, Myanmar**, Namibia, Peru, Portugal, Russia**, United Kingdom, Vietnam
High Risk (HR)	Brazil**, Burundi, Congo, Democratic Republic of the, Indonesia**, Myanmar**, Nigeria, Rwanda, Thailand
Recycled Scrap (R/S)	Angola, Argentina, Australia, Austria, Bangladesh, Bahrain, Belarus, Belgium, Bolivia, Brazil, Canada, Chile, China, Chinese Taipei, Croatia, Czech Republic, Denmark, Egypt, Finland, France, Germany, Ghana, Greece, Guinea, Hong Kong, Hungary, India, Indonesia, Ireland, Israel, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Latvia, Lebanon, Liberia, Lithuania, Malaysia, Malta, Mexico, Morocco, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Philippines, Poland, Portugal, Puerto Rico, Romania, Russia, Saudi Arabia, Serbia, Senegal, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sudan, Sweden, Switzerland, Tanzania, Thailand, Togo, Trinidad and Tobago, Tunisia, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay, Venezuela, Yemen

Known Countries from which Conformant Tungsten Industry-Conflict Minerals Council (TI-CMC) Smelters Source - Mined Material (Provided by TI-CMC)

Please refer to the Data Key above for descriptions of each RCOI designation.

All COI	Australia, Austria, Bolivia, Brazil, China, Kazakhstan, Krygyzstan, Malaysia, Mexico, Mongolia, Myanmar, Nigeria, Peru, Portugal, Russian Federation, Spain, Thailand, United Kingdom of Great Britain and Northern Ireland, United States of America, Vietnam, Zimbabwe
CC	Burundi, Rwanda, Uganda
DRC	Congo, Democratic Republic of the

Known Countries from which Conformant Tungsten Smelters Source

Please refer to the Data Key above for descriptions of each RCOI designation.

L1	Brazil, Myanmar
L2	
CC	Rwanda
DRC	Congo, Democratic Republic of the
Low Risk (LR)	China, Vietnam
High Risk (HR)	Brazil, Burundi, Rwanda
Recycled Scrap (R/S)	Brazil, Canada, China, Germany, Ireland, Israel, Japan, South Korea, United States of America, Vietnam

* Notes

* Dates marked with an asterisk represent smelters that are currently enrolled in the risk-based audit program and have not undergone an on-site audit for this compliance period. While these smelters have sent in their Line Item Summary and Declaration of Sourcing to show their full sourcing information, the information provided has not been validated by a third party auditor.

