

# Supply Chain Engagement: from Risk to Impact

Fairphone 3+ Suppliers,  
Smelters and Refiners

November 2020

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## Transparency: the first step in fairer supply chains

Fairphone was founded to create a positive impact on the value chain of consumer electronics. We began making phones because we knew there were more ethical and environmentally sound ways to manufacture electronics, and we set out to prove it: from the inside. A crucial step to setting an example to the rest of industry was to publish what we discovered, share the choices we made, and raise awareness of alternatives.

Smartphones are intricate products made up of thousands of different components. Each of these parts comes from different suppliers and contain a wide variety of materials. As a result, our supply chain includes mines, smelters, refiners and multiple tiers of manufacturers that span the entire globe. Many in the industry would call this an impossible task, but step by step, we are mapping our supply chain to understand exactly what goes into our phone and where it comes from. By learning more about the hundreds of actors and locations involved in our smartphone supply chain, we can take an informed approach to making a difference. For Fairphone, that goes beyond audits, assessments and compliance. It includes sourcing from more responsible mines, actively connecting them to our supply chain, and inviting others in the industry to do the same. It also means finding and engaging with suppliers that share our values and initiating improvement programs at their factories — and beyond.

This document offers an introduction to our supply chain approach, and a summary of what we have learned about the Fairphone 3+ supply chain to date. While this report reproduces many of the findings from our [August 2019 report on the Fairphone 3](#) we've responded to feedback from our stakeholders with some changes to approach, and updated some suppliers.

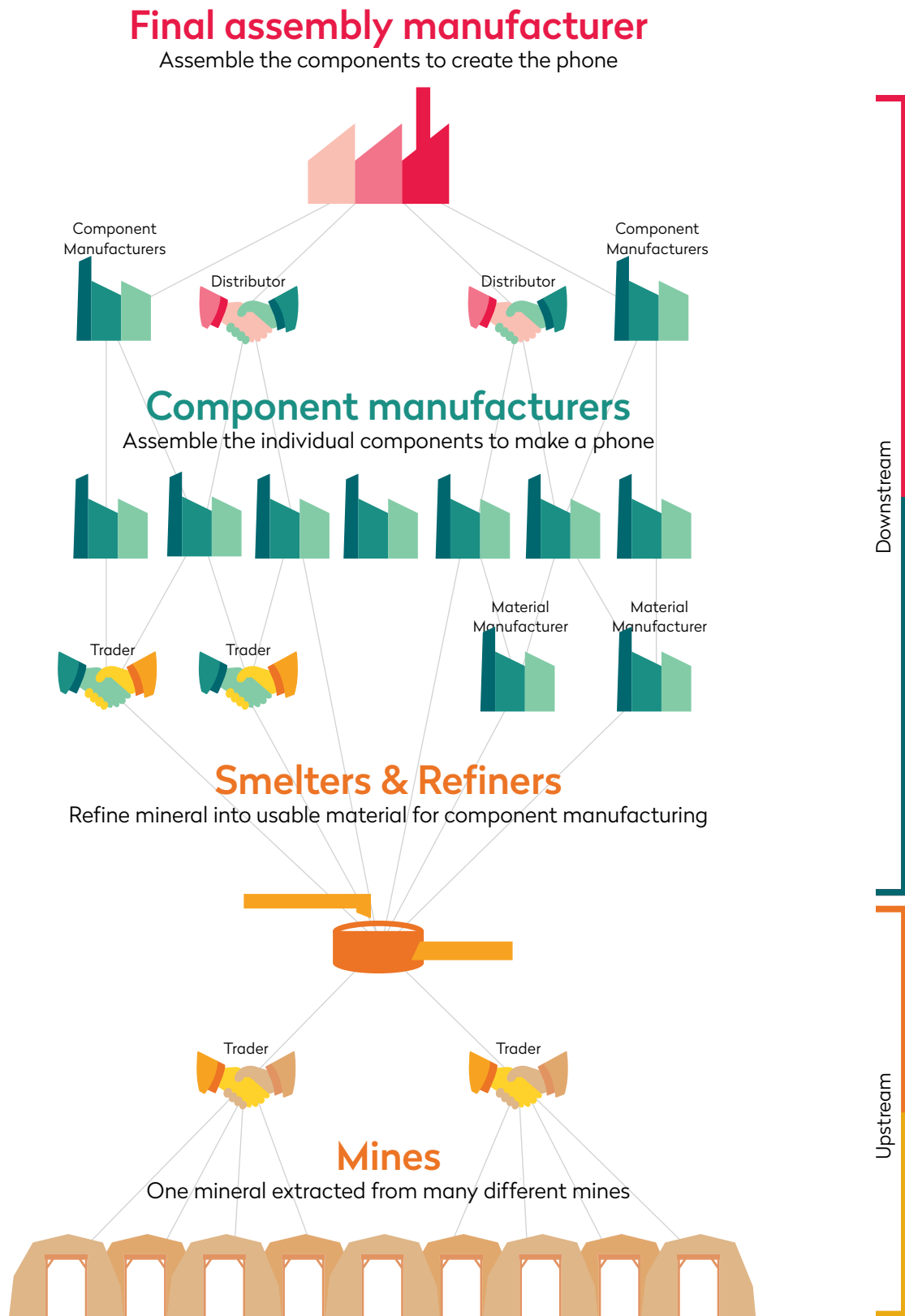
The report examines our:

**Downstream components supply chain** — the chips and components needed to assemble the final phone along with the component suppliers and assembly infrastructure

**Upstream material supply chain** — the metals, plastics, and raw materials from extraction to refinery

In each section, we explain our approach to compliance with existing regulations first, then look at the impact and engagement initiatives which we're involved in to push the industry further toward ethical and sustainable sourcing.

## Simplified representation of a smartphone supply chain



This graph is a simplified reflection of the Fairphone supply chain. In electronics, a variety of set-ups is possible and this graph should not be taken as a one-size-fits all for other products and brands.

# Downstream Components Supply Chain

## Our approach to identifying and working with suppliers

At Fairphone, we believe that each supplier and workplace requires a tailored approach to create a positive impact that is sustainable. However, we can't do this with all suppliers at once. Therefore, we're taking a step-by-step approach to mapping and improving our supply chain:

### Mapping our suppliers

Over the past years, we've been working hard to identify all the different actors involved in making our phones. A single component will often have multiple suppliers. We call a "Tier 1" supplier someone we buy, say, an assembled audio circuit board from. That board may have a speaker and microphone assembly that comes from a different supplier we'll call "Tier 2". And the chip itself on that board might come from yet another company, which we would call in this case "Tier 3". Based on a combination of desk research and direct communication with Fairphone 3+ suppliers, we've now mapped 83 suppliers, ranging from the first to fourth tier in our supply chain. We update this information regularly and are digging into ever deeper layers.

### Collaboration and setting expectations

Supply chains are long and complex, and we believe that getting suppliers involved in our mission is the only way to increase understanding of the issues and to influence real change. Our code of conduct, the Fairphone Ways of Working Together, contains our policies and expectations for working with all of our partners and suppliers, covering topics like human rights, health and safety, the environment, ethics and responsible sourcing. Many of these are based on international standards from the United Nations, the OECD, and other regulatory bodies.

We go beyond that code by conducting research, requesting information, and conducting on-site visits to ensure our direct suppliers are complying with our ethical and sustainability requirements. We further work with direct suppliers to reach out beyond the 1st tier, conducting risk assessments with their critical suppliers. We assess all the suppliers involved in Fairphone's production. Where red flags are identified, Fairphone will collaborate directly to ensure mitigation actions are put in place.

But we don't stop at risk mitigation. Our commitment is to improvement. As we engage with our suppliers, we aim to identify opportunities for creating positive change.

We've created financial incentive programmes to reward

improvements in worker satisfaction, helped identify worker priorities for workplace enhancements, organized democratic elections for worker representatives and put better mechanisms in place for worker - management feedback and dialogue.

Starting with a selection of manufacturers, we're building relationships, completing collaborative evaluations and initiating improvement programs. Some of our initiatives stretch beyond our own supply chain, and include governments, non-profit organizations, industry experts and even other electronics companies. These programs address a variety of issues, ranging from reducing the use of hazardous chemicals at the factories to enhancing employee influence over day-to-day operations by strengthening dialogue between workers and management.

