

Responsible Minerals Report

삼성전기의 생산 제품(MLCC, Camera module, PCB 등)에 공급하는 원자재를 거래중인 1차 협력회사의 CMRT(Conflict Minerals Reporting Template), EMRT(Extended Minerals Reporting Template)를 100% 입수하여, 조사 정보 신뢰도 및 인증 제련소 사용 검토, Risk 분석을 통해 문제 발생 방지와 개선 활동을 진행하고 있으며, 협력회사 등록 단계에서 Risk가 있으면 거래등록 제한 등의 규제 대응 활동을 진행하고 있습니다.

삼성전기는 이러한 활동 등의 결과 2023년도 100% 인증제련소를 통해 3TG(Tantalum, tin, tungsten, gold) 및 Cobalt, Mica가 공급 되는 것으로 확인 되었으며, 지속적으로 공급망 내 사용 제련소가 Risk 없이 공급될 수 있도록 아래와 같이 적극 노력할 것입니다.

- 모든 제련소는 인증제련소만을 사용하도록 하겠으며 미인증 제련소는 즉시 RMAP(Responsible Minerals Assurance Process) 인증을 유도하여 인증 취득 또는 사용금지 되도록 공급망 내 책임광물 관리를 하겠습니다.
- 공급망 실사 및 교육을 통해 책임광물 규제에 대한 협력회사들의 자발적인 대응이 될 수 있도록 계속해서 노력할 것 입니다.
- 나아가 삼성전기는 비윤리적으로 채굴된 광물뿐만 아니라 인권침해, 환경파괴 등에도 지대한 관심을 가지고 협력회사들까지 책임있는 광물조달을 하도록 최선을 다하겠습니다.

※ 분쟁광물 조사 결과

삼성전기의 생산 제품(MLCC, Camera module, PCB 등)에 공급하는 원자재를 거래중인 1차 협력회사의 CMRT(Conflict Minerals Reporting Template), EMRT(Extended Minerals Reporting Template)를 100% 입수하여, 조사 정보 신뢰도 및 인증제련소 사용 검토, Risk 분석을 통해 문제 발생 방지와 개선 활동을 진행하고 있으며, 협력회사 등록 단계에서 Risk가 있으면 거래등록 제한 등의 규제 대응 활동을 통하여 다음의 결과가 나왔습니다.

1) 공급망 내 광물별 사용 제련소 현황

(2023년 말 기준, 단위: 개소)

구분	인증제련소	인증진행 제련소	합계	인증 (%)
Tantalum	35	-	35	100%
Tin	81	-	81	100%
Tungsten	51	-	51	100%
Gold	167	-	167	100%
Cobalt	70	-	70	100%
Mica	4	-	4	100%
Total	408	-	408	100%

2) 연도별 사용 제련소 현황

구분	인증제련소	인증진행 제련소	합계	인증 (%)
2023	408	-	408	100%
2022	400	-	400	100%
2021	269	-	269	100%
2020	250	-	250	100%
2019	228	-	228	100%
2018	166	-	166	100%

자사 공급망 내 사용된 제련소는 총 408개로, 100% 모두 인증제련소를 사용 한 것으로 1차 확인 되었으나 협력사별로 세부 검증을 지속 추진 하겠습니다.

