

**FAIRPHONE**

# **FAIRPHONE'S IMPACT 2021**

Change is in your hands





In 2021 we saw things are moving in our industry. France required manufacturers to transparently display information about repairability. iFixit awarded its first 10/10 rating to a laptop. YouTube influencers embraced our repairability and sustainability messages and heaped praise on the Fairphone 4. Fairphone won the Coolest Dutch Brand Award. In 2021 on Fairphone 2, we rolled out Android 9 in March, and the beta of Android 10 in November, which will lead us to 7 years of software support for this device.

Apple announced efforts towards improving repairability and openly promised to do better. New fair materials coalitions sprang up, and existing coalitions surged in membership. More and more phone manufacturers followed our lead and left unnecessary cables and chargers out of their packaging. The OECD's mineral convention called on the industry to do as we do by engaging with, rather than fleeing, communities marred by poor mining practices.

Consumer and employee expectations of corporate social responsibility increased.

We see evidence of progress towards a tipping point where fair and sustainable materials and production become an expectation rather than an exception.

And every day, the world gives us new reasons to accelerate progress toward that goal. Whether it's the latest IPCC report, the rising alarm over plastic in our oceans, the depletion of nature's resources, or COVID-19 exposing the injustices baked into our economic system. Although I sense new momentum for changing our relationship with nature, I don't see the same urgency to treat workers fairly. The people in our supply chains who are 'invisible' and far from home are too often looked upon as expendable and exploitable. Our call to ensure living wages, workers' voice and better working conditions sometimes feel like they fall on deaf ears.

However, the progress that is happening,

## Today, Fairphone is an exception to the norm. But all big change starts at the fringe.

is progress that changes hearts and minds. Again and again we reach out to industry colleagues who go from skeptics to partners to ambassadors to champions. As positive disruptors, we love to be inspiring, magnetic, and (positively!) contagious.

Fairphone is the child of an activist campaign and became an innovative social enterprise. Our way of working is rooted in positive disruption. We challenge the status quo and show that it's possible to make a phone that's fairer and kinder to the environment. We're not blaming others — we're inviting them. Every time we open up a responsible source of raw materials, or innovate a way to treat factory workers better, or demonstrate how modularity prolongs a phone's life and reduces its carbon footprint, we're sharing those results with the world and encouraging our peers in the smartphone industry to join us.

It's all part of our **three-step theory of change: raise awareness; set an example; motivate the industry to follow those examples and make caring for people and planet a natural part of doing business.**

Up until 2020, a skeptical industry challenged us by saying that it would never be possible to build a profitable company that could also deliver on the ethical promises we made. Our answer? **#ChallengeAccepted:** Last year's Impact Report showed we could. So now it's time to flip the question. I'm asking my fellow CEOs directly to accept our challenge: **guys (and you're all guys),** why can't we make more ethical and sustainable phones?

Being a leader, as Paul Polman reminded me, is a privilege, and "there is nothing more gratifying than leveraging it to serve others and creating a better world for all. After all, the only impossible journey is the one you never begin." So many of the choices that we at Fairphone have made are choices any of you, as real leaders, could make, today. There's no excuse for not paying a living wage to the workers who assemble our phones, and nothing stopping all of us from insisting on this. When your customers are willing to pay less than the price of a cup of coffee to ensure the people who made your phone are treated fairly, why wouldn't you?

**Today, Fairphone is an exception to the norm. But all big change starts at the fringe. The tipping point we're heading towards is where that exception becomes the norm.**

Scientists at the University of Leeds studying the movements of birds, deer, and human crowds have observed that it takes surprisingly few individual choices to change the direction of an entire flock, herd, or crowd.

So here's my challenge to every other leader in the industry: BE a leader. Use that privilege we have not just to sell more phones, but to take up the challenge of improving lives today and in the future, as that will be our legacy to our children.

This report is a summary of what we've done and the steps we have proven possible. It closes with a set of recommendations for what we as industry leaders can do. Not just to take our companies in a new direction, but to be a part of the change that turns the herd.

Change leadership starts small, with one decision, then another, then another, and another. Until, at the tipping point, a single decision becomes the one that sets everyone running in a new and better direction. That decision could be yours.

Change is in your hands.

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We're super enthusiastic about what we do and we have a lot to share. But, if we were to include everything, this report would be huge! We therefore made choices about what we do and don't include in our Impact Report. We surveyed a selection of our stakeholders to gauge which topics we should report on and what to include in this document, in addition to company benchmarks like our B-corporation status and recognized standards for impact reporting. We compared this list of topics with the areas we, as Fairphone, consider important for achieving our mission. Core to the scope of this report are our impact focus areas. These are the key areas in which we work to drive impact, quantified by company Key Performance Indicators to which we hold ourselves accountable. To read more about the decisions we made about what to include and exclude, see [Appendix 1](#).

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# 1. OUR INDUSTRY NEEDS TO CHANGE

The United Nations Environment Program has warned that we find ourselves in an accelerating triple-crisis of climate change, biodiversity loss, and pollution. The smartphone industry contributes to all three, largely through its production. The good news is that every day more companies commit to change, but due to increased demand and production the situation will get worse: neither the overall emissions nor resource use will decrease in the coming future.



It is projected that by 2060, global material use could double to 190 billion tonnes (from 92 billion), while greenhouse gas emissions could increase by 43 percent.<sup>1</sup>

## Rapid life cycles drive CO2 & E-waste

The Information and Communications Technology industry contributes notably to this crisis: by 2040 the industry is expected to be responsible for 14% of the global carbon footprint and the impact of smartphones alone reached 11% in 2020<sup>2</sup> – mostly linked to raw material extraction, processing and production of phones. Rapid product life cycles drive the problem of CO<sub>2</sub> emissions and e-waste: in 2021, more than 1.5 billion smartphones were sold,<sup>3</sup> each using around 75 kg of resources for its production.<sup>4</sup> In Europe, it is estimated that around two-thirds of the phones that are replaced are still functional, but end up unused in a drawer.<sup>5</sup>

## Fair transition to circularity needed

In combating climate change, we are moving from a fossil fuel-based economy to a mineral-based economy. The transition towards a greener economy with more solar panels or electric vehicles means a world that's more mineral intensive. For example, the demand for lithium and cobalt used in batteries is predicted to increase by nearly 500% by 2050<sup>6</sup>. This means we have to improve product design, conserve

resources through more efficient use, reuse, and recycling, and ensure mining operations are safe, sustainable, and fair as we transition to a circular economy.

## Millions of people get stuck

Over 18 million people work in the electronics manufacturing industry<sup>7</sup> and an estimated 50 million work in the mining sector: 45 million in artisanal mining<sup>8</sup> and 5 million in formal large scale mining<sup>9</sup>. Another 135 to 270 million people depend on artisanal mining indirectly for their livelihood<sup>8</sup>. From poverty and hazardous working conditions to forced and child labor, there are a multitude of issues for these workers to contend with.

## Avoiding risks or making impact

The traditional industry response to these issues is risk management. High-risk producers are audited on their compliance with **corporate social responsibility** codes of conduct. This approach, however, has proven to have a limited effect on more systemic issues like excessive overtime, lack of worker representation and low wages. Crucially, it fails to catalyze the cooperation and investment needed throughout the supply chain to tackle the root causes behind these issues. We need to find a better way of doing things, quickly.



Photo by: David Sturmes (The Impact Facility)

<sup>1</sup> [Global resources outlook 2019](#)

<sup>2</sup> [Assessing ICT global emissions footprint](#)

<sup>3</sup> [Global smartphone sales to end users](#)

<sup>4</sup> [Ecological backpack](#)

<sup>5</sup> [Identifying the impact of the circular economy on the Fast-Moving Consumer Goods Industry](#)

<sup>6</sup> [Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition](#)

<sup>7</sup> [International Labour Organisation](#)

<sup>8</sup> [2020 State of the Artisanal and Small-Scale Mining Sector](#)

<sup>9</sup> [IndustriALL Mining and DGOJP"](#)

# 1.1 Our path to solutions

Fairphone started in 2013 as a company providing alternatives for the social and environmental challenges the electronics industry faces. We were founded on a mission: “by establishing a viable market for ethical electronics, we motivate the entire industry to act more responsibly”. We’re modeling fairer solutions for the malpractices we find, from a repairable phone to paying living wage bonuses. Our business model and products don’t just empower consumers to make a fairer choice; they prove that fairness is both possible, and good for business.

Ethical electronics requires a holistic approach towards sustainability, respecting both people and planet. To achieve our mission, we drive change by a 3-step approach, our “theory of change”:

## 1. Research and raise awareness

## 2. Innovate scalable solutions

## 3. Inspire the industry

### 1. Research and raise awareness.

We uncover the complex supply chains behind electronic products and communicate transparently about what we find to a wide group of people to create awareness around issues in the industry.

### 2. Innovate scalable solutions.

We innovate on scalable solutions. Step by step we’re building our company to model a new way of making and using products. In doing so, we’re proving it’s possible to make more ethical business choices AND to be commercially successful.

### 3. Inspire the industry.

By practicing a fairer business model and creating strategic partnerships with key industry actors, we help motivate the electronics industry to make caring for people and planet a standard part of doing business.

At Fairphone, we focus on four impact areas where we can most effectively leverage our ideas to maximize impact:

- **Longevity:** creating products that last
- **E-waste:** take-back, reuse and recycling
- **Fair materials:** choosing fairer materials
- **Fair factories:** decent work in manufacturing

We put people and the planet at the core of our decisions. From the suppliers we work with to the consumers that hold a Fairphone in their hands, we constantly think about how our way of doing business makes an impact, good and bad.

Measuring our impact is central to how we work. We follow industry and government best practices for auditing and monitoring our supply chain. However, we need something different than the traditional auditing framework to effectively tackle the challenges the electronics industry now faces. It’s important for us to go beyond a risk-based perspective and use our market demand to empower our small producers and supply chain workers and catalyze investments and partnerships that drive true impact.