### Current progress

Fairphone has engaged with suppliers to develop worker voice programs and living wage bonuses. You can read more about these initiatives in the ["Our Impact"](#) section of our website.

### Worker voice

At the outset, we identify key areas affecting employee satisfaction and retention using satisfaction surveys and by creating programs to ensure worker's voices are heard and heeded. Based on the needs identified by the workers, Fairphone works with suppliers to jointly develop an improvement program and co-invests in initiatives to improve employee satisfaction.

### Living wage bonus:

Living wage initiatives are at the center of Fairphone's working conditions agenda. We worked with a direct supplier to calculate the living wage gap, then calculated how much additional unit price we would need to pay as a bonus, to bring employees assembling the Fairphone up to a living wage. The bonus is being distributed across the entire workforce, based upon workers' advice.

As this report goes to press, we are happy to announce that 11 downstream suppliers have joined our initiatives.

## Fairphone 3+ suppliers at a glance

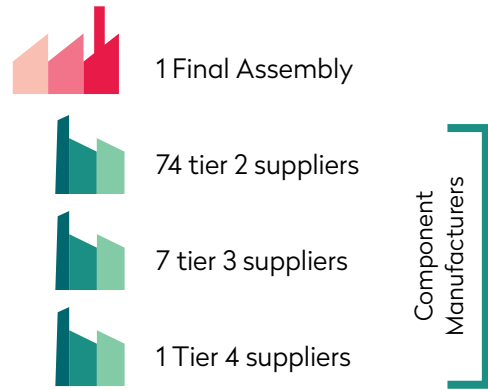
### Supplier Tiers

Supplier tiers are calculated from the point of the final assembly. So component manufacturers that supply our final assembly partner are tier 1. The component suppliers that they work with are tier 2, and companies who work with these component suppliers are tier 3.

What have we learned about our supply chain so far? Here's a snapshot of the most important findings. Note that these are not all the suppliers in our supply chain as there are many more and we are mapping these step by step.

The first version of Fairphone 3+ supplier list presents all the first-tier and second-tier suppliers, as well as the third and fourth tier suppliers that we are directly engaged with.

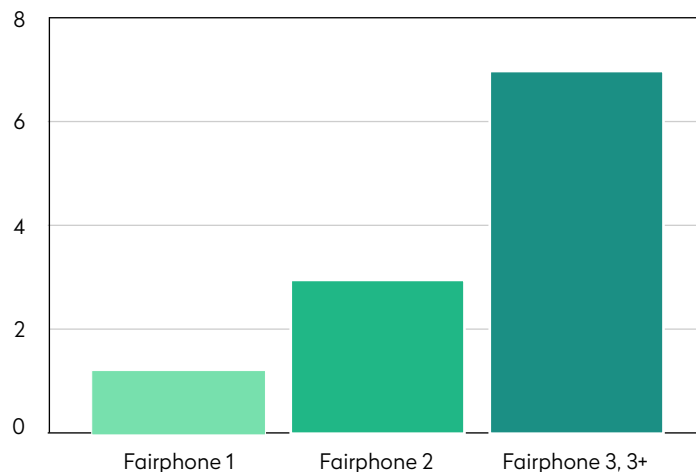
We've identified a total of 83 suppliers, including:



We identified the production facilities of 73 suppliers. Most of these are located in Asia, particularly China:

Location	Count	%
China	55	75.3%
Taiwan	11	15.1%
Japan	3	4.1%
Korea	4	5.5%

Suppliers in the working condition programs



# Upstream Materials Supply Chain



## Our approach to identifying and working with smelters and refiners

Fairphone uses a collaborative approach in its due diligence process to find out which smelters and refiners are part of our supply chain. We (sometimes literally) travel from the top to the bottom of our supply chain, assembling a paper trail, and revealing each player involved, step by step.

Thanks to the information we have gathered from our suppliers, we have identified the smelters and refiners for four internationally recognized conflict minerals: tin, tantalum, tungsten and gold. While certain suppliers report the smelters and refiners they work with on a component- by-component level ('product level' reporting), others simply share all the smelters and refiners they work with as a company (reporting on a 'company level'). This often makes it difficult, if not impossible, to know if they are indeed directly involved in the Fairphone supply chain. Moreover, it's often hard to validate whether all suppliers have been reported and matched correctly to items in our supply chain. This is another reason why we consider it important to work from the bottom up to develop a truly transparent supply chain. This section presents all smelters and refiners that are potentially providing materials for Fairphone.

### OECD 5 steps

The OECD's "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" is a framework that sets the industry standard for due diligence. To ensure that the production of our phones doesn't contribute to conflict or human rights violations Fairphone follows the five-step approach as presented in the OECD guidelines:

#### 1. Establish strong company management systems

Fairphone's Responsible Sourcing Policy outlines our commitment to making a positive impact in collaboration with our partners and suppliers. We also have a Standard Operating Procedure for Mineral Due Diligence, which defines our internal

processes for collecting information about our supply chain, including the roles and responsibilities of the legal, impact innovation and product teams. It also describes our record-keeping processes for the information we collect from and about our suppliers.

#### 2. Identify and assess risks in the supply chain

We collect a variety of information from our suppliers, including material declarations, to understand the full materials composition of our smartphone. To identify risks related to conflict minerals (gold, tin, tungsten, tantalum), we also ask suppliers to identify their smelters and refiners by cascading a conflict mineral report (CMRT) down their supply chain. We evaluate this information based on a variety of criteria, including accuracy and compliance of the reported refiners and smelters with the Responsible Minerals Assurance Process (RMAP).

#### 3. Design and implement a strategy to respond to identified risks

We provide a feedback mechanism on our website where we can receive complaints about materials suppliers. When we receive or identify information or practices that we consider concerning, we investigate. A member of our Impact Innovation team will assess the information and analyze any material declarations provided by our suppliers to confirm the problem materials are in our supply chain. If the suppliers are indeed using these materials, and their refiners have valid red flags identified - we reach out for further clarification. If needed, the red flag will be reported to the management team and/or brought to the attention of the appropriate industry grievance platform. In some situations, we may need to end the relationship with the supplier; in others we may develop a collaborative plan for improvement.

**4. Carry out independent third-party audit of supply chain due diligence**

The conflict mineral reports from our component suppliers includes a list of the smelters they work with. As a small player, we don't always have the resources to conduct additional audits on our own. We therefore rely on industry-wide programs like the Responsible Minerals Initiative (RMI) audits or other recognized third-party audits to check the status of identified smelters. Fairphone has set a target to achieve a 100% conformance rate of identified smelters and refiners in Fairphone's conflict minerals supply chains by end of 2023. If an identified smelter/refiner does

not conform, Fairphone will reach out to see how the issue can be resolved - by actively engaging with our suppliers and leveraging the outreach conducted by RMI. In the case where the smelter/refiner refuses to be engaged, Fairphone will require our supplier to move away from this smelter/refiner.

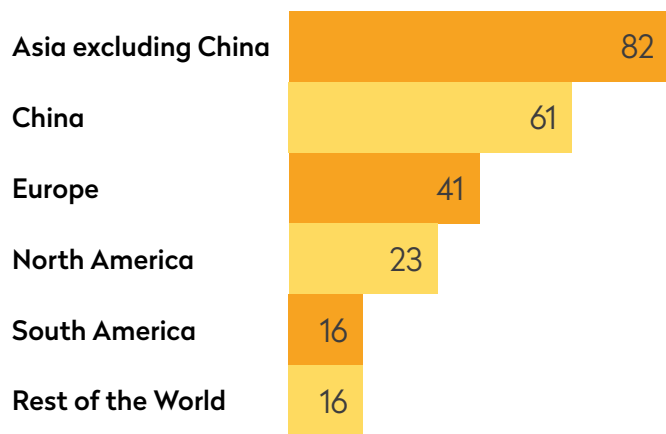
**5. Report annually on supply chain due diligence**

We report on our supply chain due diligence and related improvement projects through our website, blog, annual Impact Report and this Supply Chain Engagement report.