유첨 : 사용제련소 List

광물명	제련소명	국가명
Tungsten	DONGKUK INDUSTRIES CO., LTD.	KOREA, REPUBLIC OF
Tungsten	Tungsten Vietnam Joint Stock Company	VIET NAM
Tungsten	HANNAE FOR T Co., Ltd.	KOREA, REPUBLIC OF
Tungsten	YUDU ANSHENG TUNGSTEN CO., LTD.	CHINA
Tungsten	LLC Vostok	RUSSIAN FEDERATION
Tungsten	Technolom 1	RUSSIAN FEDERATION
Tungsten	Technolom 2	RUSSIAN FEDERATION
Tungsten	Fujian Xinlu Tungsten Co., Ltd.	CHINA
Tungsten	Artek LLC	RUSSIAN FEDERATION
Tungsten	Cronimet Brasil Ltda	BRAZIL
Tungsten	Albasteel Industria e Comercio de Ligas Para Fundicao Ltd.	BRAZIL
Tungsten	Hubei Green Tungsten Co., Ltd.	CHINA
Tungsten	NPP Tyazhmetprom LLC	RUSSIAN FEDERATION
Tungsten	JSC "Kirovgrad Hard Alloys Plant"	RUSSIAN FEDERATION
Tungsten	Lianyou Metals Co., Ltd.	TAIWAN, PROVINCE OF CHINA
Tungsten	Fujian Ganmin RareMetal Co., Ltd.	CHINA
Tungsten	Moliren Ltd	RUSSIAN FEDERATION
Tungsten	ACL Metais Eireli	BRAZIL
Tungsten	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES
Tungsten	Unecha Refractory metals plant	RUSSIAN FEDERATION
Tungsten	Hydrometallurg, JSC	RUSSIAN FEDERATION
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.	CHINA
Tungsten	China Molybdenum Tungsten Co., Ltd.	CHINA
Tungsten	Niagara Refining LLC	UNITED STATES OF AMERICA
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA
Tungsten	Masan High-Tech Materials	VIET NAM
Tungsten	H.C. Starck Smelting GmbH & Co.KG	GERMANY
Tungsten	H.C. Starck Tungsten GmbH	GERMANY
Tungsten	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA
Tungsten	Asia Tungsten Products Vietnam Ltd.	VIET NAM
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA

Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co	CHINA
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CHINA
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA
Tungsten	Jiangxi Minmetals Gaoan Non-ferrous Metals Co., Ltd.	CHINA
Tungsten	Xiamen Tungsten Co., Ltd.	CHINA
Tungsten	Wolfram Bergbau und Hutten AG	AUSTRIA
Tungsten	Kennametal Fallon	UNITED STATES OF AMERICA
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA
Tungsten	Japan New Metals Co., Ltd.	JAPAN
Tungsten	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA
Tungsten	Hunan Chenzhou Mining Group Co., Ltd.	CHINA
Tungsten	Global Tungsten & Powders Corp.	UNITED STATES OF AMERICA
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CHINA
Tungsten	Kennametal Huntsville	UNITED STATES OF AMERICA
Tungsten	A.L.M.T. TUNGSTEN Corp.	JAPAN
Tin	PT Putera Sarana Shakti (PT PSS)	INDONESIA
Tin	DS Myanmar	MYANMAR
Tin	Fabrica Auricchio	BRAZIL
Tin	CRM Synergies	SPAIN
Tin	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda	BRAZIL
Tin	PT Mitra Sukses Globalindo	INDONESIA
Tin	Gejiu City Fuxiang Industry and Trade Co., Ltd.”	CHINA
Tin	Precious Minerals and Smelting Limited	INDIA
Tin	Yunnan Yunfan Non-ferrous Metals Co., Ltd.	CHINA
Tin	Luna Smelter, Ltd.	RWANDA
Tin	PT Rajawali Rimba Perkasa	INDONESIA
Tin	Dongguan CiEXPO Environmental Engineering	CHINA
Tin	Tin Technology & Refining	UNITED STATES OF AMERICA
Tin	Pongpipat Company Limited	MYANMAR
Tin	PT Bangka Serumpun	INDONESIA

Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CHINA
Tin	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CHINA
Tin	Modeltech Sdn Bhd	MALAYSIA
Tin	PT Menara Cipta Mulia	INDONESIA
Tin	PT Sukses Inti Makmur	INDONESIA
Tin	PT Bangka Prima Tin	INDONESIA
Tin	Elmet S.L.U.	SPAIN
Tin	Metallo Belgium N.V.	BELGIUM
Tin	Super Ligas	BRAZIL
Tin	Resind Indústria e Comércio Ltda.	BRAZIL
Tin	An Vinh Joint Stock Mineral Processing Company	VIET NAM
Tin	PT Cipta Persada Mulia	INDONESIA
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	VIET NAM
Tin	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company	VIET NAM
Tin	Smelter not listed	INDONESIA
Tin	O.M. Manufacturing Philippines, Inc.	PHILIPPINES
Tin	PT ATD Makmur Mandiri Jaya	INDONESIA
Tin	Melt Metais e Ligas S.A.	BRAZIL
Tin	PT Tirus Putra Mandiri	INDONESIA
Tin	Magnus Minerais Metais e Ligas Ltda.	BRAZIL
Tin	CV Venus Inti Perkasa	INDONESIA
Tin	Smelting Branch of Yunnan Tin Company Ltd	CHINA
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA
Tin	White Solder Metalurgia e Mineração Ltda.	BRAZIL
Tin	VQB Mineral and Trading Group JSC	VIET NAM
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA
Tin	Thaisarco	THAILAND
Tin	Rui Da Hung	TAIWAN, PROVINCE OF CHINA
Tin	PT Tommy Utama	INDONESIA
Tin	PT Tinindo Inter Nusa	INDONESIA
Tin	PT Timah Nusantara	INDONESIA
Tin	PT Timah Tbk Mentok	INDONESIA
Tin	PT Timah Tbk Kundur	INDONESIA