That is why we set ourselves ambitious impact goals on a set of Key Performance Indicators (KPIs). These relate directly to our focus impact areas, and we measure our progress towards positive impact against these KPIs.

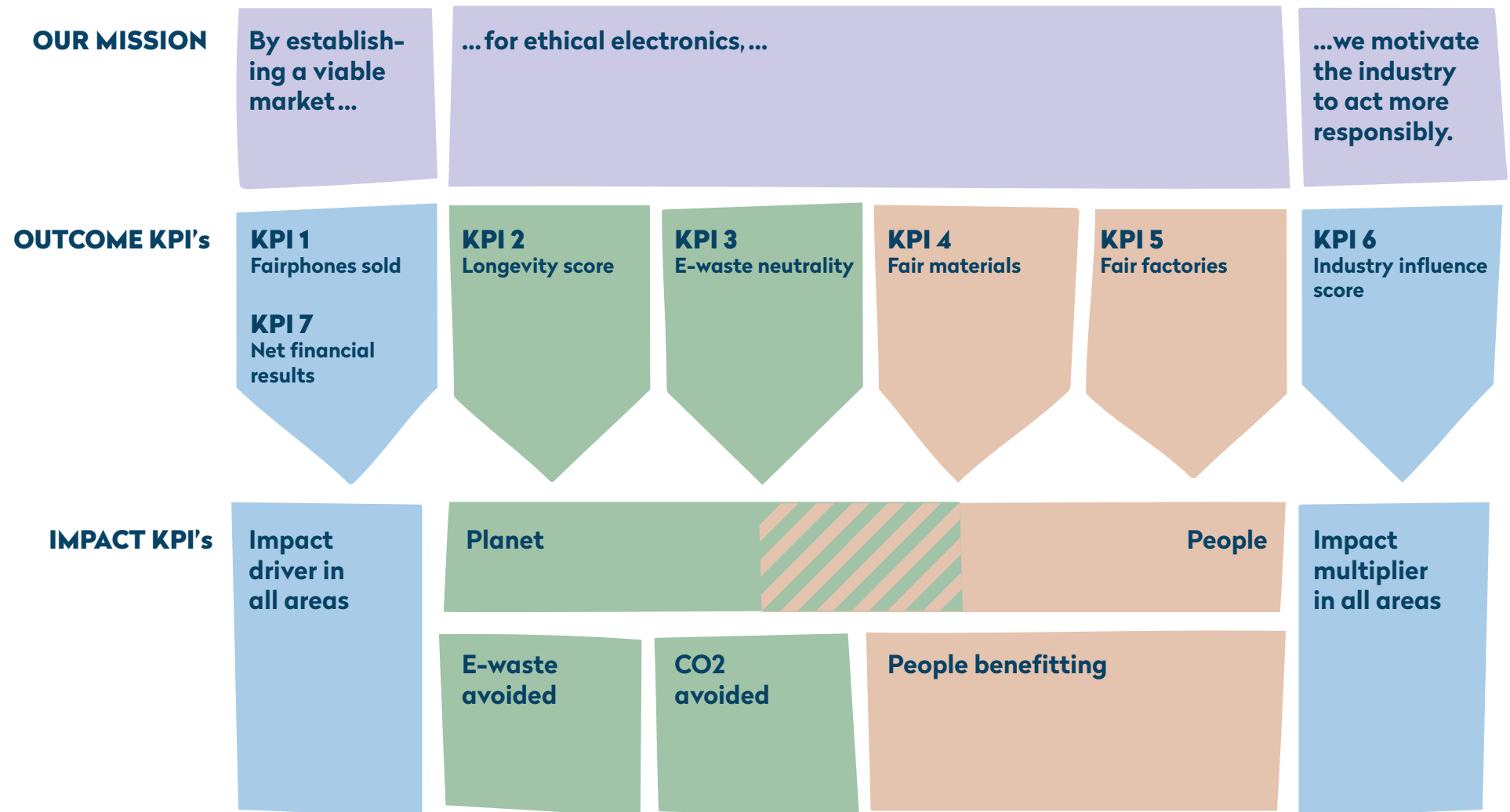
## 2.

# FAIRPHONE'S PROGRESS ON CORE IMPACT STRATEGIES

In 2021, we've set ourselves some serious challenges. But change doesn't happen overnight. We're disrupting centuries-old production models and deeply ingrained habits we all have. Our goal of a fairer future is a work in progress, and we're constantly assessing how far we've come and where we want to go. To do just that, in this chapter, we share and examine our KPI results. To aid us in our reporting, our KPIs have been **externally assured by ERM CVS.**



## We selected Key Performance Indicators that are core to our mission and impact (KPIs)



## 2.1 Our impact at a glance

We're not kidding ourselves: Fairphone won't improve the electronics industry by outselling huge competitors in the marketplace. Instead, we want to demonstrate that there is a better way of doing business. We actively encourage other companies to adopt our methods and work with to provide more transparency and improve social and environmental performance in the industry.

We measure our impact based on 6 outcome KPIs and 3 impact KPIs. These have been externally assured by an independent 3rd party (ERM CVS).

KPI Name	Unit of measure	Results 2021	Target 2021	Target 2023
<b>Outcome KPI</b>				
KPI 2: Longevity score	Expected lifetime in years of activated FP3/+ and FP4	5.5	4.5	4.5
KPI 3: E-waste neutrality	% of electronic end-of-use products taken back vs. new FP4 and FP4 modules sold	100%	100%	100%
KPI 4: Fair materials	Average % of 14 focus materials sustainably sourced	31%	55%	70%
KPI 5: Fair factories	% of strategic suppliers who demonstrate improvements or high maturity	38%	12.5%	50%
KPI 6: <b>Industry influence score</b>	Number of points scored on key industry players	19	15	31
<b>Impact KPI</b>				
E-waste avoided	T of e-waste avoided	8	N/A	N/A
CO2 avoided	T of CO2e avoided	668	N/A	N/A
People benefitting	Number of people	25,699	N/A	N/A

## Fairphone contributes to nine Sustainable Development Goals



## 2.2 Key Performance Indicators

Our progress against our KPIs this year reflects our values and our long-term outlook: there's much to be proud of, much cause for hope, and much more to do. Fairphone is scaling up, as a business and a brand. We are brimming with potential to amplify our impact. As we identify and shore up the weak spots in the electronics industry, we seek to continuously improve our own performance, and to play our part in global efforts to create a more liveable world. All of our Key Performance Indicators contribute, directly or indirectly, to the **United Nations Sustainable Development Goals** – humanity's collectively agreed agenda for building a more just and sustainable future – and we invite our industry colleagues to also align their goals with this important work.

We work hard to minimize the negative impacts our products have on the planet, and to move the electronics industry in a positive direction. We've had lots of reaffirming moments over the years, and in 2021 much of that truly paid off.

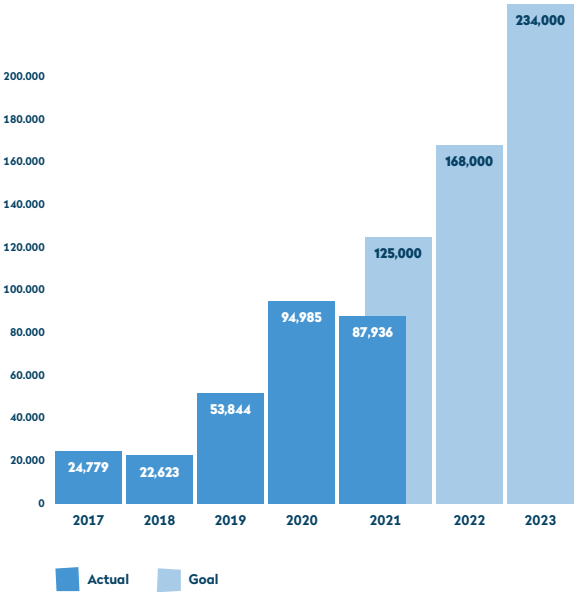
Fairphones sold

KPI  
1

Establishing a market  
for ethical phones

We make smartphones to create change: the more phones and spare parts we sell and the more successful our business, the more we can scale up and the further our impact can reach. Every Fairphone sold shows that making a device proud to minimize environmental impacts and treat workers fairly is a selling point, not a profit liability. By demonstrating the commercial viability of our ethical choices, we inspire the industry to act more responsibly as well. That makes our sales numbers – and our financial health – the foundation of our impact.