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Cobalt Smelter List

No	ID	Smelter Name	Location
1	CID003211	Zhuhai Kelixin Metal Materials Co., Ltd.	China
2	CID003221	Nantong Xinwei Nickel Cobalt Technology Development Co., Ltd.	China
3	CID003232	Dynatec Madagascar Company	Madagascar
4	CID003233	JSC Kolskaya Mining and Metallurgical Company (Kola MMC)	Russia
5	CID003266	Societe pour le Traitment du Terril de Lubumbashi (STL)	Congo, Democratic Republic of the
6	CID003377	Jiangxi Jiangwu Cobalt industrial Co., Ltd.	China
7	CID003426	SOCIETE MINIERE DU KATANGA (SOMIKA SARL)	Congo, Democratic Republic of the
8	CID003470	Hunan Jinxin New Material Holding Co., Ltd.	China
9	CID003534	Mechema Taiwan Plant 2	Taiwan
10	CID003209	Gem (Jiangsu) Cobalt Industry Co., Ltd.	China
11	CID003210	Lanzhou Jinchuan Advanced Materials Technology Co., Ltd.	China
12	CID003212	Ganzhou Tengyuan Cobalt New Material Co., Ltd.	China
13	CID003213	Guangxi Yinyi Advanced Material Co., Ltd.	China
14	CID003215	Tianjin Maolian Science & Technology Co., Ltd.	China
15	CID003225	Zhejiang Huayou Cobalt Company Limited	China
16	CID003226	Umicore Finland Oy	Finland
17	CID003228	Umicore Olen	Belgium
18	CID003255	Quzhou Huayou Cobalt New Material Co., Ltd.	China
19	CID003261	Kamoto Copper Company	Congo, Democratic Republic of the
20	CID003264	Chemaf Etoile	Congo, Democratic Republic of the
21	CID003275	La Compagnie de Traitement des Rejets de Kingamyambo S.A. (Metalkol S.A.)	Congo, Democratic Republic of the
22	CID003278	Niihama Nickel Refinery, Sumitomo Metal Mining	Japan
23	CID003279	Mine de Bou-Azzer	Morocco
24	CID003280	Compagnie de Tifnout Tiranimine	Morocco
25	CID003291	Guangdong Jiana Energy Technology Co., Ltd.	China
26	CID003293	Jiangsu Xiongfeng Technology Co., Ltd.	China
27	CID003338	SungEel HiTech Co., Ltd.	Korea, Republic of
28	CID003378	Jingmen GEM Co., Ltd.	China
29	CID003384	Ganzhou Highpower Technology Co., Ltd.	China
30	CID003390	NORILSK NICKEL HARJAVALTA OY	Finland
31	CID003398	New Era Group Zhejiang Zhongneng Cycle Technology Co., Ltd.	China
32	CID003404	Hunan Yacheng New Materials Co., Ltd.	China
33	CID003406	Murrin Murrin Nickel Cobalt Plant	Australia
34	CID003411	Hunan CNGR New Energy Science & Technology Co., Ltd.	China
35	CID003415	Cosmo Chemical, Ltd.	Korea, Republic of
36	CID003423	Chemaf Usoke	Congo, Democratic Republic of the
37	CID003465	Ningbo Hubang New Material Co., Ltd.	China
38	CID003473	CoreMax Corporation	Taiwan
39	CID003481	Chizhou CN New Materials and Technology Co., Ltd.	China
40	CID003526	Zhejiang Greatpower Cobalt Materials Co., Ltd.	China
41	CID003577	Harima Refinery, Sumitomo Metal Mining	Japan
42	CID003610	Guizhou CNGR Resource Recycling Industry Development Co., Ltd.	China

Mica Operator List

No	ID	Operator Name	Location
1	CID003512	Yamaguchi Mica	Japan
2	CID003514	The JAI Mica Supply Company Limited	-
3	CID003625	SIDDHI EXIMP ENTERPRISES	India
4	CID003652	Ruby Mica	India
5	CID003730	Lingshou Huajing Mica Co., Ltd.	China
6	CID003734	Tri-H	Madagascar
7	CID003513	Modi Mica Enterprises	India
8	CID003589	Imerys Canada, Inc.	Canada
9	CID003590	Southeastern Performance Minerals, LLC	USA
10	CID003591	Imerys Mica Kings Mountain, Inc.	USA
11	CID003592	Arctic Minerals, LLC	USA
12	CID003593	VON ROLL BRAZIL LTDA	Brazil
13	CID003599	Pachisia & Co.	India
14	CID003621	DARUKA INTERNATIONAL	India
15	CID003623	G. K. INTERNATIONAL	India
16	CID003624	LAXIM MINERALS CORPORATION	India
17	CID003626	DARUKA MINERALS	India
18	CID003664	JSC "Sludyanaya Fabrika"	Russia
19	CID003787	Nanjing Jinyun Mica Ltd.	China

Lithium Smelter List

No	ID	Smelter Name	Location
1	CID003670	Fujhara Refinery	UAE
2	CID003708	Salar del Carmen	Chile
3	CID003714	Jiangxi Ganfeng Lithium Co., Ltd.	China
4	CID003715	Ningdu Ganfeng Lithium Co., Ltd.	China
5	CID003720	Tianqi Lithium (Shehong) Co., Ltd.	China
6	CID003745	POSCO	Korea, Republic of
7	CID003823	La Negra Chemical Plant	Canada
8	CID003824	Albermarle U.S. Inc (King's Mountain)	USA
9	CID003826	FMC	Unknown
10	CID003954	SQM Salar S.A.	Chile
11	CID004013	Jingmen GEM Co., Ltd.	China