Tin	PT Stanindo Inti Perkasa	INDONESIA
Tin	PT Sariwiguna Binasentosa	INDONESIA
Tin	PT Refined Bangka Tin	INDONESIA
Tin	PT Prima Timah Utama	INDONESIA
Tin	PT Panca Mega Persada	INDONESIA
Tin	PT Mitra Stania Prima	INDONESIA
Tin	PT Bukit Timah	INDONESIA
Tin	PT Belitung Industri Sejahtera	INDONESIA
Tin	PT Bangka Tin Industry	INDONESIA
Tin	PT Babel Surya Alam Lestari	INDONESIA
Tin	PT Babel Inti Perkasa	INDONESIA
Tin	PT Artha Cipta Langgeng	INDONESIA
Tin	Operaciones Metalurgicas S.A.	BOLIVIA (PLURINATIONAL STATE OF)
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND
Tin	Novosibirsk Tin Combine	RUSSIAN FEDERATION
Tin	Nankang Nanshan Tin Manufactory Co., Ltd.	CHINA
Tin	Mitsubishi Materials Corporation	JAPAN
Tin	Minsur	PERU
Tin	Mineracao Taboca S.A.	BRAZIL
Tin	Metallic Resources, Inc.	UNITED STATES OF AMERICA
Tin	Malaysia Smelting Corporation (MSC)	MALAYSIA
Tin	China Tin Group Co., Ltd.	CHINA
Tin	Gejiu Kai Meng Industry and Trade LLC	CHINA
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA
Tin	Fenix Metals	POLAND
Tin	Estanho de Rondônia S.A.	BRAZIL
Tin	Empresa Metalúrgica Vinto	BOLIVIA (PLURINATIONAL STATE OF)
Tin	Dowa	JAPAN
Tin	PT Premium Tin Indonesia	INDONESIA
Tin	PT Aries Kencana Sejahtera	INDONESIA
Tin	Alpha	UNITED STATES OF AMERICA
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA
Tantalum	5D Production OU	ESTONIA
Tantalum	RFH Yancheng Jinye New Material Technology Co., Ltd.	CHINA
Tantalum	Jiangxi Tuohong New Raw Material	CHINA

Tantalum	Resind Industria e Comercio Ltda.	BRAZIL
Tantalum	Global Advanced Metals Aizu	JAPAN
Tantalum	Global Advanced Metals Boyertown	UNITED STATES OF AMERICA
Tantalum	H.C. Starck Smelting GmbH & Co. KG	GERMANY
Tantalum	H.C. Starck Ltd.	JAPAN
Tantalum	H.C. Starck Inc.	UNITED STATES OF AMERICA
Tantalum	H.C. Starck Tantalum and Niobium GmbH	GERMANY
Tantalum	H.C. Starck Co., Ltd.	THAILAND
Tantalum	KEMET Blue Metals	MEXICO
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	XinXing HaoRong Electronic Material Co., Ltd.	CHINA
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	FIR Metals & Resource Ltd.	CHINA
Tantalum	D Block Metals, LLC	UNITED STATES OF AMERICA
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA
Tantalum	Ulba Metallurgical Plant JSC	KAZAKHSTAN
Tantalum	Telex Metals	UNITED STATES OF AMERICA
Tantalum	Taki Chemicals	JAPAN
Tantalum	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION
Tantalum	Yanling Jincheng Tantalum & Niobium Co., Ltd.	CHINA
Tantalum	QuantumClean	UNITED STATES OF AMERICA
Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA
Tantalum	Molycorp Silmet A.S.	ESTONIA
Tantalum	Mitsui Mining & Smelting	JAPAN
Tantalum	Mineracao Taboca S.A.	BRAZIL
Tantalum	Metallurgical Products India Pvt., Ltd.	INDIA
Tantalum	LSM Brasil S.A.	BRAZIL
Tantalum	Jiujiang Tanbre Co., Ltd.	CHINA
Tantalum	Jiujiang JinXin Nonferrous Metals Co., Ltd.	CHINA
Tantalum	Guangdong Zhiyuan New Material Co., Ltd.	CHINA
Tantalum	F&X Electro-Materials Ltd.	CHINA
Tantalum	Changsha South Tantalum Niobium Co., Ltd.	CHINA
Mica	Yamaguchi Mica Co., Ltd. Shinshiro Factory	JAPAN
Mica	Yamaguchi Mica Co., Ltd. Toyohashi Factory	JAPAN
Mica	Imerys Mica Kings Mountain, Inc.	UNITED STATES OF AMERICA