Number of Fairphone 3, 3+ and 4 sold in 2021 via direct and indirect sales:



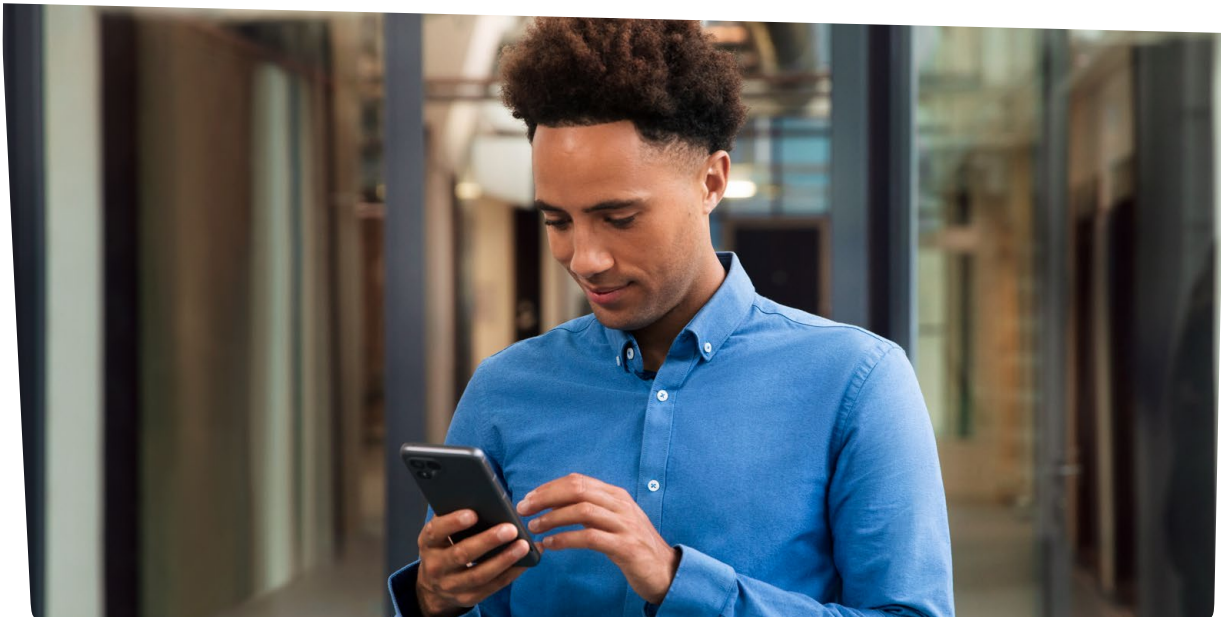
## Our approach

By championing a fairer, more sustainable way of making and selling smartphones, we are raising awareness not just of Fairphone, but of the issues themselves. Sustainability is becoming increasingly important for mobile network operators and electronics retailers, which has resulted in nearly all major operators and retailers in our focus countries offering a Fairphone in their portfolio, introducing ever more people to our brand and mission.

In September 2021 we launched the modular Fairphone 4 5G. Our highest quality phone to date, it provides significant benefits for the user that make it enjoyable to keep in use for as long as possible, delivering up-to-date specs (including 5G capability), a sleek, high-end look (thanks to a frame of responsibly sourced aluminum), a guarantee of e-waste neutrality, and significantly, a 5-year warranty.

With the launch of the Fairphone 4, we also introduced a strong offer for the B2B (business-to-business) market as more companies want to offer their staff the most sustainable smartphone in the world.

To catch the consumer's eye and inform them of a more ethical alternative, the launch was supported by an attractive PR and media campaign in both Germany and the Netherlands. In the same period, we ran a TV and radio campaign with our partner Belsimpel in the Netherlands.



OUR RESULTS	VOLUME	% OF TOTAL
Indirect Sales	53,609	61%
FP3	1,100	1%
FP3+	30,512	35%
FP4 (6/128)	17,697	20%
FP4 (8/256)	4,300	5%
Direct Sales	34,327	39%
FP3	4,547	5%
FP3+	17,584	20%
FP4 (6/128)	4,472	5%
FP4 (8/256)	7,724	9%
Total Volume Phones	87,936	100%

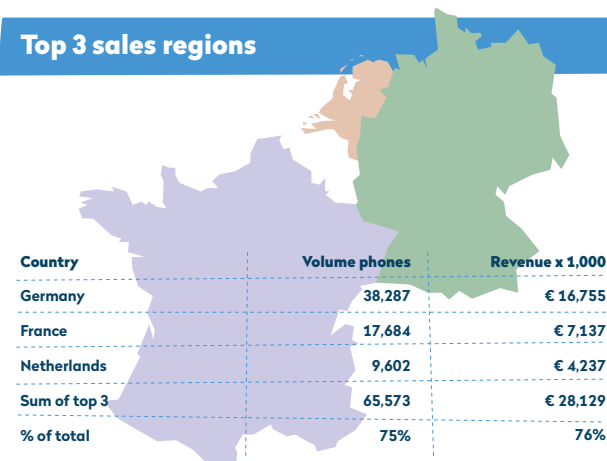
## Our results

The year of 2021 was eventful for us: we sold 87,936 devices in total during the year. Initially, we aimed to sell 125,000 devices, but due to the impact of COVID-19 and shops being closed throughout Europe, sales were slow in the first quarter of the year. In the summer of 2021 we faced supply issues, and furthermore, we had devices stuck for months on the Ever Given, the container ship that blocked the Suez Canal. For the development and manufacturing of the Fairphone 4, we switched to a new partner, **T2Mobile**. This decision was taken to help us scale-up production volume and further improve the quality of the product and manufacturing.

In the second part of 2021, just as we were gearing up for the launch of the Fairphone 4, we were significantly impacted by the global shortage for chipsets and other electronic components. As a result, Fairphone 4 sales were hampered by limited supply. We are happy to share that we resolved this in the first quarter of 2022.

In 2021, 61% of our sales came via partners and 39% via our website. We expanded our retail visibility in Europe from nearly 2,000 to almost 4,000 shops. Our presence in Europe via sales partners increased to 16 countries. We deliberately did not expand further in Eastern and Southern Europe in order to focus on growing sales in key countries. Our biggest market remained Germany, responsible for 44% of our sales (+3% compared to 2020), followed by France at 20% (same as 2020) and Switzerland and Netherlands, both accounting for 9%.

## Top 3 sales regions



Country	Volume phones	Revenue x 1,000
Germany	38,287	€ 16,755
France	17,684	€ 7,137
Netherlands	9,602	€ 4,237
Sum of top 3	65,573	€ 28,129
% of total	75%	76%



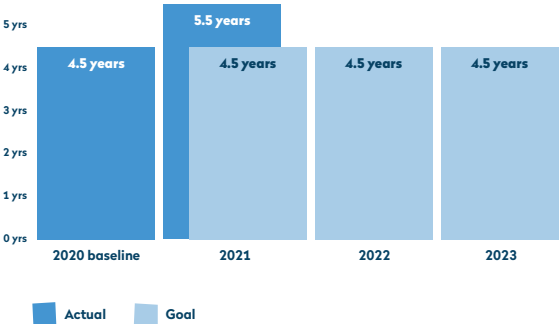


Longevity score

KPI  
2

Creating products that last

Expected lifetime of Fairphone 3, 3+ and 4



This KPI was before the “% phones in use vs. sold”, but was updated last year to give us a better realtime indication of how our products and services are performing against our aim to stretch their lifetime to a minimum of 5 years. Baseline is therefore 2020.

Measuring an average product lifespan is not possible while the product is still being used. Therefore, our Longevity Score predicts the average lifespan of Fairphone 3(+) and 4 by combining their measured actual lifetime with their expected lifetime. The latter is collected via a survey in which we ask Fairphone users to estimate how long they will still keep using their phone, having experienced its performance and Fairphone’s support system.

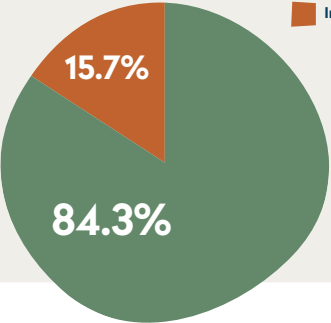
The challenge

For each of our Fairphone models we conducted a Life Cycle Assessment of the environmental impact of a phone’s manufacture, transport, use, and disposal. Every time, the assessment proved that a smartphone’s primary climate change impact is during the production phase. For Fairphone 4, the production phase accounts for 75% of its total carbon footprint.

The implication is clear: to reduce negative impact, reduce the number of phones produced. In the simplest terms, someone who goes through two phones in five years will cause close to twice the impact on global warming compared to someone who uses only one. Keeping a phone for seven years rather than three reduces that yearly impact by around 44%.

When you consider that the average lifespan of a smartphone is 2.7 years, and less than 20% of out-of-use phones are correctly recycled, you can see how these short replacement cycles create the majority of climate change and resource problems for the industry.

TOTAL PHONES ACTIVATED



Active  
Inactive

Actual lifetime (measured)

Avg. active phones: 1.08 yrs  
Avg. inactive phones: 0.63 yrs

Actual lifetime:  
Additionally expected lifetime:

Expected lifetime (predicted through survey)

Avg. active phones: 5.4 yrs  
Avg. inactive phones: 0 yrs

$1.08 \text{ yrs} \times 84.3\% + 0.63 \text{ yrs} \times 15.7\% = 1 \text{ yr}$   
 $5.4 \text{ yrs} \times 84.3\% + 0 \text{ yrs} \times 15.7\% = 4.5 \text{ yrs}$

Longevity score = 5.5 Yrs

## Our approach

Fairphone aims to maximize the lifetime of its products through both hardware and software innovation. We want the industry to embrace these solutions, and we want users to keep their phone for as long as possible.

We challenge the take-make-dispose system with longer-lasting design and modularity, to enable repairability and easy upgrades. As the repair of a Fairphone results into very few additional greenhouse gas emissions, the user 'breaks even' on environmental impact already a few weeks after additional usage (see table next page).

We encourage and enable DIY repair through the availability of reasonably-priced spare parts, and the free, public repair information and assistance we provide through Fairphone's website and community pages. Our Fairphone Angels and community members are crucial to these efforts as well.

When a phone breaks, the decision to repair or not is made by the owner. But in Europe, only about half of all broken phones are repaired, and we know that the possibility to repair and the costs are determining factors. In our efforts to remove as many barriers to repair as we can, we introduced a 5-year warranty for the Fairphone 4.

Hardware longevity, however, is pointless unless your phone's software can ensure good and safe functionality. We pledge software support for at least 5 years – even when we have no guarantee that a chip manufacturer will support us in this endeavor and we will likely have to maintain and upgrade software by ourselves in a product's later years. In fact, we've been supporting the Fairphone 2 for over 7 years and continue to raise the bar. And once again, it is in part due to the enthusiasm and technical prowess of our user community that we continue to develop, debug, and release new operating system versions to keep Fairphones going longer.

Open-source operating systems can prolong the lifetime of smartphones, and we make sure our users know they have the right to freely choose their software. We nurture open-source

communities and have a partnership with the /e/foundation. Fairphone users can even choose a phone flashed with /e/ instead of Google's Android operating system.