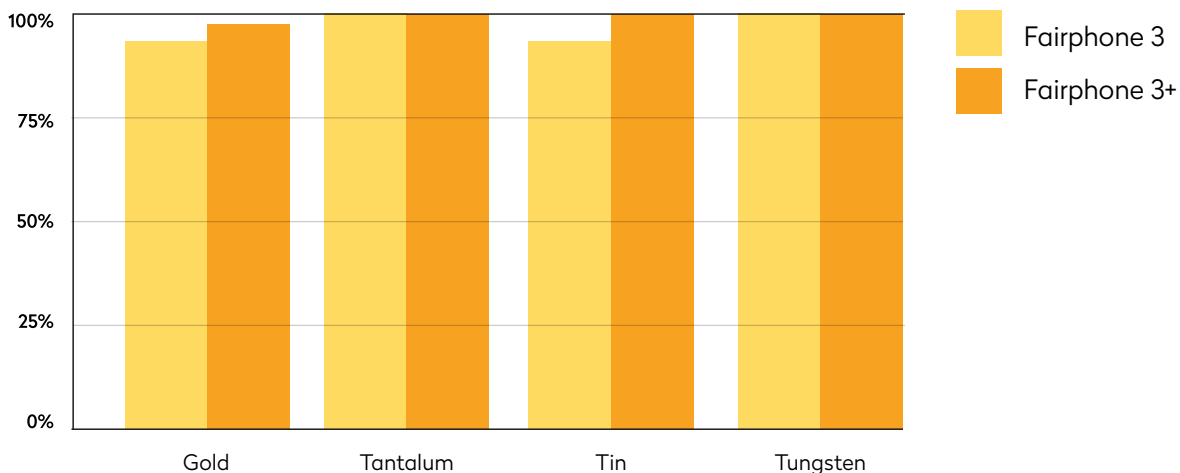
**Fairphone 3+ smelters and refiners at a glance**

What have we learned about smelters and refiners so far? Here is a snapshot of the most important findings.

- 64% of suppliers reported on a company or user defined level; the rest reported on the more informative product level.
- We have identified 239 eligible smelters and refiners. They come from:



**3TG smelters and refiners RMAP participation**



**Third-party audit\* status for smelters and refiners of the four defined conflict minerals**

\*This audit checks whether smelters/refiners have the right processes in place to determine whether or not their materials come from the DRC

	Total reported	Audit passed	Audit in progress	Audit not valid
Gold	109	107	1	1
Tantalum	27	27	0	0
Tin	51	51	0	0
Tungsten	42	42	0	0

**Reasonable Country of Origin Inquiry**

Material origins based on above smelters and refiners who have passed the audit:

	Gold	Tungsten	Tin	Tantalum
Smelters known to directly source from the DRC	0	2	8	2
Smelters known to directly source from the DRC's adjoining countries (but Not the DRC itself)	2	5	13	3
Smelters known to directly source from the recycled sources	32	20	23	22
Smelters disclosed direct sources to auditors only	72	17	0	0
Smelters known to indirectly source from the DRC	0	3	8	6
Smelters known to indirectly source from the DRC's adjoining countries (but Not the DRC itself)	0	7	12	6
Smelters known to indirectly source from the recycled sources	6	8	23	8

Source: RCOI (Reasonable Country of Origin Inquiry) list; the data presented includes both direct and indirect sources

## Fairphone does more than simply avoid compliance risks in its supply chain. We engage with industry partners to to develop improvement trajectories and create impact

For the electronics sector, due diligence focuses heavily on conflict financing of the four recognized conflict minerals (tin, tantalum, tungsten and gold) originating from the Democratic Republic of the Congo (DRC) and the surrounding countries. Industry audits are generally focussed on these materials and this region. However, we recognize that conflict, human rights and environmental issues happen in a wider range of material supply chains and countries, and go far beyond financing conflict. We're actively searching for opportunities to make a positive impact, especially in conflict-affected areas, but across the entire spectrum of issues involved with the materials that end up in our phones.

Apart from our approach to risk-based due diligence, what sets Fairphone apart as a thought leader is our bottom-up, fair sourcing approach. For us, it's not only about managing risks; it's about creating impact. We're making a positive change in materials supply chains by sourcing more responsibly mined materials, increasing our use of recycled materials and actively seeking partners who can help us achieve these goals. One material at a time, we're working to increase industry and consumer awareness and incorporate better resources into our phones.

In 2017, we conducted extensive research on 38 of the materials found in our phones and published a [materials scoping study](#). This is helping us prioritize which materials to focus on next and identify new opportunities for improvement projects. Building on this research, Fairphone's 2017-2020 roadmap selected 8 focus materials and sought to source either fairly mined or recycled sources for each.

In addition, in keeping with our vision of a fair transition to a truly circular economy, we aim to increasingly use post-consumer recycled materials. But while this is a straightforward goal with some materials, like plastic, others suffer from a limited availability of recyclable materials, which means mined supply may remain an important source.

### Fair mining

We first identify the best practices and initiatives in mining. We then encourage and support specific

suppliers to source from these to develop a fully transparent supply chain, component by component. We work with mines, smelters and suppliers to integrate fair sources into the supply chain. By driving demand for fair materials, we seek to catalyze investments, creating positive feedback loops around fair and sustainable practices.

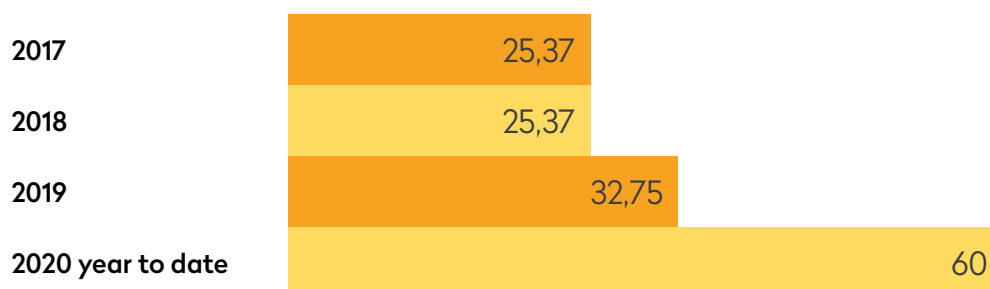
Where fair mining sources don't exist, we'll work to develop them. We recognize and acknowledge that some mines cannot change overnight, but can commit to improve and grow from meeting basic expectations to the highest levels of best practice: a continuous improvement framework. That sometimes requires supporting them in that journey. We partner with international and local organizations that can provide capacity building, investments in improved equipment, and better market access.

### Recycling

Recognizing that e-waste is one of the fastest growing waste streams, Fairphone focuses on maximizing our use of post-consumer recycled materials, increasing options for responsible end-of-life disposal or recycling, and encouraging sustainable recycling chains. We have a take-back programme for gathering old phones from new customers, and we additionally recover phones discarded and dumped in Africa for recycling. We're investing in and building scalable sourcing models for post-consumer recycled materials and biobased plastic and improving Fairphone's recyclability by design. To date, we have integrated recycled copper, plastics and rare earth into our supply chains.

We have already found more responsible sources of tin, the tantalum (used in the Fairphone 2), tungsten and gold, copper, plastics, and rare earth (neodymium). We have integrated these into the supply chain of specific components. We aim to grow the volume of responsible materials in more and more components as we continue to engage with suppliers and identify new sources of fairly mined and responsibly recycled materials.

## Fairly sourced materials



Our result up to date for fairer materials: An average of 60% of our eight focus materials has been sustainably sourced as this report goes to press. These materials were selected by examining where Fairphone had the greatest potential to make positive impacts. For each of them, we compare the weight we've responsibly sourced to the total amount used in our phones. We're improving material sourcing from two angles: more responsible mining practices, plus increased use of recycled materials.

### Partnerships & Collaboration

Fairphone works together with others to improve industry-wide practises, both in the context of our top down due diligence as well as bottom-up fair sourcing approaches.