Mica	Yamaguchi Mica	JAPAN
Gold	Dongwu Gold Group	CHINA
Gold	Gold by Gold Colombia	COLOMBIA
Gold	WEEEREFINING	FRANCE
Gold	Metal Concentrators SA (PTY) Ltd.	SOUTH AFRICA
Gold	Metallix Refining Inc.	UNITED STATES OF AMERICA
Gold	MD Overseas	INDIA
Gold	Sellem Industries Ltd.	MAURITANIA
Gold	Sancus ZFS (L'Orfebre, SA)	COLOMBIA
Gold	Alexy Metals	UNITED STATES OF AMERICA
Gold	K.A. Rasmussen	NORWAY
Gold	Emerald Jewel Industry India Limited (Unit 4)	INDIA
Gold	Emerald Jewel Industry India Limited (Unit 3)	INDIA
Gold	Emerald Jewel Industry India Limited (Unit 2)	INDIA
Gold	Emerald Jewel Industry India Limited (Unit 1)	INDIA
Gold	Kundan Care Products Ltd.	INDIA
Gold	Augmont Enterprises Private Limited	INDIA
Gold	Eco-System Recycling Co., Ltd. West Plant	JAPAN
Gold	Eco-System Recycling Co., Ltd. North Plant	JAPAN
Gold	C.I Metales Procesados Industriales SAS	COLOMBIA
Gold	Sovereign Metals	INDIA
Gold	CGR Metalloys Pvt Ltd.	INDIA
Gold	Dijllah Gold Refinery FZC	UNITED ARAB EMIRATES
Gold	QG Refining, LLC	UNITED STATES OF AMERICA
Gold	NH Recytech Company	KOREA, REPUBLIC OF
Gold	Gold Coast Refinery	GHANA
Gold	African Gold Refinery	UGANDA
Gold	State Research Institute Center for Physical Sciences and Technology	LITHUANIA
Gold	Safimet S.p.A	ITALY
Gold	ABC Refinery Pty Ltd.	AUSTRALIA
Gold	Planta Recuperadora de Metales SpA	CHILE
Gold	SungEel HiMetal Co., Ltd.	KOREA, REPUBLIC OF
Gold	JALAN & Company	INDIA
Gold	Pease & Curren	UNITED STATES OF AMERICA