We expect to improve our Longevity Score by doing more research into why our users decide to stop using their phone and by taking actions to address those reasons. We plan to publish the detailed methodology of our Longevity Score to facilitate that other actors gain insights into the average lifetime of their products as a first step to extend it.



## Results

**We exceeded our Longevity Score target of 4.5 years with a result of 5.5 years.** The value is driven by active Fairphone 3(+) and Fairphone 4 users (84% still active) who expect to continue using their Fairphones on average for 5.4 years beyond their current usage, offset by those customers not actively using their device. This accounts for all devices with Fairphone OS (demo phones and phones with alternative OS excluded), which are 95% of all Fairphone 3, 3+ and 4 devices activated. The score of 5.5 years is a strong indicator of customer trust in the phone when it comes to quality, repairability, software updates, and overall support.

In 2021, the Fairphone 2 received an update to Android 9. The news was big in the tech press, with **The Verge** noting that “it’s basically unheard of for an Android manufacturer to still be updating a handset six years after its original release.” Well, make that 7 years. In November, a beta version of Android 10 was released – another industry first which will lead Fairphone 2 towards 7,3 years of Software Support. A beta release of Android 11 was also released for Fairphone 3.

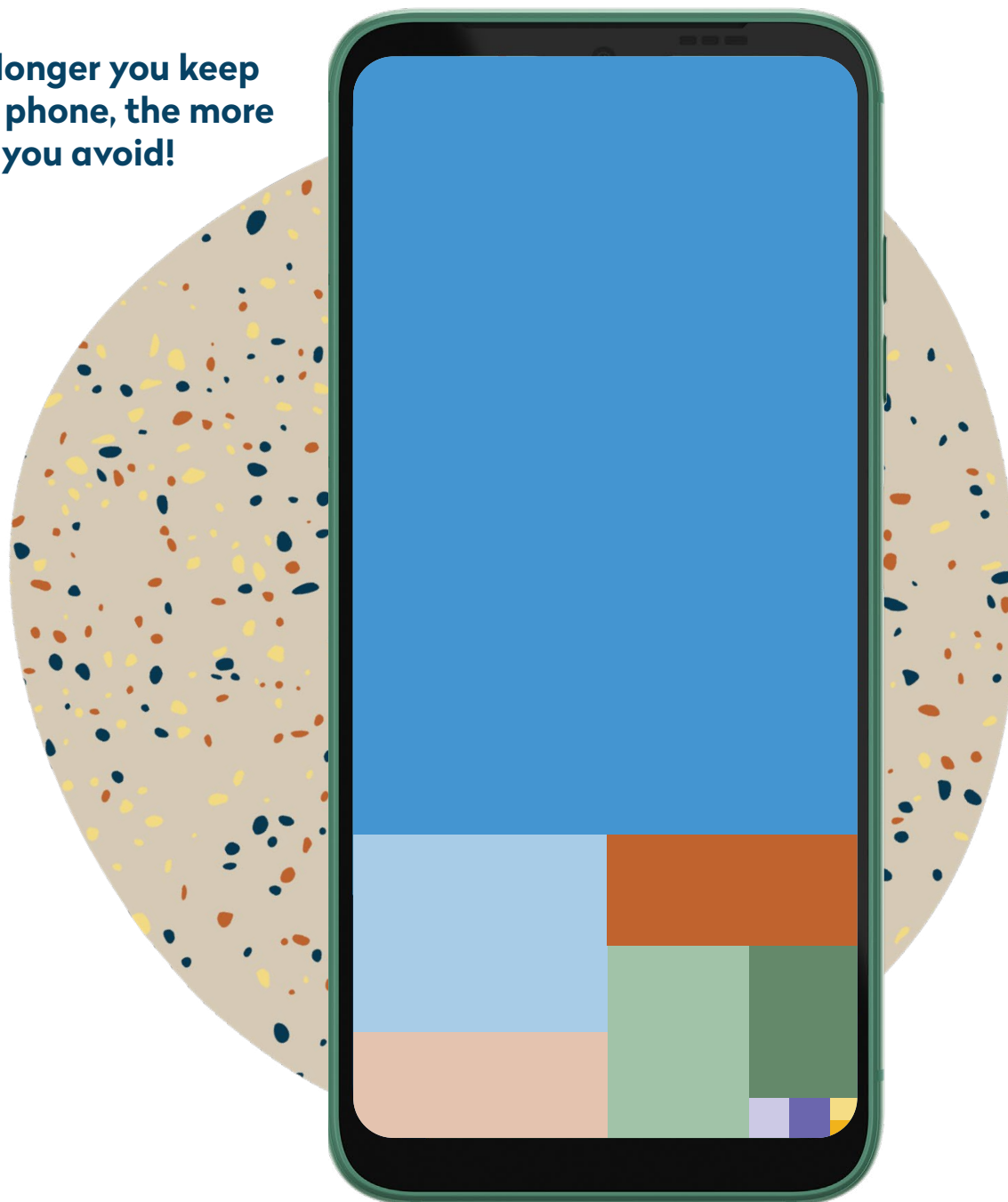
We introduced our True Wireless Earbuds in 2021. We integrated **Fairtrade Gold** and used 30% recycled materials in the housing of the earbuds. We slowed down battery degradation by reducing the charging rate, so they can be used for around 800 charge cycles – far longer than most earbuds. On the down side, our first release did not include a replaceable battery, and **iFixit** awarded them a stinging 1/10 repairability score. Finding the right supplier to develop our TWS earbuds was a humbling experience that took us back to our beginnings. Essentially, we did our best to find repairable and more sustainable earbuds on the market to kickstart our trajectory in the audio market. However, we realized we had to start like with Fairphone 1 – from scratch with step-by-step improvements. Despite being unable to achieve some key objectives with our first release, we’re proud of the work we’ve done so far with our supplier, and we’re sticking to our tried and true concept of improving step by step.

REPLACED MODULE	# of extra user days needed to break even on the negative impact of a replaced module
Rear camera module	120
Battery	55
Display module	33
USB-C port	22
Back cover, loudspeaker, earpiece, selfie camera	19

## Repairing makes sense

It is way better for the planet to repair your phone by replacing a module vs. buying a full new phone. You ‘earn’ that back after some days. The table above shows it already makes sense to replace e.g. a speaker module from an environmental perspective if it makes you use the phone for more than 19 days longer than without repairing it. So It goes really fast that the impact of repairing a phone is ‘offset’ by the prolonged use — repairing makes absolutely sense!”

**The longer you keep  
your phone, the more  
CO<sub>2</sub> you avoid!**



## CO<sub>2</sub> emissions for the production of the Fairphone 4

75% of CO<sub>2</sub> emissions is created during the production of the Fairphone 4. Below is an overview of the CO<sub>2</sub> emissions in kg for the production of the Fairphone 4 and its spare parts. Proving that it's much more sustainable to repair rather than replace your phone.

Total CO<sub>2</sub> emissions for the production of the Fairphone 4 (excl. transportation, use phase and end-of-life treatment): 35 kg.



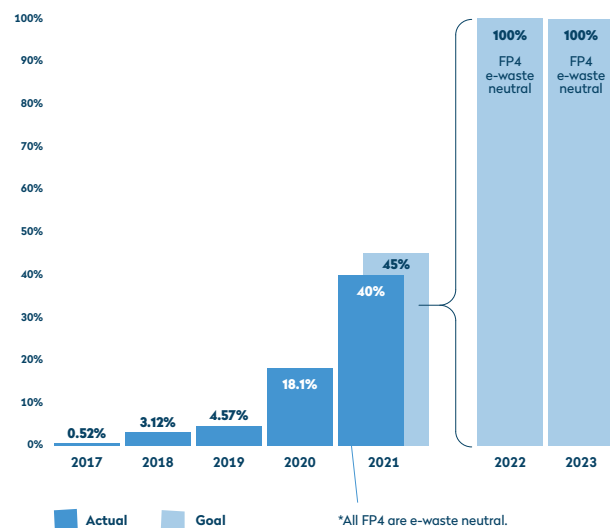
Source: [Life Cycle Assessment of the Fairphone 4](#)

## E-waste neutrality

KPI  
3

## Offsetting our e-waste footprint

## E-waste recovered vs. phones sold



Electronic end-of-use products taken back compared to new Fairphone 4 (+modules) sold (%). We updated this indicator to account for Fairphone 4 only as we launched the phone with an e-waste neutral promise.

## The challenge

E-waste is currently the world's fastest growing waste stream, with millions of tons of electronics being dumped and left to corrode all over the world – especially in poorer countries. Also, too many of us simply treat e-waste and old phones as household waste. On top of this, it's estimated that around 700 million phones are simply abandoned in drawers and boxes in Europe, neither used nor disposed of properly. Only 17.4% of e-waste is collected for recycling. The remaining 82.6% is unaccounted for, of which 7–20% is estimated to being legally or illegally exported as second hand products or waste to countries lacking proper recycling systems<sup>10</sup>. In these countries, landfilled e-waste and informal recycling causes health and environmental hazards, while resources are not – or inefficiently – recovered.

By properly recycling e-waste, we can avoid these risks for people and planet, preserve resources and reduce the demand for virgin mined materials. However, it is important to point out that even when properly recycled according to EU standards, only about 30% of the weight of materials contained in a smartphone can be recovered by recycling – which means that 70% of the materials still remains as waste. This is another reason why we place such emphasis on longevity and reuse: recycling is not the ultimate panacea for e-waste.

We believe in the possibilities of a circular economy that not only closes the material loop, but that is inclusive and contributes to the livelihoods of those in need.