We are part of the:

- [Responsible Business Alliance](#)
- [European Partnership for Responsible Minerals](#)
- [Responsible Minerals Initiative](#)
- [Clean Electronics Production Network](#)
- [UN Global Compact](#)
- [Dutch Agreement for Responsible Gold](#)
- [Fair Cobalt Alliance](#)
- [Global Battery Alliance](#)

We continue to prove, every day, the idea at the core of the Fairphone: we can create consumer electronics that are fairer to human beings and kinder to the earth. And while that takes effort, those efforts are rewarded by customers and suppliers who appreciate that their choices have consequences, and given an ethical choice, will make an ethical choice.

We at Fairphone, our suppliers, and the entire electronics industry are still far from the goals of a 100% fair and sustainable product that fits seamlessly into a circular economic model in which nothing is wasted. But we move closer to that goal every year.

We will continue to improve our sourcing targets, deepen our engagement with suppliers and material providers, and accelerate wherever we can the goal of moving the entire industry beyond conflict-free materials to truly fair sourcing. We will continue to transparently share our steps on that journey, and to invite more and more industry partners to join us in creating more ethical and sustainable products.

# Annex 1: Components Suppliers

## List of Suppliers for the Fairphone 3+

Consumer electronics supply chains include several complex, often opaque tiers of suppliers, ranging from first-tier assembly manufacturers (direct suppliers) to second, third and sometimes even fourth-tier component manufacturers. Many electronics manufacturers only have insight into their direct suppliers and perhaps some second-tier component manufacturers.

At Fairphone, we are working to gain an in-depth understanding of the complicated layers of our supply chain. In addition to our first-tier assembly manufacturer, we have mapped all second-tier suppliers, and are progressively including third and fourth-tier suppliers in our research. By uncovering all of the different players and manufacturing locations in our smartphone supply chain, we can start engaging with suppliers, establishing relationships and initiating programs for improvement.

### Understanding our List of Suppliers

The list below includes all of the first, second and third-tier suppliers that we know of to date, and it is accurate to the best of our knowledge at the time of publication. We will periodically update the information in this document as we learn more.

Here is a bit more information about how the list is arranged:

**Locations:** Whenever possible, we have listed the (approximate) manufacturing location. If this information was not available, we have provided the location of the company headquarters.

**Categories:** Suppliers are grouped by the type of components they produce. Some suppliers may be mentioned more than once because they produce different kinds of components, sometimes with different manufacturing locations.

**Tiers:** Supplier tiers are calculated from the point of the final assembly. So the final assembly partner (for example Arima) is tier 1, (component) suppliers to Arima are tier 2, their (component) suppliers make up tier 3, etc. The first version of Fairphone 3+ supplier list presents all the first-tier and second-tier suppliers, as well as the third tier suppliers that we are directly engaged with.

**Suppliers included:** This list includes our first-tier assembly manufacturer and all component manufacturers that we have mapped to date. To provide a clear overview, it does not include refiners, smelters, traders or mines which are listed in annex (p.16).

We work with selected suppliers on specific initiatives designed to make improvements in our supply chain, such as worker voice and sourcing fair materials. The [\*] symbol indicates that a supplier was included in one of these supplier engagement initiatives.

**Please note:** This list reflects the suppliers currently providing components or materials for the Fairphone 3+. Inclusion on the list does not imply that these manufacturers are “fairer” than their competitors, or that Fairphone has a direct relationship with these companies and is influencing their business practices.



## Phone Assembly - Fairphone 3+

Tier	Supplier	Address: Manufacturer	Website
1	Arima Communications Corp.*	Headquarters: No. 866, Zhongzheng Road, Zhonghe District, New Taipei City, Taiwan Manufacturer: No.168, Jiaotong North Road, Wujiang Economic Development Zone, Suzhou, Jiangsu, 215200, China	www.arimacomm.com.tw

## Semiconductors - Integrated Circuits, Discretives & LEDs

Tier	Supplier	Address: Manufacturer	Website
2	Qualcomm	Headquarters: 5775 Morehouse Drive, San Diego, California 92121, USA	www.qualcomm.com
2	Asahi Kasei	Manufacturer (TSMC): 9,Ctreation Rd. 1, Hsinchu Science Park, Hsinchu, 30077, Taiwan	www.akm.com
2	Diodes	Manufacturer: No.1, Lane 18, Sanzhuang Road,Songjiang Export Zone, Songjiang District, Shanghai, China	www.diodes.com
2	Wuxi ETEK Microelectronics	Manufacturer: No.8 Xin Hui Huan Road, New District, Wuxi, Jiangsu, China	www.etek.com
2	Infineon Technologies	Headquarters: Am Campeon 1-15. 85579 Neubiberg, Germany.	www.infineon.com
2	InvenSense	Manufacturer: 7F, No.9 Prosperity 1st Road.Hsinchu Science Park, 30078, Taiwan	www.invensense.com
2	Kinetic Technologies	Headquarters: Room 405, Building 1, No.2966, Jinke Road, Zhangjiang High-Tech Park, Pudong District, Shanghai, 201203, China	www.kinet-ic.com
2	Ricoh Electronics	Manufacturer: 13-1, Himemuro-cho, Ikeda-shi, Osaka 563-8501, Japan	www.rei.ricoh.com
2	Amotech	Manufacturer: 5BL-1 Lot, 617, Namchon-Dong, Namdong-Gu, Incheon, Korea	www.amotech.co.kr
2	EMINENT	Manufacturer: 6F, No.12, Innovation 1st Rd. Hsinchu Science Park, Hsinchu, 30076, Taiwan	www.eminent-tek.com
2	EVERLIGHT	Manufacturer: No.35, Lane Guoguang, Yutian Village, Yuanli Township, Miaoli , 358, Taiwan	www.everlight.com
2	Lision	Manufacturer: No.7-1, Ziqiang 1st Rd., Zhongli City, Taoyuan County, 320, Taiwan	www.li-sion.com.tw
2	NXP Semiconductors	Headquarters: High Tech Campus 60, 5656 AG Eindhoven, The Netherlands	www.nxp.com
2	Prisemi Electronics	Headquarters: Building 7, No.2277 ZuChongZhi Road, Zhangjiang High-tech Park, Shanghai, China	www.prisemi.com
2	Will Semiconductor	Headquarters: Floor 7,Building 4, No.3000,Longdong, Ave,Pudong,ShangHai, 201203, China	www.willsemi.com
2	Qorvo	Manufacturer: 17 Tongji Middle Road, Industrial Park of Beijing Economic & Technological Development Area Daxing, Beijing 100176, China	www.qorvo.com
2	Samsung	Manufacturer: 1, Samsungjeonja-ro, Hwaseong-si, Gyeonggi-do 18448, Korea	www.samsung.com/semiconductor
2	Texas Instruments	Headquarters: 12500 TI Boulevard Dallas, Texas 75243, USA	www.ti.com

## Passives

Tier	Supplier	Address: Manufacturer	Website
2	Chilisin	Manufacturer: No.78, Puxing East Rd., Yuliangwei Administration Area, Qingxin Town, Dongguan city, Guangdong, 523649, China	www.chilisin.com
2	Moda-Innochips	Manufacturer: 11B-16L, Banwol Industrial Complex, 769-12, Wonsi-Dong, Danwon-Gu, Ansan-si, Gyeonggi-Do, Korea	www.innochips.co.kr
2	Ralec Electronic	Manufacturer: No 333 ,Huangpujiang Zhong Road,Kunshan, Jiangsu, China	www.ralec.com
2	Shenzhen Sunlord	Manufacturer: Sunlord Industrial Park ,Dafuyuan Industrial Zone,Guanlan, Shenzhen, China	www.sunlordinc.com
2	TA-I	Manufacturer: No.675,Luxiang North Road, Songling Town,Wujiang, China	www.tai.com.tw
2	Harmony Electronics	Manufacturer: No.39, Huadong Road., Daliao Dist., Dafa Industrial Park, Kaohsiung City, Taiwan	www.hele.com.tw
2	INPAQ Technology	Manufacturer: No.5, Chunqiu Road, Panyang Industrial Park, Huangdai Town, Xiangcheng Zone, Suzhou City, Jiangsu, 215143, China	www.inpaq.com.tw
2	KDS	Manufacturer (Harmony Electronics): No.40, Huadong Road., Daliao Dist., Dafa Industrial Park, Kaohsiung City, Taiwan	www.kds.info
2	Taiyo Yuden	Manufacturer: No.13 Keji Dong Road, Shi Jie Town, Dongguan City, Guangdong, 523290, China	www.t-yuden.com
2	TDK Corporation [EPCOS]	Manufacturer: No. 1-19 Liansheng Road, JiMei Industrial Park, Xiamen, Fujian, China	www.global.tdk.com
2	Walsin Technology	Manufacturer: No.566-1, Kao-Shi Road, Yang-Mei, TaoYuan, 32668 Taiwan	www.passivecomponent.com
2	Yageo Corporation	Manufacturer: 10, Zhuyuan Road, Huqiu, Suzhou, Jiangsu, China	www.yageo.com
2	Shenzhen Viiyong	Manufacturer: No.1, Chuangye 2nd Road, Shuangdong street, Luoding, Guangdong, China	www.viiyong.com
2	AVX KYOCERA	Manufacturer: 1-1 Yamashita Cho, Kokubu, Kirishima City, Kagoshima, Japan	www.avx.com/
2	Kamaya	Manufacturer: No.369, Changyang Street, Suzhou Industrial Park, Suzhou City, Jiangsu, China	www.kamaya.com/