Gold	Degussa Sonne / Mond Goldhandel GmbH	GERMANY
Gold	Kyshtym Copper-Electrolytic Plant ZAO	RUSSIAN FEDERATION
Gold	Bangalore Refinery	INDIA
Gold	Modeltech Sdn Bhd	MALAYSIA
Gold	Sai Refinery	INDIA
Gold	GGC Gujrat Gold Centre Pvt. Ltd.	INDIA
Gold	AU Traders and Refiners	SOUTH AFRICA
Gold	Ögussa Österreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA
Gold	WIELAND Edelmetalle GmbH	GERMANY
Gold	Italpreziosi	ITALY
Gold	8853 S.p.A.	ITALY
Gold	LOrfebre S.A.	ANDORRA
Gold	SAAMP	FRANCE
Gold	Albino Mountinho Lda.	PORTUGAL
Gold	Shenzhen CuiLu Gold Co., Ltd.	CHINA
Gold	Abington Reldan Metals, LLC	UNITED STATES OF AMERICA
Gold	TOO Tau-Ken-Altyn	KAZAKHSTAN
Gold	Marsam Metals	BRAZIL
Gold	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF
Gold	Shirpur Gold Refinery Ltd.	INDIA
Gold	Tony Goetz NV	BELGIUM
Gold	Fujairah Gold FZC	UNITED ARAB EMIRATES
Gold	Remondis Argentia B.V.	NETHERLANDS
Gold	T.C.A S.p.A	ITALY
Gold	Sudan Gold Refinery	SUDAN
Gold	Kaloti Precious Metals	UNITED ARAB EMIRATES
Gold	International Precious Metal Refiners	UNITED ARAB EMIRATES
Gold	Emirates Gold DMCC	UNITED ARAB EMIRATES
Gold	Al Etihad Gold Refinery DMCC	UNITED ARAB EMIRATES
Gold	Shenzhen Zhonghenglong Real Industry Co., Ltd.	CHINA
Gold	Shandong Humon Smelting Co., Ltd.	CHINA
Gold	Singway Technology Co., Ltd.	TAIWAN, PROVINCE OF CHINA
Gold	Fidelity Printers and Refiners Ltd.	ZIMBABWE
Gold	KGHM Polska Miedz Spolka Akcyjna	POLAND

Gold	MMTC-PAMP India Pvt., Ltd.	INDIA
Gold	Geib Refining	UNITED STATES OF AMERICA
Gold	Umicore Precious Metals Thailand	THAILAND
Gold	Guangdong Jinding Gold Limited	CHINA
Gold	SAFINA A.S.	CZECHIA
Gold	Morris and Watson	NEW ZEALAND
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA
Gold	Yokohama Metal Co., Ltd.	JAPAN
Gold	Yamamoto Precious Metal Co., Ltd.	JAPAN
Gold	Western Australian Mint trading as The Perth Mint	AUSTRALIA
Gold	Valcambi S.A.	SWITZERLAND
Gold	United Precious Metal Refining, Inc.	UNITED STATES OF AMERICA
Gold	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM
Gold	Torecom	KOREA, REPUBLIC OF
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CHINA
Gold	Tokuriki Honten Co., Ltd.	JAPAN
Gold	The Refinery of Shandong Gold Mining Co., Ltd.	CHINA
Gold	Great Wall Precious Metals Co., Ltd. of CBPM	CHINA
Gold	Tanaka Kikinzoku Kogyo K.K.	JAPAN
Gold	Super Dragon Technology Co., Ltd.	TAIWAN, PROVINCE OF CHINA
Gold	Sumitomo Metal Mining Co., Ltd.	JAPAN
Gold	Solar Applied Materials Technology Corp.	TAIWAN, PROVINCE OF CHINA
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CHINA
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA
Gold	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CHINA
Gold	SEMPSA Joyería Platería S.A.	SPAIN
Gold	SAMWON Metals Corp.	KOREA, REPUBLIC OF
Gold	Samduck Precious Metals	KOREA, REPUBLIC OF
Gold	Sabin Metal Corp.	UNITED STATES OF AMERICA
Gold	Royal Canadian Mint	CANADA
Gold	Rand Refinery (Pty) Ltd.	SOUTH AFRICA
Gold	PX Précinox S.A.	SWITZERLAND
Gold	PT Aneka Tambang (Persero) Tbk	INDONESIA

Gold	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION
Gold	Penglai Penggang Gold Industry Co., Ltd.	CHINA
Gold	PAMP S.A.	SWITZERLAND
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION
Gold	Ohura Precious Metal Industry Co., Ltd.	JAPAN
Gold	Nihon Material Co., Ltd.	JAPAN
Gold	Navoi Mining and Metallurgical Combinat	UZBEKISTAN
Gold	Nadir Metal Rafineri San. Ve Tic. A.S.	TURKEY
Gold	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION
Gold	Mitsui Mining and Smelting Co., Ltd.	JAPAN
Gold	Mitsubishi Materials Corporation	JAPAN
Gold	Metalúrgica Met-Mex Peñoles S.A. De C.V.	MEXICO
Gold	Metalor USA Refining Corporation	UNITED STATES OF AMERICA
Gold	Metalor Technologies S.A.	SWITZERLAND
Gold	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE
Gold	Metalor Technologies (Hong Kong) Ltd.	CHINA
Gold	Metalor Technologies (Suzhou) Ltd.	CHINA
Gold	Matsuda Sangyo Co., Ltd.	JAPAN
Gold	Materion	UNITED STATES OF AMERICA
Gold	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CHINA
Gold	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF
Gold	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CHINA
Gold	Lingbao Gold Co., Ltd.	CHINA
Gold	Lazurde Company For Jewelry	SAUDI ARABIA
Gold	Kyrgyzaltyn JSC	KYRGYZSTAN
Gold	Kojima Chemicals Co., Ltd.	JAPAN
Gold	Kennecott Utah Copper LLC	UNITED STATES OF AMERICA
Gold	Kazzinc	KAZAKHSTAN
Gold	Kazakhmys Smelting LLC	KAZAKHSTAN
Gold	JX Nippon Mining & Metals Co., Ltd.	JAPAN
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	RUSSIAN FEDERATION
Gold	Asahi Refining Canada Ltd.	CANADA
Gold	Asahi Refining USA Inc.	UNITED STATES OF AMERICA
Gold	Jiangxi Copper Co., Ltd.	CHINA