## Our approach

We want to help build a world with a closed loop; a future where e-waste is reduced thanks to long-lasting products which are continuously reused and recycled. Once resources enter our economic system, they should be kept at their highest value for as long as possible and only freed for new applications once a product cannot be repaired anymore. We're moving one step closer to a circular economy by driving longer-lasting design, the reuse and repair of our phones, researching electronics recycling options and reducing electronic waste worldwide.

Since every electronic product will become e-waste one day, we measure the amount of electronic end-of-use products we collect, compared to the amount of future e-waste we put on the market by selling devices and spare parts. With the Fairphone 4 we are demonstrating that taking responsibility for future e-waste can be a selling point

<sup>10</sup> [The Global E-waste Monitor 2020](#)



for a product or a company. The Fairphone 4 launched in 2021 with the proud statement that it is e-waste neutral, meaning that for every Fairphone 4 phone and module we sell, another end-of-use phone or the same amount of e-waste is either reused or recycled through Fairphone's efforts.

We do this through our own **European Reuse and Recycle program** in which we take back phones and modules and reuse them or send them for proper recycling – whether it's a Fairphone or any other brand. On top of that, through the model of waste compensation, we collect and recycle phones from countries with insufficient recycling infrastructure through our partnership with **Closing the Loop**. This is a first in the smartphone industry and it's exactly the kind of dedication you won't find anywhere else – although more companies are expressing interest in following our lead!

We are also working on more ideas to avoid and reduce e-waste:

- Circular business models like “Fairphone as a service”, allowing us to ensure that phones are reused and control what happens at the phone's end-of-life.
- Various take-back incentives in the European market to encourage device return.

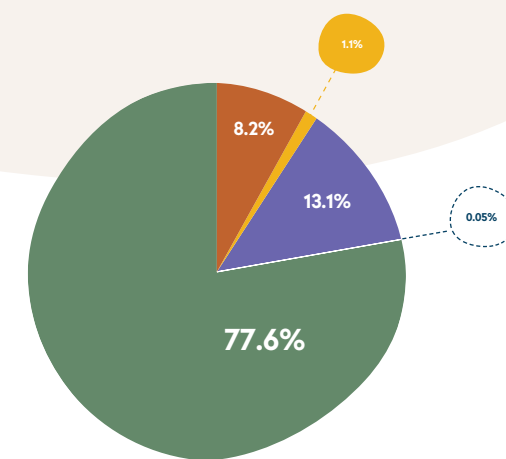
- Supporting safe value creation from e-waste in countries with insufficient recycling infrastructure.

## Results

We fulfilled our **e-waste neutral guarantee** for the Fairphone 4 device and modules by taking back or compensating the equivalent of 100% of sold units in electronic end-of-use products. This was achieved with 9% (of take-back) coming from **Fairphone's programs** in the EU market and 78% from Africa in partnership with **Closing the Loop**. In addition we account for the take-back financed through the **WEEE fee we pay** in our European markets.

We launched our new **Reuse and Recycle Program** in October 2021, which offers customers a Fairphone gift card equal to the real value of the smartphone handed in. We took back close to 2,000 different phone models of all brands and values to ensure that they are reused if possible, or otherwise, recycled. The launch of the new program was delayed however, and we had a gap between the end of our old program and the start of the new one, meaning we were unable to take back used devices and modules for several months. This resulted in less phones taken back from Europe than we would like to see.

We were the first smartphone company in a pilot project to develop a **product circularity report with KPN, KPMG, and CircularIQ**. The report reconfirms longevity as the most important element in reducing a phone's environmental impact. We also shared with the group our experience of the dilemmas associated with the choices between fair mined & recycled materials.

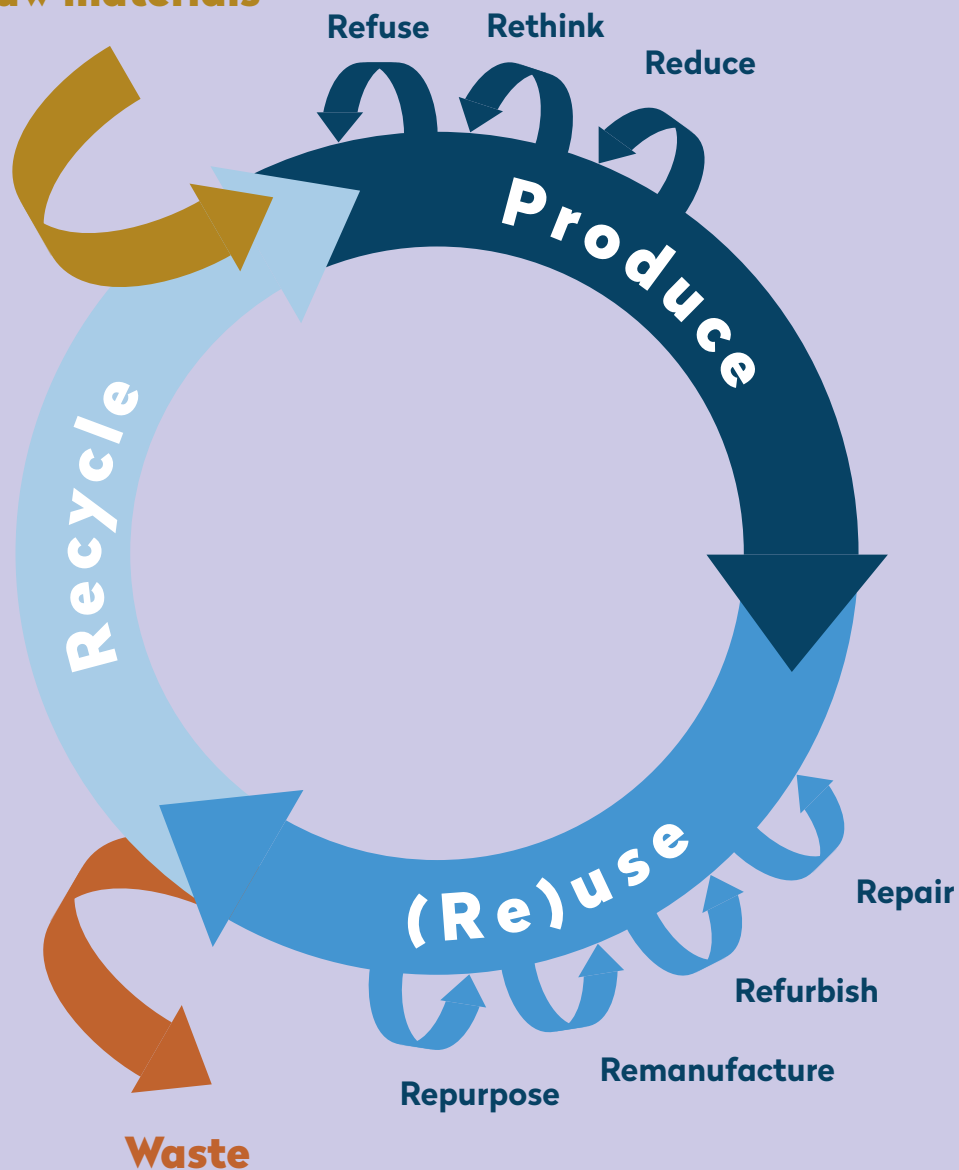


**Take back split 2021**

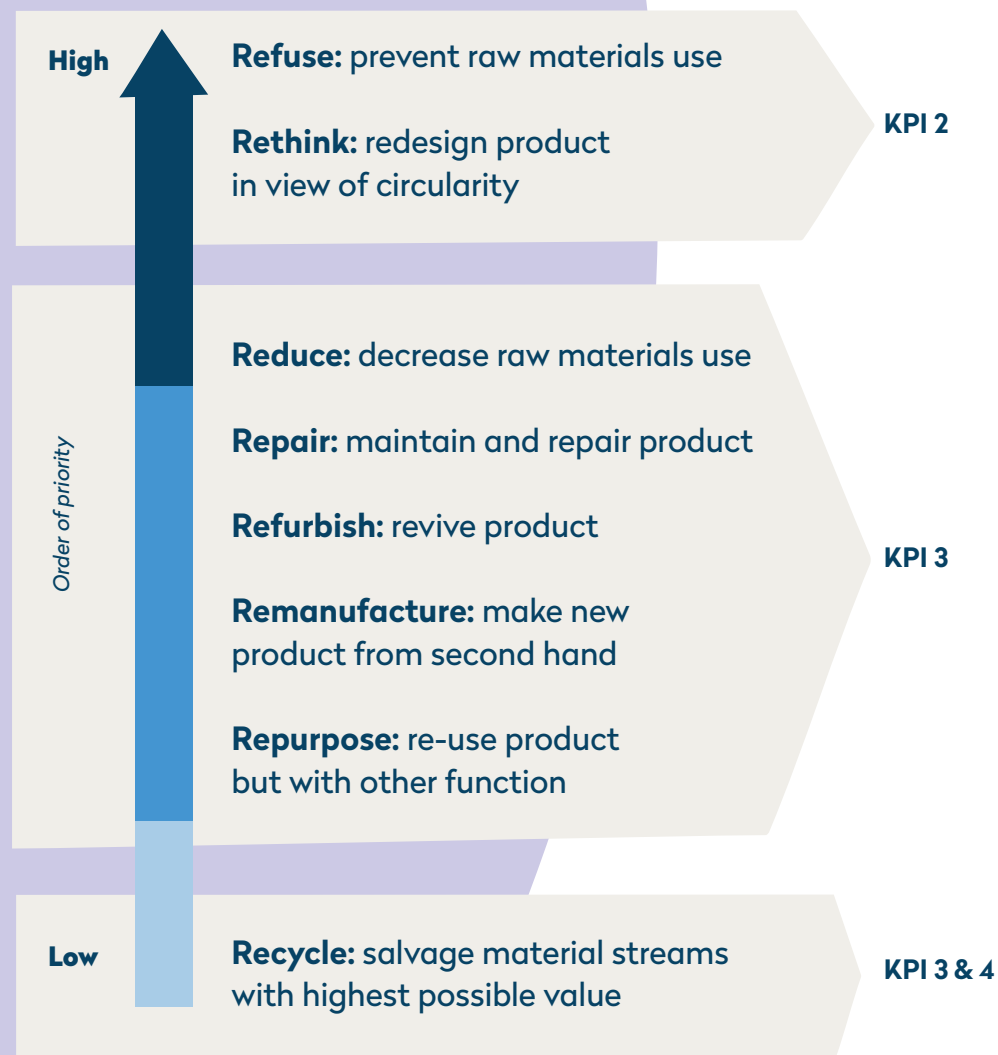
- EU-FP - Discontinued Reuse and Recycling Program
- EU-FP - New Reuse and Recycling Program
- EU-FP - Module Take-Back Program
- EU-EU - Take-back financed by WEEE fee
- Africa - Take-back from countries w/o sufficient formal recycling