## Electromechanical, MEMS

Tier	Supplier	Address: Manufacturer	Website
2	Memsensing	Headquarters: Suite 501, Bldg NW-09, 99 Jin Ji Hu Rd, Suzhou Industrial Park, 215123, China	www.memsensing.com
2	OBO*	Manufacturer (Kunshan Dragonstate Electronic Technology): No.688 Huangpujiangbei Rd., Zhoushi Town, Kunshan City, Jiangsu, China	www.obopro2.com
2	Baolong Electronics*	Manufacturer: No.388, East Ningkang Road, Yueqing City, Zhejiang, China	www.baolong.com
3	Tianjia*	Manufacturer: 171 Yu Yin Road, YaoBei village, Hong Qiao, Yue Qing, ZheJiang, China	www.cntjdz.net
2	Xiamen OU YING	Manufacturer: 39, Yang Ping Road, Haicang-Xinyang Industrial Zone, Xiamen City, Fu-Jian, China	www.ouyinge.com

## Connectors, Clips, Spring Contacts, Cables

Tier	Supplier	Address: Manufacturer	Website
2	CviLux Corporation	Manufacturer: 9F, No.9,Lane 3,Sec.1,Chung-Cheng East Road, Tamshui, New Taipei City 25147, Taiwan	www.cvilux.com
2	Assem Tech	Manufacturer: No.17, Minquan St., Tucheng Dist., New Taipei City, 236, Taiwan	www.assem.com.tw
2	Molex	Manufacturer: No 363, Bailu Road, Kunshan City, Jiangsu, China	www.molex.com
2	Kunzhon Electronics	Manufacturer: Fenghuangshan industrial zone, shajiao Humen Town, DongGuan City, GuangDong,China	No official website
2	JustConnector Kushan	Manufacturer: No.1389, Zizhu Road,Yushan Town, Kunshan City, Jiangsu, China	No official website
2	Goldenconn Electronics	Manufacturer: No.777 Xiuhu West Road, Wujiang Economic Development Zone, Suzhou, 215200 ,China	www.goldenconn.com
2	Electric Connector Technology (ECT)	Manufacturer: No.8-A Building, Jinxiu Industrial Park, Xitian Village, Gongming, Bao'an, Shenzhen, China	www.ectsz.com
2	Hirose	Headquarters: 5-5-23 Osaki, Shinagawa-ku, Tokyo, Shinagawa-ku, Tokyo, Japan	www.hirose.com
2	Speed Tech	Manufacturer: No. 568, Sec 1, Minsheng N. Road., Kweishan Hsiang, Taoyuan Hsien, 33393, Taiwan	www.speedtech.com.tw
2	Yuliang Electronics	Manufacturer: No. 168, Hankun Road, Kunshan City, Jiangsu, China	www.cylconn.com
2	Murata	Headquarters: 10-1, Higashikotari 1-chome, Nagaokakyo-shi, Kyoto 617-8555, Japan The parts Murata supplies for Fairphone 3+ are produced in China, Philippines, Japan, and Singapore.	www.murata.com
2	Molex	Manufacturer (Suzhou Fuxing Rui Electronics): No 363, Bailu Road, Kunshan City, Jiangsu, China	www.molex.com
2	DongGuan Wealth Win Electronic Technology	Manufacturer: 295 Jinsong Road, Liuwu Lane, Liaobu Town, Dongguan City, China	www.dgwin-win.com

## Display, Touch Screen

Tier	Supplier	Address: Manufacturer	Website
2	DJN Optronics Technology	Manufacturer: Building A5 & A6, Phoenix No.3 Industrial Zone, Shenzhen, Guangdong, China	www.djnlcd.com
2	Dolfa Technology	Manufacturer: South of Dongye Road,Hou Jie Technology industry Park, Dongguan,GuangDong, China	www.dolfa.com
3	Corning	Headquarters: One Riverfront Plaza Corning, New York 14831, USA	www.corning.com

## Cameras

Tier	Supplier	Address: Manufacturer	Website
2	Shenzhen TXD Technology*	Manufacturer: Factory No. 4, Nanchang Economic and Technological Development Zone, Nanchang City, Jiangxi, China	www.txdkj.com
2	Kaymao Technology	Manufacturer: 2/F, 22.23rd Block, Xialang Industrial Area, Heshuikou Community, Gong Ming, Guang ming District, Shenzhen, China	www.karmatech.com
2	MINGYONG	Manufacturer: 315, Huguang Road, Nangang, Zhangpu Town, Kunshan City, Jiangsu, China	www.ksmygd.com

## Printed Circuit Board

Tier	Supplier	Address: Manufacturer	Website
2	Gold Circuit Electronics *Fairtrade gold sourcing program	Manufacturer: No.16 Dongnan Road, Changshu New & Hi-tech Industrial Development Zone, Changshu City, Jiangsu, 215500, China	www.gce.com.tw
3	Jiangsu-SUDA Special Chemical	Manufacturer: 88 Nancun Rd, Wujiang Qu, Suzhou Shi, Jiangsu Sheng, China	www.sudachem.com
3	Huaxi Copper Products	Manufacturer: Huaxi Village, Jiangsu, China	www.hxcty.com
4	Zhangjiagang United Copper	Manufacturer: Sanxing Street Jinfeng Town Zhangjiagang, 215624, China	www.lianhecopper.com

## Flexible Printed Circuits

Tier	Supplier	Address: Manufacturer	Website
2	Zhuhai All-Winner FPC	Manufacturer: 17 Kuiqing road, Qingxi, Dongguan, Guangdong, China	www.kinwong.com

## Soldering Paste

Tier	Supplier	Address: Manufacturer	Website
2	AIM Solder* DRC tin sourcing program	Manufacturer: No. 1208-1, Chenwang Road, Taihu Street, Changxing County, Huzhou City, Zhejiang, 313100, China	www.aimsolder.com

## Battery

Tier	Supplier	Address: Manufacturer	Website
2	SHENZHEN KAYO BATTERY	Manufacturer: Bldg#11, Hualian Industrial Park, Huaning Rd., Longhua Dist., Shenzhen, Guangdong, China	www.kayobattery.com
3	Amperex Technology	Manufacturer: 1 West Industrial Road, Songshan Lake Dongguan, Guangdong, China	www.atlbattery.com

## Plastics, rubber

Tier	Supplier	Address: Manufacturer	Website
2	Worldhom	Manufacturer (Sunonline Precision): No.106, Wentang Area, East Town, Guangdong, China	www.grp-jb.com
2	Wistron Advanced Materials (Kunshan)	Manufacturer: 88, Jinju Rd, Kunshan Integrated Free Trade Zone, Suzhou, Jiangsu, 215300, China	www.wiwynn.com
3	Lotte	Manufacturer: 334-27 Yeosusandan-ro	www.lotteadms.com
	Advanced Materials	Yeosu, Jeollanam-do, South Korea	
2	Creator Solutions	Manufacturer: No. 5 HongFeng Road, SIP (Suzhou Industry Park), Suzhou, 215021, China	www.creator-solutions.com
2	Kushan JuShuo	Manufacturer: 858, Ni Jia Bang Road, Kunshan, Suzhou, Jiangsu Sheng, China	No official website