Gold	Japan Mint	JAPAN
Gold	Istanbul Gold Refinery	TURKEY
Gold	Ishifuku Metal Industry Co., Ltd.	JAPAN
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co	CHINA
Gold	Hwaseong CJ Co., Ltd.	KOREA, REPUBLIC OF
Gold	Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd.	CHINA
Gold	Hunan Chenzhou Mining Co., Ltd.	CHINA
Gold	Heraeus Precious Metals GmbH & Co. KG	GERMANY
Gold	Heraeus Ltd. Hong Kong	CHINA
Gold	HeeSung Metal Ltd.	KOREA, REPUBLIC OF
Gold	Hangzhou Fuchunjiang Smelting Co., Ltd.	CHINA
Gold	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CHINA
Gold	Gansu Seemine Material Hi-Tech Co., Ltd.	CHINA
Gold	OJSC Novosibirsk Refinery	RUSSIAN FEDERATION
Gold	Dowa	JAPAN
Gold	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF
Gold	Chugai Mining	JAPAN
Gold	Chimet S.p.A.	ITALY
Gold	Yunnan Copper Industry Co., Ltd.	CHINA
Gold	Cendres + Métaux S.A.	SWITZERLAND
Gold	Caridad	MEXICO
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES
Gold	Aurubis AG	GERMANY
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	TURKEY
Gold	Asaka Riken Co., Ltd.	JAPAN
Gold	Asahi Pretec Corp.	JAPAN
Gold	Argor-Heraeus S.A.	SWITZERLAND
Gold	AngloGold Ashanti Córrego do Sítio Mineração	BRAZIL
Gold	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY
Gold	Aida Chemical Industries Co., Ltd.	JAPAN
Gold	Advanced Chemical Company	UNITED STATES OF AMERICA
Cobalt	Jiangxi Miracle Golden Tiger Cobalt Co. Ltd.	CHINA
Cobalt	Fujian Evergreen New Energy Technology Co.	CHINA
Cobalt	Guangdong Fangyuan Environment Co., Ltd.	CHINA
Cobalt	Anhui Hanrui New Material Co., Ltd.	CHINA