## Raw materials



## Levels of circularity: 8 R's



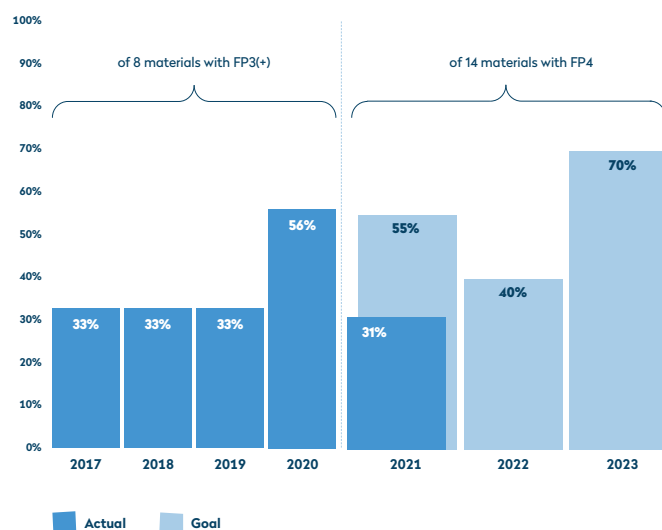
## Fair materials

KPI

4

## Choosing fairer materials

## Average of 14 focus materials sustainably sourced



This KPI reflects the % of our 14 focus materials that is sustainably sourced for the Fairphone 4 (in weight, measured separately). With sustainably sourced we mean they are sourced from fair(er) mines or are (post consumer) recycled.

## The challenge

Smartphones contain dozens of materials sourced from every corner of the globe – each with its own story, complex supply chain, and social and environmental impact.

In a perfect world, we would be truly circular – meeting our demand by using, reusing and recycling materials. However, at the moment, the demand outweighs the supply and a truly circular economy is still a distant goal. So, for some materials, we will need to depend on the mining sector for decades to come. The extraction of minerals however is still too often associated with critical issues, such as dangerous working conditions and child labour. However, when managed well, mining can be done sustainably and function as strong catalyzer for local development, especially in mineral- rich but economically poor regions. That's why we focus on sustainable solutions for mining issues, as well as increasing the demand for and supply of recycled materials.

## Our approach

One material at a time, we're working to incorporate fairer materials — including responsibly mined and recycled materials — in our phones. We want to go straight to the source to make sure we're creating positive change. Read more about our approach to fair sourcing in our [Fair Sourcing Principles](#). The challenge

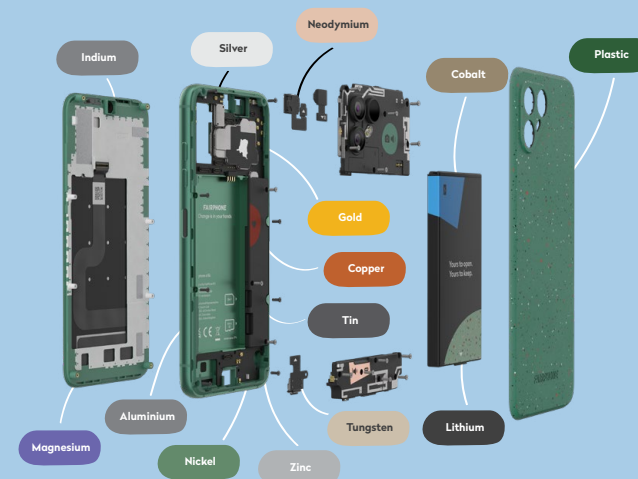
Since 2017 we have focused on 8 materials that posed social and/or environmental challenges. We set out to either find more fair and sustainable sources or to transform the policies and practices that made them problematic. In 2021 we expanded that list of focus materials to 14: aluminum, cobalt, copper, gold, indium, lithium, magnesium, nickel, plastics, rare earth, silver, tin, tungsten and zinc.

**Our goal is to source a minimum of 70% of the focus materials in our phones from fair sources.**

In our [Fair Materials Sourcing Roadmap](#) you can read more about our approach to fair materials.

We launched our [Fair Materials Sourcing Roadmap](#) during a webinar with key industry guest speakers and over 200 participants. It serves as an inspirational reference to the industry, and was an important Fair Materials milestone for us.

## FOCUS MATERIALS



## Results

Last year, the Fairphone 4 contained 31% fair materials, while we had hoped to achieve 55% by year's end. 2021 brought unprecedented supply chain issues such as chipset and material shortages, which made it even more challenging to get suppliers' commitment for finding and integrating fairer materials. In addition we launched the new Fairphone 4, which came with a new design and a largely new supply chain. Where possible, we continued with Fairphone 3 suppliers and built upon our long-term relationships for sustainable material integration. Recognising however that working with a new supply chain takes time, we adjusted our target for 2022 to 40%, whilst keeping our ambition for 2023 of 70% fairly sourced materials untouched.

## Cobalt

In 2021 the Fair Cobalt Alliance (FCA), co-founded by Fairphone to drive responsibly mined cobalt in Congo and managed by TIE, saw a significant growth up to 18 members. Although it had unforeseen setbacks including COVID 19, changes in local government, and lack of clarity about mining regulations, some firm advances were made with strengthening relations in Lualaba and Kinshasa and several projects launched, such as a support program for legal recognition of mine operations, a health and safety training at mine sites and the set up of a system to remediate child labour. A partnership with the Signify Foundation was launched to install solar panels and lighting at schools. Also the FCA has driven the creation of a best operating practice framework for mines, in close collaboration with key industry platforms. More information on FCAs results in 2021 can be found in its annual report.

## Lithium

To advance on our quest for responsible Lithium, in 2021 we joined the cross-industry partnership the Responsible Lithium Partnership, which aims to work towards responsible lithium in Chile's Salar de Atacama. In addition, we became a member of IRMA (Initiative for Responsible Mining Assurance), which offers a verification system for responsibly mined materials and enables us to reach out to and encourage our lithium suppliers to be audited through IRMA.

## Aluminium and Plastic

We also joined the Aluminium Stewardship Initiative, and had initially aimed for using recycled aluminium in the Fairphone 4. When tested however, the impurities in the recycled material resulted in visible scratches on the outer metal frame of the phone. Hence we chose for now to work with mined aluminium sourced from an ASI certified vendor. We were, however, able to integrate an even larger percentage of post-consumer recycled plastics (60%) among the plastics that the phone still uses.

Photo by: DCR David (The Impact Facility)





## Tin

We joined an exciting **universal basic income pilot** in tin-mining communities in the Democratic Republic of the Congo. Together with Belgian non-profit **Eight** we're examining the impact of providing unconditional income to every resident of the village of Lutala. We're comparing the impact there on education, health, entrepreneurship, and child labor with a control village and have published a baseline study.

## Gold

With the launch of the Fairphone 4 we increased our sourcing of **Fairtrade Gold** now also integrated in our BtB connectors next to our PCB, Battery PCB & connectors and speaker. We also published the results of our project in Busia, Uganda, to eradicate child labor, improve support for the artisanal and small-scale mining community, and establish a sustainable, traceable gold supply chain that benefits miners and their families. Based on the lessons learned, further efforts will be made through Project Access – a four-year program in Kenya and Uganda that will focus on responsible mining. Fairphone is a member of the consortium, which is managed by **TIF**.

## Tungsten

We published two studies on fair tungsten detailing our successful efforts to move from conflict free to fair. Our research partner, **Levin Sources**, visited the NBM mine in Rwanda to document that with patience, hard work, and long-term partnerships, we can transform a problematic artisanal mining site into one fully in line with our **four Fair Sourcing Principles**. You can [read more about these efforts here](#).

All in all, even though we didn't hit our fair materials target by year's end, we're still proud of our efforts in this arena. We are proud of integrating 31% of the 14 focus materials sustainably during a turbulent time in the global supply chain, and we did significant work to evaluate impact, build new partnerships, and join initiatives to increase our impact in the future.

## The Impact Facility

In order to increase our impact in key mineral value chains such as Cobalt and Gold, Fairphone co-founded and partners with **The Impact Facility**, a global sustainability organisation that enables small and medium-sized businesses in the mineral value chain to drive local sustainable development. For SMEs to become strong, resilient and more responsible businesses, **TIF** focuses on providing access to capital, markets and technical assistance against a progressive, internationally recognised standard. **TIF** also develops opportunities for investment and grants into mining operations, urban mining and non-mining enterprises that support the mining community. More on **TIF** can be found [here](#).

Photo by: Merel van en Enden (Solidaridad)



# Our path to fairer materials\*

1

## Research

Understand the social, environmental, governance challenges of the material, identify what a sustainable source would be and what Thought Leadership role Fairphone could play.

2

## Engagement & Trace

Map the supply chain and identify in which components the material is used. Clarify the technical specifications. Identify key suppliers and engage the needed suppliers/partners for the onboarding of a fair material source.