## Shields, Metal Parts, Screws

Tier	Supplier	Address: Manufacturer	Website
2	H.N.M	Manufacturer: No.1 Gaoding Rd, Kunshan Shi, Suzhou Shi, Jiangsu Sheng, China	www.hnm.com.cn
2	Chuangjuren Electronics	Manufacturer: No. 123, Fuhua Rd, Wujiang Qu, Suzhou Shi, Jiangsu Sheng, 215200, China	No official website
2	Heryang technology	Manufacturer: No.6, Zhengfa Industrial Park, Baixue new Rode Dongnan Development Zone, Changshu City Jiangsu, China	No official website
2	Qingdao Runer	Manufacturer: No. 413, Gaoping Road, Tonghe Town, Pingdu City, Qingdao, Shandong, 266706, China	No official website
2	Hangzhou Amphenol Phoenix Telecom Parts	Manufacturer: 98-5 South Road 19 Hangzhou Eco-Tech Dvpt Zone Hangzhou, 310018, China	www.amphenol.com

## Packaging, Labels, Adhesive

Tier	Supplier	Address: Manufacturer	Website
2	HSIN YI DE (KUN SHAN)	Manufacturer: 136, Dongrong Road, Kunshan Shi, Suzhou Shi, Jiangsu Sheng, 215300, China	www.guoxinyao.diytrade.com
2	Kunshan Yilin Printing	Manufacturer: No.1378, Fushikang RD Chengbei Yushan Town, Kunshan City, Jiangsu, China	No Official Website
2	Suzhou Hualong Adhesive	Manufacturer: 58, Xingwu Road Wuzhong Economic Development Zone, Suzhou, 215128, China	www.huamao-auto.com

## Accessories

Tier	Supplier	Address: Manufacturer	Website
2	Worldhom	Manufacturer (Sunonline Precision): No.106, Wentang Area, East Town, Guangdong, China	www.grp-jb.com
2	ABP*	Manufacturer: B2 Building, Xin Hao Sheng Ding Feng Industrial zone, Fuhai Street, Bao'an District, Shenzhen 518103, China	www.abp.com.hk
2	Ju Wei electronics	Manufacturer: 4F, ZhongKai High-tech Zone, Huizhou, Guangdong, China	www.szjuwei.com
2	Mconomy	Manufacturer (Besky Electronics): Chengtian Industrial Park, Shatian Town, Dongguan City, Guangdong Sheng, China	www.mconomy.nl
2	Interconnect Products [Freeport]	Manufacturer: No. 29 Haibin Rd., WuSha the 6th Industrial Ave., Chang-an Town, Dongguan City, Guangdong, China	www.freprt.com
3	Corning (Screen protector is supplied by Corning via imos)	Headquarters: One Riverfront Plaza Corning, New York 14831, USA	www.corning.com

# Annex 2: Materials Suppliers

## List of Smelters and Refiners

All the details shared here are accurate to the best of our knowledge at the time of publication. Inclusion on the list does not imply that these smelter and refiners are “fairer” than their competitors, or that Fairphone has a direct relationship with these companies and is influencing their business practices. We will update the information yearly and are currently collecting smelter and refiner information related to our other focus materials, and will publish it in a future edition of this document.

Here are a few explanations that will help you better understand our list of smelters and refiners:

### **Responsible Minerals Initiative (RMI)**

The Responsible Minerals Initiative is the industry association which runs the RMAP auditing program, while cross-recognizing a variety of other recognized auditing programs, including the RJC and LBMA. All of these programs check for processes related to identifying one or more of the four defined conflict minerals the RJC also assesses mine sites on a wider range of social and environmental issues.

### **Audit passed**

Smelters or refiners that are verified to be in compliance with RMI standards or one of the cross-recognized certification programs.

### **Audit in progress**

Smelters or refiners that have committed to undergoing an RMI audit or one of the cross-recognized certification audits and are in the participating phase.

### **Audit not valid**

Smelters or refiners that are communicating with RMI, have failed to proceed with the certification process, audited but found not conformant, or still require further outreach to join certification program(s).



## Metal: Gold

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID002100	Yamakin Co., Ltd.	JAPAN	Conformant
CID002863	Bangalore Refinery	INDIA	Conformant
CID001236	Navoi Mining and Metallurgical Combinat	UZBEKISTAN	Conformant
CID000711	Heraeus Germany GmbH & Co. KG	GERMANY	Audit in progress
CID001980	Umicore S.A. Business Unit Precious Metals Refining	BELGIUM	Conformant
CID001955	Torecom	KOREA, REPUBLIC OF	Conformant
CID001938	Tokuriki Honten Co., Ltd.	JAPAN	Conformant
CID001916	Shandong Gold Smelting Co., Ltd.	CHINA	Conformant
CID001386	Prioksky Plant of Non-Ferrous Metals	RUSSIAN FEDERATION	Conformant
CID001352	PAMP S.A.	SWITZERLAND	Conformant
CID001326	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	RUSSIAN FEDERATION	Conformant
CID001325	Ohura Precious Metal Industry Co., Ltd.	JAPAN	Conformant
CID000957	Kazzinc	KAZAKHSTAN	Conformant
CID000937	JX Nippon Mining & Metals Co., Ltd.	JAPAN	Conformant
CID000924	Asahi Refining Canada Ltd.	CANADA	Conformant
CID000920	Asahi Refining USA Inc.	UNITED STATES OF AMERICA	Conformant
CID000090	Asaka Riken Co., Ltd.	JAPAN	Conformant
CID000077	Argor-Heraeus S.A.	SWITZERLAND	Conformant
CID000058	AngloGold Ashanti Corrego do Sitio Mineracao	BRAZIL	Conformant
CID000823	Japan Mint	JAPAN	Conformant
CID002290	SAFINA A.S.	CZECHIA	Conformant
CID002615	TOO Tau-Ken-Altyn	KAZAKHSTAN	Conformant
CID002560	Al Etihad Gold Refinery DMCC	UNITED ARAB EMIRATES	Conformant
CID001585	SEMPSA Joyeria Plateria S.A.	SPAIN	Conformant
CID001555	Samduck Precious Metals	KOREA, REPUBLIC OF	Conformant
CID001119	Matsuda Sangyo Co., Ltd.	JAPAN	Conformant
CID001113	Materion	UNITED STATES OF AMERICA	Conformant
CID001078	LS-NIKKO Copper Inc.	KOREA, REPUBLIC OF	Conformant
CID000855	Jiangxi Copper Co., Ltd.	CHINA	Conformant
CID000814	Istanbul Gold Refinery	TURKEY	Conformant
CID000807	Ishifuku Metal Industry Co., Ltd.	JAPAN	Conformant
CID000801	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CHINA	Conformant
CID000233	Chimet S.p.A.	ITALY	Conformant
CID000694	Heimerle + Meule GmbH	GERMANY	Conformant
CID002129	Yokohama Metal Co., Ltd.	JAPAN	Conformant
CID001798	Sumitomo Metal Mining Co., Ltd.	JAPAN	Conformant
CID001761	Solar Applied Materials Technology Corp.	TAIWAN, PROVINCE OF CHINA	Conformant
CID001756	SOE Shyolkovsky Factory of Secondary Precious Metals	RUSSIAN FEDERATION	Conformant
CID001534	Royal Canadian Mint	CANADA	Conformant
CID001512	Rand Refinery (Pty) Ltd.	SOUTH AFRICA	Conformant
CID001498	PX Precinox S.A.	SWITZERLAND	Conformant