Cobalt	Vital Materials Plant	CHINA
Cobalt	Zhejiang Power New Energy Materials Co., Ltd.	CHINA
Cobalt	Guizhou CNGR Resource Recycling Industry Development Co., Ltd.	CHINA
Cobalt	Vale – Long Harbour Processing Plant (LHPP)	CANADA
Cobalt	Harima Refinery, Sumitomo Metal Mining	JAPAN
Cobalt	PT Mechema Indonesia	INDONESIA
Cobalt	Mechema Chemicals (Thailand) Co., Ltd.	THAILAND
Cobalt	Mechema Chemicals shang-yu	CHINA
Cobalt	Mechema Korea, Co., Ltd.	KOREA, REPUBLIC OF
Cobalt	Mechema Taiwan Plant 2	TAIWAN, PROVINCE OF CHINA
Cobalt	Mechema Taiwan Plant 1	TAIWAN, PROVINCE OF CHINA
Cobalt	Zhejiang Greatpower Cobalt Materials Co., Ltd.	CHINA
Cobalt	ICoNiChem	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
Cobalt	Chizhou CN New Materials and Technology Co., Ltd.	CHINA
Cobalt	CoreMax Corporation	TAIWAN, PROVINCE OF CHINA
Cobalt	Hunan Jinxin New Material Holding Co., Ltd.	CHINA
Cobalt	Fairsky Industrial Co., Limited	CHINA
Cobalt	Hunan Shiji Yintian New Material Co., Ltd.	CHINA
Cobalt	Xiangtan Huacheng Nickel Cobalt New Material Co., Ltd.	CHINA
Cobalt	Ningbo Hubang New Material Co., Ltd.	CHINA
Cobalt	MKM - La Miniere de Kalumbwe Myunga	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Jiangxi Rui da Xinnengyuan Technology Co., Ltd.	CHINA
Cobalt	Ruashi Mining SAS	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Tenke Fungurume Mining SA	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	SOCIETE MINIERE DU KATANGA (SOMIKA SARL)	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Ningbo Yanmen Chemical Co., Ltd.	CHINA
Cobalt	Cosmo Chemical, Ltd.	KOREA, REPUBLIC OF
Cobalt	Hunan CNGR New Energy Science & Technology Co., Ltd.	CHINA
Cobalt	Murrin Murrin Nickel Cobalt Plant	AUSTRALIA
Cobalt	Hunan Yacheng New Materials Co., Ltd.	CHINA
Cobalt	Glencore Nikkelverk Refinery	NORWAY
Cobalt	Zhejiang New Era Zhongneng Technology Co., Ltd.	CHINA
Cobalt	NORILSK NICKEL HARJAVALTA OY	FINLAND
Cobalt	METAL MINES SARL	CONGO, DEMOCRATIC REPUBLIC OF THE

Cobalt	Ganzhou Highpower Technology Co., Ltd.	CHINA
Cobalt	Jingmen GEM Co., Ltd.	CHINA
Cobalt	Jiangxi Jiangwu Cobalt industrial Co., Ltd.	CHINA
Cobalt	XTC New Energy Materials (Xiamen) LTD.	CHINA
Cobalt	SungEel HiTech Co., Ltd.	KOREA, REPUBLIC OF
Cobalt	Vale New Caledonia	FRANCE
Cobalt	Jiangsu Xiongfeng Technology Co., Ltd.	CHINA
Cobalt	Guangdong Jiana Energy Technology Co., Ltd.	CHINA
Cobalt	Compagnie de Tifnout Tiranimine	MOROCCO
Cobalt	Mine de Bou-Azzer	MOROCCO
Cobalt	Niihama Nickel Refinery, Sumitomo Metal Mining	JAPAN
Cobalt	La Compagnie de Traitement des Rejets de Kingamyambo S.A. (Metalkol S.A.)	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Societe pour le Traitement du Terril de Lubumbashi (STL)	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Chemaf Etoile	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Kamoto Copper Company	CONGO, DEMOCRATIC REPUBLIC OF THE
Cobalt	Quzhou Huayou Cobalt New Material Co., Ltd.	CHINA
Cobalt	Nanjing Hanrui Cobalt	CHINA
Cobalt	Port Colborne Refinery	CANADA
Cobalt	JSC Kolskaya Mining and Metallurgical Company	RUSSIAN FEDERATION
Cobalt	Dynatec Madagascar Company	MADAGASCAR
Cobalt	Umicore Olen	BELGIUM
Cobalt	Gangzhou Yi Hao Umicore Industry Co.	CHINA
Cobalt	Umicore Finland Oy	FINLAND
Cobalt	Zhejiang Huayou Cobalt Company Limited	CHINA
Cobalt	Nantong Xinwei Nickel Cobalt Technology Development	CHINA
Cobalt	Hunan Brunp Recycling Technology Co., Ltd.	CHINA
Cobalt	Tianjin Maolian Science & Technology Co., Ltd.	CHINA
Cobalt	Guangxi Yinyi Advanced Material Co., Ltd.	CHINA
Cobalt	Ganzhou Tengyuan Cobalt New Material Co., Ltd.	CHINA
Cobalt	Zhuhai Kelixin Metal Materials Co., Ltd.	CHINA
Cobalt	Lanzhou Jinchuan Advanced Materials Technology Co., Ltd.	CHINA
Cobalt	Gem (Jiangsu) Cobalt Industry Co., Ltd.	CHINA