3

## Build

Identify which sustainable sources exist and if the don't (co) build a sustainable source/supply chain (e.g. [certification](#), impact project, etc).

4

## Integrate

Set-up the supply chain so the Fair material can be integrated, collect all necessary documentation.

5

## Continuous Improvement





As per our [Fair Sourcing Principles](#), continuously look for improvement to create impact and keep our Thought Leadership position (e.g. from conflict free to Fair Tungsten).







\* In our [Fair Materials 101](#) you can read more about our path to fair materials.






\*\* Rare Earth includes the minerals: Neodymium, Praseodymium, Dysprosium

### Steps we took in 2021

 Aluminium  Lithium  Plastic






 Aluminium  Lithium  Plastic  
 Gold






 Aluminium  Lithium  Plastic  
 Gold  Tin  Cobalt






 Aluminium  Plastic  Gold  
 Tin  Rare Earth\*\*





 Gold  Magnesium  Tin  
 Tungsten









### Planned for 2022 & 2023

 Copper  Nickel  Indium  
 Silver  Zinc

 Copper  Nickel  Indium  
 Silver  Zinc

 Copper  Nickel  Indium  
 Silver  Zinc

 Cobalt  Gold  Lithium  
 Copper  Nickel  Indium  
 Silver  Zinc

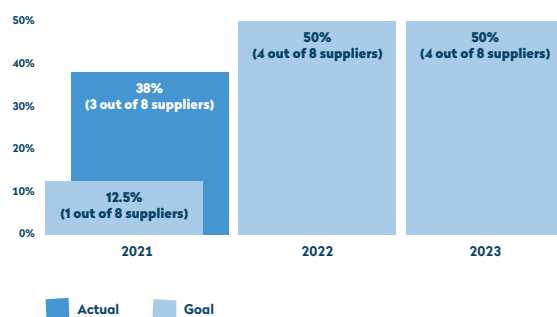
 Aluminium  Cobalt  Gold  
 Magnesium  Plastic  Tin  
 Tungsten  Rare Earth\*\*

## Fair factories

KPI  
5

## Decent work in manufacturing

## Strategic Fairphone 4 suppliers that improved on decent work



We are working with strategic Fairphone 4 suppliers (direct and indirect) to improve worker satisfaction and advance decent working conditions. This KPI indicates the % of suppliers that already have a high maturity in decent work, or that have realized improvements since collaborating with us.

In total, we defined 8 strategic suppliers with a strategic position for spreading our approach to decent work in our supply chain.

## The challenge

Not only are phones a complex array of materials, each material becomes part of dozens of components manufactured by hundreds of suppliers. This means the phone that ends up in your hands has gone through thousands of hands to make it, hands that dug up minerals, traded bars and assembled parts.

While being a source of income for millions worldwide, unfortunately a significant part of the people working in this industry are dealing with poor working conditions: child labor, unsafe working places, excessive working hours, low wages and extreme poverty. Workers are often unable to express their opinion or concerns and risk losing their job if they ask for trade union support. In addition, many workers can't afford basic necessities, earning much less than needed for a decent living for themselves and their family.

In general, companies work with **Codes of Conduct and audit suppliers** on their conformance, which drives a healthier and safer workplace. This approach however **doesn't address more systemic issues, such as low wages, excessive overtime and lack of worker representation**. An additional challenge for change is that not all suppliers are willing to share who their suppliers are, leaving supply chain blind spots.

## Our approach

Despite these challenges, we're proving every day that an electronics company can use market demand to not just reduce negative impact, but also create positive impact for the people working in the supply chain.

We believe that everyone working in the electronics industry should have a decent life, a sufficient income, a safe workplace and the opportunity to be heard on their opinions and concerns. To make a lasting impact, we go **beyond the traditional Codes of Conduct**.

Our approach puts workers and their needs first:

- Together with our strategic suppliers, we develop worker-driven impact programs that increase worker satisfaction and representation, and bridge the gap to a living wage.
- We listen to what the factory workers want to change in the workplace via surveys and group discussions, involve them in the implementation of solutions and empower them to have an influence on their working conditions.
- In 2019, Fairphone was the first electronics company to support factory workers with a **living wage bonus** – a premium we awarded to ensure the wages workers received would meet their needs. Since then, over 2,500 factory workers have received over \$440,000 USD to increase their income.



## Results

In 2021, **three of our strategic Fairphone 4 suppliers made improvements** in relation to decent work:



Our progress in this KPI area is monitored through assessments, worker surveys and group discussion at our suppliers **performed by an independent party**. Since 2018, Fairphone has commissioned 17 worker satisfaction surveys and assessments at 13 factories of direct and indirect suppliers, reaching over 9,000 workers.

We expanded our **living wage bonus** program to the Fairphone 4 assembly factory. For every Fairphone 4 made, US\$1.99 goes directly to the workers who assemble it. 1,257 workers received a bonus in the first pay-out at the end of 2021. This factory has a valid **SA8000** certificate, one of the highest standards for safe and decent working conditions, along with a valid **ISO14001** certificate for environmental management.

At the Fairphone 3 and 3+ factory, we've seen the living wage gap per worker close by an average 8.1% (2019), 8.5% (2020) and 3.5% (2021). Not every worker received the same bonus: the lowest paid workers received higher bonuses. Individuals who received the maximum bonus got between one and three months of extra salary. For workers who struggle to pay for basics, this is an impactful extra that every Fairphone owner can be proud of.

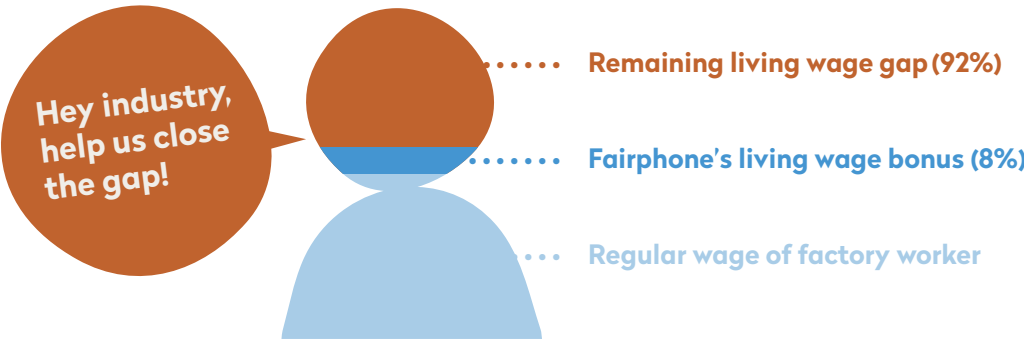
Since 2019, the percentage of factory workers who feel their wages are fair has increased from 27% (before the living wage bonus payment) to 49% (after two years of living wage bonus payment).

In addition to the living wage measures, we saw progress in worker satisfaction. Improvements in canteens and dormitories were realized. Personal development courses were offered and new communication channels were created for workers to get better access to information and to share their opinions and grievances. Fairphone supported these improvements through guidance and investments in capacity building and training for both workers and management.

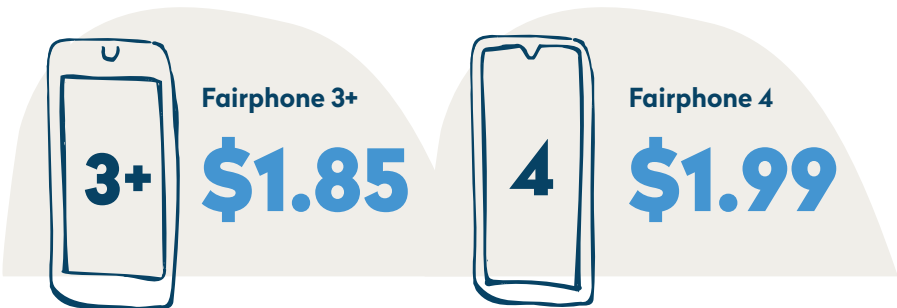
**More detailed information on the certifications** of our assembly factory, which suppliers have included a worker voice or living wage program and which chemicals are not allowed in the production of our devices, can be found in Appendix 2.




# Living wage bonus payments (2019–2021)

Fairphone’s bonus closes the gap to a living wage by 8% (that is 1 month of salary)



Bonus per device paid directly to factory workers (USD)