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID001259	Nihon Material Co., Ltd.	JAPAN	Conformant
CID001220	Nadir Metal Rafineri San. Ve Tic. A.S.	TURKEY	Conformant
CID001029	Kyrgyzaltyn JSC	KYRGYZSTAN	Conformant
CID000981	Kojima Chemicals Co., Ltd.	JAPAN	Conformant
CID000707	Heraeus Metals Hong Kong Ltd.	CHINA	Conformant
CID001397	PT Aneka Tambang (Persero) Tbk	INDONESIA	Conformant
CID000113	Aurubis AG	GERMANY	Conformant
CID000082	Asahi Pretec Corp.	JAPAN	Conformant
CID000041	Almalyk Mining and Metallurgical Complex (AMMC)	UZBEKISTAN	Conformant
CID000035	Allgemeine Gold-und Silberscheideanstalt A.G.	GERMANY	Conformant
CID000019	Aida Chemical Industries Co., Ltd.	JAPAN	Conformant
CID003195	DS PRETECH Co., Ltd.	KOREA, REPUBLIC OF	Conformant
CID002516	Singway Technology Co., Ltd.	TAIWAN, PROVINCE OF CHINA	Conformant
CID001993	United Precious Metal Refining, Inc.	UNITED STATES OF AMERICA	Conformant
CID000969	Kennecott Utah Copper LLC	UNITED STATES OF AMERICA	Conformant
CID000493	JSC Novosibirsk Refinery	RUSSIAN FEDERATION	Conformant
CID000362	DODUCO Contacts and Refining GmbH	GERMANY	Conformant
CID000929	JSC Uralelectromed	RUSSIAN FEDERATION	Conformant
CID000015	Advanced Chemical Company	UNITED STATES OF AMERICA	Conformant
CID002778	WIELAND Edelmetalle GmbH	GERMANY	Conformant
CID002511	KGHM Polska Miedz Spolka Akcyjna	POLAND	Conformant
CID002850	AU Traders and Refiners	SOUTH AFRICA	Conformant
CID002580	T.C.A S.p.A	ITALY	Conformant
CID002561	Emirates Gold DMCC	UNITED ARAB EMIRATES	Conformant
CID002973	Safimet S.p.A	ITALY	Conformant
CID002779	Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH	AUSTRIA	Conformant
CID001147	Metalor Technologies (Suzhou) Ltd.	CHINA	Conformant
CID000689	LT Metal Ltd.	KOREA, REPUBLIC OF	Conformant
CID000651	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CHINA	No valid audit
CID000425	Eco-System Recycling Co., Ltd. East Plant	JAPAN	Conformant
CID000189	Cendres + Metaux S.A.	SWITZERLAND	Conformant
CID000128	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	PHILIPPINES	Conformant
CID003425	Eco-System Recycling Co., Ltd. West Plant	JAPAN	Conformant
CID003424	Eco-System Recycling Co., Ltd. North Plant	JAPAN	Conformant
CID002761	SAAMP	FRANCE	Conformant
CID002459	Geib Refining Corporation	UNITED STATES OF AMERICA	Conformant
CID002224	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CHINA	Conformant
CID001622	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CHINA	Conformant
CID000264	Chugai Mining	JAPAN	Conformant
CID002918	SungEel HiMetal Co., Ltd.	KOREA, REPUBLIC OF	Conformant
CID002919	Planta Recuperadora de Metales SpA	CHILE	Conformant
CID002314	Umicore Precious Metals Thailand	THAILAND	Conformant

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID002030	Western Australian Mint (T/a The Perth Mint)	AUSTRALIA	Conformant
CID002003	Valcambi S.A.	SWITZERLAND	Conformant
CID001736	Sichuan Tianze Precious Metals Co., Ltd.	CHINA	Conformant
CID001204	Moscow Special Alloys Processing Plant	RUSSIAN FEDERATION	Conformant
CID001193	Mitsui Mining and Smelting Co., Ltd.	JAPAN	Conformant
CID001188	Mitsubishi Materials Corporation	JAPAN	Conformant
CID001161	Metalurgica Met-Mex Penoles S.A. De C.V.	MEXICO	Conformant
CID001157	Metalor USA Refining Corporation	UNITED STATES OF AMERICA	Conformant
CID001153	Metalor Technologies S.A.	SWITZERLAND	Conformant
CID001152	Metalor Technologies (Singapore) Pte., Ltd.	SINGAPORE	Conformant
CID001149	Metalor Technologies (Hong Kong) Ltd.	CHINA	Conformant
CID000401	Dowa	JAPAN	Conformant
CID000359	DSC (Do Sung Corporation)	KOREA, REPUBLIC OF	Conformant
CID000185	CCR Refinery - Glencore Canada Corporation	CANADA	Conformant
CID000176	C. Hafner GmbH + Co. KG	GERMANY	Conformant
CID000157	Boliden AB	SWEDEN	Conformant
CID002765	Italpreziosi	ITALY	Conformant
CID002762	L'Orfebre S.A.	ANDORRA	Conformant
CID002763	8853 S.p.A.	ITALY	Conformant
CID002509	MMTC-PAMP India Pvt., Ltd.	INDIA	Conformant
CID002243	Gold Refinery of Zijin Mining Group Co., Ltd.	CHINA	Conformant
CID001875	Tanaka Kikinzoku Kogyo K.K.	JAPAN	Conformant
CID002605	Korea Zinc Co., Ltd.	KOREA, REPUBLIC OF	Conformant
CID002606	Marsam Metals	BRAZIL	Conformant
CID002582	REMONDIS PMR B.V.	NETHERLANDS	Conformant
CID002777	SAXONIA Edelmetalle GmbH	GERMANY	Conformant

## Metal: Tin

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID001758	Soft Metais Ltda.	BRAZIL	Conformant
CID001458	PT Prima Timah Utama	INDONESIA	Conformant
CID002835	PT Menara Cipta Mulia	INDONESIA	Conformant
CID003387	Luna Smelter, Ltd.	RWANDA	Conformant
CID003381	PT Rajawali Rimba Perkasa	INDONESIA	Conformant
CID002593	PT Rajehan Ariq	INDONESIA	Conformant
CID001406	PT Babel Surya Alam Lestari	INDONESIA	Conformant
CID003205	PT Bangka Serumpun	INDONESIA	Conformant
CID001399	PT Artha Cipta Langgeng	INDONESIA	Conformant
CID001337	Operaciones Metalurgicas S.A.	BOLIVIA (PLURINATIONAL STATE OF)	Conformant
CID000292	Alpha	UNITED STATES OF AMERICA	Conformant
CID002503	PT ATD Makmur Mandiri Jaya	INDONESIA	Conformant
CID001105	Malaysia Smelting Corporation (MSC)	MALAYSIA	Conformant
CID001070	China Tin Group Co., Ltd.	CHINA	Conformant
CID000555	Gejiu Zili Mining And Metallurgy Co., Ltd.	CHINA	Conformant
CID000538	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA	Conformant
CID003379	Ma'anshan Weitai Tin Co., Ltd.	CHINA	Conformant
CID001482	PT Timah Tbk Mentok	INDONESIA	Conformant
CID001477	PT Timah Tbk Kundur	INDONESIA	Conformant
CID001460	PT Refined Bangka Tin	INDONESIA	Conformant
CID001314	O.M. Manufacturing (Thailand) Co., Ltd.	THAILAND	Conformant
CID000468	Fenix Metals	POLAND	Conformant
CID002844	HuiChang Hill Tin Industry Co., Ltd.	CHINA	Conformant
CID002834	Thai Nguyen Mining and Metallurgy Co., Ltd.	VIET NAM	Conformant
CID001539	Rui Da Hung	TAIWAN, PROVINCE OF CHINA	Conformant
CID001231	Jiangxi New Nanshan Technology Ltd.	CHINA	Conformant
CID000760	Huichang Jinshunda Tin Co., Ltd.	CHINA	Conformant
CID002517	O.M. Manufacturing Philippines, Inc.	PHILIPPINES	Conformant
CID003190	Chifeng Dajingzi Tin Industry Co., Ltd.	CHINA	Conformant
CID000942	Gejiu Kai Meng Industry and Trade LLC	CHINA	Conformant
CID003325	Tin Technology & Refining	UNITED STATES OF AMERICA	Conformant
CID001142	Metallic Resources, Inc.	UNITED STATES OF AMERICA	Conformant
CID002706	Resind Industria e Comercio Ltda.	BRAZIL	Conformant
CID001908	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CHINA	Conformant
CID002036	White Solder Metalurgia e Mineracao Ltda.	BRAZIL	Conformant
CID001453	PT Mitra Stania Prima	INDONESIA	Conformant
CID001191	Mitsubishi Materials Corporation	JAPAN	Conformant
CID001182	Minsur	PERU	Conformant
CID001173	Mineracao Taboca S.A.	BRAZIL	Conformant
CID000438	EM Vinto	BOLIVIA (PLURINATIONAL STATE OF)	Conformant
CID000402	Dowa	JAPAN	Conformant
CID003116	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CHINA	Conformant
CID002774	Metallo Spain S.L.U.	SPAIN	Conformant