Copper Smelter List

No	ID	Smelter Name	Location
1	CID003668	Fujhara Refinery	UAE
2	CID003722	Katanga Mining	Congo, Democratic Republic of the
3	CID003742	TSK Pretech	Unknown
4	CID003747	Samsun Smelter and Electrolysis Plant	Turkey
5	CID003748	Kure Plant	Turkey
6	CID003749	Murgul Plant	Turkey
7	CID003754	Atlantic Nickel Santa Rita	Brazil
8	CID003774	Apex Material Technologies	USA
9	CID003792	Mufulira - Mopani Copper Mines	Congo, Democratic Republic of the
10	CID003793	MKM	Congo, Democratic Republic of the
11	CID003794	KCC	Congo, Democratic Republic of the
12	CID003795	Tenke Fungurume Mining SA	Congo, Democratic Republic of the
13	CID003812	Young Poong Seokpo Smelter	Korea, Republic of
14	CID003876	Besshi Copper Mine	Japan
15	CID003877	Hishikari Mine	Japan
16	CID003878	Toyo Smelter & Refinery	Japan
17	CID003881	Niihama Refinery	Japan
18	CID003887	Mitsui Sumitomo Metal Mining Brass & Copper Co., Ltd.	Japan
19	CID003895	Niihama Electronics Co., Ltd.	Japan
20	CID003898	Jinlong Copper	China
21	CID003900	Northparkes Mine	Australia
22	CID003901	Ojos del Salado Copper Mine	Chile
23	CID003902	Candelaria Mine	Chile
24	CID003903	Sierra Gorda Mine	Chile
25	CID003916	Ganzhou Hanrui	China
26	CID003921	Jiangmen Fangyuan Cycle Technology Co., Ltd.	China
27	CID003931	MCC Non Ferrous Trading Inc.	USA
28	CID003941	Guangdong Fangyuan Environment Co., Ltd.	China
29	CID003948	La Compagnie de Traitement des Rejets de Kingamyambo S.A. (Metalkol S.A.)	Congo, Democratic Republic of the
30	CID003982	Africo Resources/Rubicon Minerals	Congo, Democratic Republic of the
31	CID003992	Compagnie Minière de Musonoie Global SAS	Congo, Democratic Republic of the
32	CID003995	JX Nippon Mining & Metals Co., Ltd.	Japan
33	CID003996	JX Nippon Mining & Metals Co., Ltd. Hitachi	Japan

Nickel Smelter List

No	ID	Smelter Name	Location
1	CID003703	Eramet SLN	New Caledonia
2	CID003707	Angel Nickel	Indonesia
3	CID003753	Atlantic Nickel Santa Rita	Brazil
4	CID003771	JIANGMEN UMICORE CHANG XIN NEW MATERIALS CO., LTD,	China
5	CID003775	Apex Material Technologies	USA
6	CID003897	Sumiko Energy Materials Co., Ltd.	Japan
7	CID003923	Jiangmen Fangyuan Cycle Technology Co., Ltd.	China
8	CID003925	Jiangmen Fangyuan New Energy Materials Co., Ltd.	China
9	CID003928	Murrin Murrin Nickel Cobalt Plant	Australia
10	CID003943	Guangdong Fangyuan Environment Co., Ltd.	China
11	CID003947	Baotou Jielang Nickel Salt Co., Ltd.	China
12	CID003958	Joint-Stock Company Kola Mining and Metallurgical Company (JSC Kola MMC)	Russia
13	CID003968	Dynatec Madagascar Company	Madagascar
14	CID003976	Jinchuan Group Co., Ltd.	China
15	CID004004	PT Huayue	Indonesia
16	CID004005	PT Smelter Nickel Indonesia	Indonesia
17	CID004006	PT Cahaya Modern Metal Industri	Indonesia
18	CID004007	PT Aneka Tambang Tbk (Antam)	Indonesia
19	CID004008	NORILSK NICKEL HARJAVALTA OY	Finland
20	CID004012	Nadezhda Metallurgical Plant of MMC Norilsk Nickel's Polar Division	Russia
21	CID004024	Zhejiang Power New Energy Materials Co., Ltd.	China
22	CID004055	Niihama Nickel Refinery, Sumitomo Metal Mining	Japan

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