<b>Smelter ID</b>	<b>Standard Smelter Name</b>	<b>Country Location</b>	<b>RMAP Conformant</b>
CID002773	Metallo Belgium N.V.	BELGIUM	Conformant
CID002500	Melt Metais e Ligas S.A.	BRAZIL	Conformant
CID002468	Magnu's Minerais Metais e Ligas Ltda.	BRAZIL	Conformant
CID002180	Yunnan Tin Company Limited	CHINA	Conformant
CID002158	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CHINA	Conformant
CID001898	Thaisarco	THAILAND	Conformant
CID000228	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CHINA	Conformant
CID003397	Yunnan Yunfan Non-ferrous Metals Co., Ltd.	CHINA	Conformant

## Metal: Tungsten

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID002082	Xiamen Tungsten Co., Ltd.	CHINA	Conformant
CID003401	Fujian Ganmin RareMetal Co., Ltd.	CHINA	Conformant
CID003388	KGETS Co., Ltd.	KOREA, REPUBLIC OF	Conformant
CID002833	ACL Metais Eireli	BRAZIL	Conformant
CID002830	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA	Conformant
CID002827	Philippine Chuangxin Industrial Co., Inc.	PHILIPPINES	Conformant
CID002645	Ganzhou Haichuang Tungsten Co., Ltd.	CHINA	Conformant
CID000966	Kennametal Fallon	UNITED STATES OF AMERICA	Conformant
CID000499	Fujian Jinxin Tungsten Co., Ltd.	CHINA	Conformant
CID002589	Niagara Refining LLC	UNITED STATES OF AMERICA	Conformant
CID002317	Jiangxi Xincheng Tungsten Industry Co., Ltd.	CHINA	Conformant
CID002845	Moliren Ltd.	RUSSIAN FEDERATION	Conformant
CID002551	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CHINA	Conformant
CID002543	Masan High-Tech Materials	VIET NAM	Conformant
CID002541	H.C. Starck Tungsten GmbH	GERMANY	Conformant
CID002542	TANIOBIS Smelting GmbH & Co. KG	GERMANY	Conformant
CID002513	Chenzhou Diamond Tungsten Products Co., Ltd.	CHINA	Conformant
CID000105	Kennametal Huntsville	UNITED STATES OF AMERICA	Conformant
CID000769	Hunan Chunchang Nonferrous Metals Co., Ltd.	CHINA	Conformant
CID000004	A.L.M.T. Corp.	JAPAN	Conformant
CID002579	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji	CHINA	Conformant
CID002843	Woltech Korea Co., Ltd.	KOREA, REPUBLIC OF	Conformant
CID002321	Jiangxi Gan Bei Tungsten Co., Ltd.	CHINA	Conformant
CID002318	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CHINA	Conformant
CID002315	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CHINA	Conformant
CID002320	Xiamen Tungsten (H.C.) Co., Ltd.	CHINA	Conformant
CID002319	Malipo Haiyu Tungsten Co., Ltd.	CHINA	Conformant
CID002316	Jiangxi Yaosheng Tungsten Co., Ltd.	CHINA	Conformant
CID002044	Wolfram Bergbau und Hutten AG	AUSTRIA	Conformant
CID002724	Unecha Refractory metals plant	RUSSIAN FEDERATION	Conformant
CID002502	Asia Tungsten Products Vietnam Ltd.	VIET NAM	Conformant
CID002494	Ganzhou Seadragon W & Mo Co., Ltd.	CHINA	Conformant
CID001889	Tejing (Vietnam) Tungsten Co., Ltd.	VIET NAM	Conformant
CID000875	Ganzhou Huaxing Tungsten Products Co., Ltd.	CHINA	Conformant
CID000825	Japan New Metals Co., Ltd.	JAPAN	Conformant
CID000568	Global Tungsten & Powders Corp.	UNITED STATES OF AMERICA	Conformant
CID003182	Hunan Litian Tungsten Industry Co., Ltd.	CHINA	Conformant
CID000258	Chongyi Zhangyuan Tungsten Co., Ltd.	CHINA	Conformant
CID000218	Guangdong Xianglu Tungsten Co., Ltd.	CHINA	Conformant
CID000766	Hunan Chenzhou Mining Co., Ltd.	CHINA	Conformant
CID003407	Lianyou Metals Co., Ltd.	TAIWAN, PROVINCE OF CHINA	Conformant
CID002649	Hydrometallurg, JSC	RUSSIAN FEDERATION	Conformant

## Metal: Tantalum

Smelter ID	Standard Smelter Name	Country Location	RMAP Conformant
CID001200	NPM Silmet AS	ESTONIA	Conformant
CID001969	Ulba Metallurgical Plant JSC	KAZAKHSTAN	Conformant
CID001508	QuantumClean	UNITED STATES OF AMERICA	Conformant
CID000917	Jiujiang Tanbre Co., Ltd.	CHINA	Conformant
CID000914	Jiujiang JinXin Nonferrous Metals Co., Ltd.	CHINA	Conformant
CID000092	Asaka Riken Co., Ltd.	JAPAN	Conformant
CID001869	Taki Chemical Co., Ltd.	JAPAN	Conformant
CID001076	LSM Brasil S.A.	BRAZIL	Conformant
CID000211	Changsha South Tantalum Niobium Co., Ltd.	CHINA	Conformant
CID001769	Solikamsk Magnesium Works OAO	RUSSIAN FEDERATION	Conformant
CID001522	Yanling Jincheng Tantalum & Niobium Co., Ltd.	CHINA	Conformant
CID000460	F&X Electro-Materials Ltd.	CHINA	Conformant
CID000456	Exotech Inc.	UNITED STATES OF AMERICA	Conformant
CID001277	Ningxia Orient Tantalum Industry Co., Ltd.	CHINA	Conformant
CID002847	Meta Materials	NORTH MACEDONIA, REPUBLIC OF	Conformant
CID002547	H.C. Starck Hermsdorf GmbH	GERMANY	Conformant
CID002548	H.C. Starck Inc.	UNITED STATES OF AMERICA	Conformant
CID002545	TANIOBIS GmbH	GERMANY	Conformant
CID002544	TANIOBIS Co., Ltd.	THAILAND	Conformant
CID002539	KEMET de Mexico	MEXICO	Conformant
CID002512	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CHINA	Conformant
CID002558	Global Advanced Metals Aizu	JAPAN	Conformant
CID002557	Global Advanced Metals Boyertown	UNITED STATES OF AMERICA	Conformant
CID002550	TANIOBIS Smelting GmbH & Co. KG	GERMANY	Conformant
CID002549	TANIOBIS Japan Co., Ltd.	JAPAN	Conformant
CID002707	Resind Industria e Comercio Ltda.	BRAZIL	Conformant
CID002504	D Block Metals, LLC	UNITED STATES OF AMERICA	Conformant
CID002842	Jiangxi Tuohong New Raw Material	CHINA	Conformant
CID001192	Mitsui Mining and Smelting Co., Ltd.	JAPAN	Conformant
CID001175	Mineracao Taboca S.A.	BRAZIL	Conformant
CID001163	Metallurgical Products India Pvt., Ltd.	INDIA	Conformant
CID000616	XIMEI RESOURCES (GUANGDONG) LIMITED	CHINA	Conformant
CID002508	XinXing HaoRong Electronic Material Co., Ltd.	CHINA	Conformant
CID002506	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CHINA	Conformant
CID002505	FIR Metals & Resource Ltd.	CHINA	Conformant
CID002492	Hengyang King Xing Lifeng New Materials Co., Ltd.	CHINA	Conformant
CID001891	Telex Metals	UNITED STATES OF AMERICA	Conformant