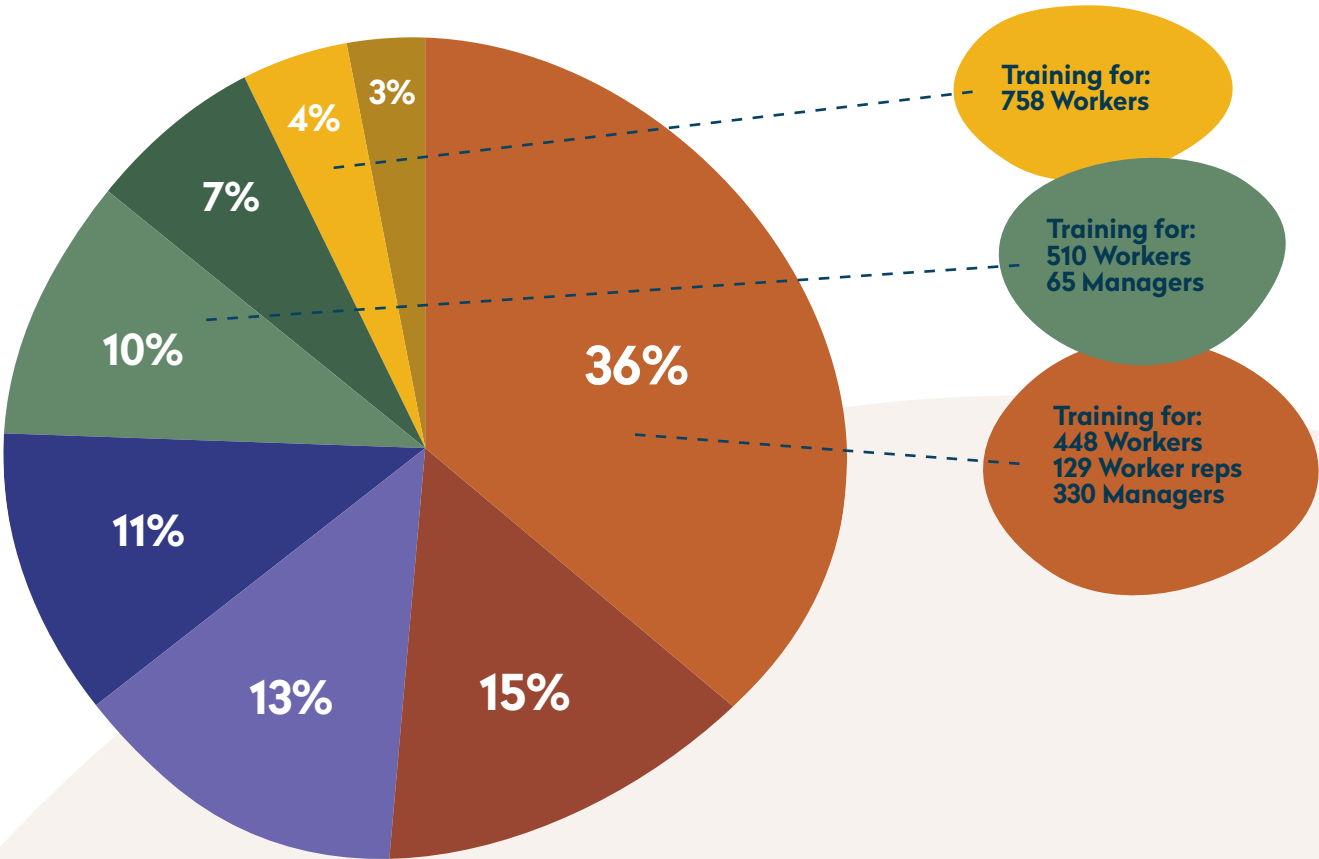


Year	Number of workers paid	Total paid out (USD)	Model	Context description
2019	 231	\$89,128	FP3	2019: Start of living wage bonus Fairphone 3 per July 2019
2020	 501	\$184,736	FP3 & FP3+	2020: Full year of Fairphone 3 & 3+ production
2021	 1823	\$166,622	FP3+ & FP4	2021: Less production of Fairphone 3+ due to supply chain shortages. Start of living wage bonus Fairphone 4 per October 2021

# Improvements to working conditions (2018–2021)

## Improvements by area

- Worker Voice & Representation
- Dormitories
- Canteen
- After-work activities
- Health & Safety
- Wages
- Personal Development
- Hiring Practices



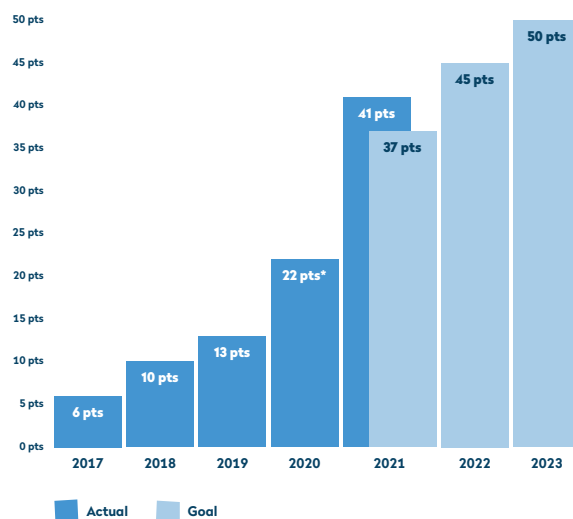
## Industry influence score

KPI

6

## Driving wider impact in the industry

### Score on key industry players adopting Fairphone solutions.



\* adjusted downwards (31 → 22) versus our former impact report, as we use a stricter KPI definition that reflects actual adoption or a strong commitment to apply our solution

This KPI reflects the influence points scored on industry players adopting or applying Fairphone solutions, beyond our own supply chain. The score is higher when the company or association reflects a higher market value : below \$2b = 1 point and above \$2b = 2, above \$10b is 3 points.

### The challenge

We are unapologetic evangelizers. To accelerate progress toward a tipping point where all electronics are fair, sustainable, and part of a circular economy, we're all about influencing other industry players. We know Fairphone won't improve the electronics industry by dominating the smartphone market — at least not in the short term. Therefore, we'll improve it by showing there is a better way of doing business that can be profitable and successful, inviting the entire industry to move in a fairer direction.

### Our approach

We actively encourage other companies to adopt our methods, follow our lead, and work with us in **strategic partnerships to drive improvements in the industry**. By working together, we can accelerate impact, and achieve greater transparency and broader systemic change.

This can be a collaborative project between Fairphone or a specific industry player (electronics or otherwise), industry players joining our lead in consortiums or alliances, or when another player in the electronics industry adopts one of our methods or policies.

Fairphone may or may not be the direct catalyst of some of these changes – this score isn't intended to be a pat-on-the-back vanity metric, but a measure of the progress in adaptation of the ideas that we promote, that our customers and evangelists champion, and that we hope to see more and more industry players adopt independently.

## Results

In 2021 we scored 19 influence points, reflecting 9 industry pioneers that joined us on the path to a fairer future, beyond our target of 15. Many of these were traders, mining companies, insurance companies and downstream brands that have joined as new members of the Fair Cobalt Alliance and signed the call to action. We were also pleased to see that Save the Children joined the Steering Committee of the alliance. Although we don't count them as part of our industry influence score (they are, of course, not an electronics manufacturer or cobalt consumer), it's another step toward fair cobalt being the norm rather than the exception, and further solidifying the credibility and strength of the multistakeholder initiative.

We continue to work with industry partners as thought leaders in the sector. In 2021 we participated in:

- The publication of an industry-first product circularity report with KPN and KPMG
- The development of the international industry framework for ASM Cobalt Framework and its stakeholder consultation (representing FCA in the technical committee)

- The development of a French Durability Index through active participation in the working group on the Repairability/ Durability Indices with the french government
- The Eco Rating for smartphones, which launched its assessment scheme for sustainable smartphones in May 2021 in 24 European countries with five operators. More than 150 mobile phone models are now assessed by the Eco Rating initiative, nearly doubling the range of devices rated at launch.
- we launched in 2021 the FairTEC initiative with other partners like /e/OS, Commown and some alternative MVNO like Telecoop in France or WETell in Germany. FairTEC is a collective group of actors committed to digital sobriety. We are working together to offer credible and sustainable alternatives in order to create a paradigm shift in the mobile industry : from the hardware to the software, including the sim card provider.

And we have been actively sharing our best practices in the following platforms:

Fair Cobalt alliance (Steering Committee member) • Responsible Business Alliance • European Partnership for Responsible Minerals • Responsible Minerals Initiative • Clean Electronics Production Network • Dutch Agreement for Responsible Gold • Initiative for Responsible Mining Assurance • Responsible Lithium Partnership • Social Enterprise NL • Responsible Labor Initiative • European Raw Materials Alliance • Circular Electronics Partnership (CEP) • MVO Nederland • IDH Roadmap to Living Wages Working Group • Aluminum Stewardship Initiative

We are also members of:

The Right to Repair campaign  
UN Global Compact  
B Corporation



## Net financial results

KPI  
7

## Being financially sustainable

### Fairphone Financials

Financials (€ '000)	2020	2021
Revenue	35,930	36,962
EBITDA	3,734	5,687
Normalised EBITDA	3,734	2,190
Net result	2,760	3,876

Although we were seriously challenged by global supply limitations in 2021, our revenue has increased by a further €1 million, mainly driven by the higher sales price of the Fairphone 4 and expanding our accessory portfolio. We recognized €36,961,604 of revenue, compared with €35,930,371 in 2020.

Despite tough market circumstances we managed to be profitable in 2021. We ended 2021 with a record- high positive net result of €3,875,884. This is driven by an Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) of €5,686,953 from our ordinary business, supported by €3,495,308 of net proceeds from a claim settlement.

### Team Fairphone

Ambitions like Fairphone's require talented, motivated people, working together. Our team is key to achieving our mission. We manage to attract intrinsically motivated people that feel aligned with our mission, appreciate the dynamics of a disruptive brand and bring the right level of expertise.

### Diverse and growing team

In 2021, team capabilities were expanded by onboarding more staff members – including topic experts and project managers – to a.o. our IT, Commercial, After Sales & Field Quality, and Customer Support teams. In 2021 we hired 34 people. By the end of December 2021 we had 111 Fairphoners across the Netherlands, China, and Taiwan (total FTE: 104.72). While the majority works at our Amsterdam office, we collaborate closely with our three team members in China, and seven in Taiwan. Overall, we grew the Fairphone team by 12% compared to 2020. We did not only grow our team in numbers by

hiring new Fairphoners but also encouraged and supported all of our team members with growth opportunities: 7 internal applicants were promoted after a successful recruitment process.

Overall, we have a diverse team of employees which includes people from 24 different nationalities, ranging from 22 to 62 years in age, giving us an average age of 35. Our employees are 53% female and 47% male.

### Office or working from home?

In March 2021, we moved to a new office building. Our staff are offered a variety of benefits at this new location, including a gym and yoga room, a bouldering wall and an office set-up designed to facilitate healthy work habits. We encourage our team to take sustainable commute options to the office (via bike or public transport) and commuting costs are covered by Fairphone.

To enable employees to work from home, we set funds aside to contribute towards home office



setups, while IT equipment was distributed on loan. Anticipating a future without the restrictions of the pandemic and applying the learnings from working from home, a new Remote Working Policy was introduced.

Fairphone is an office-led, remote-friendly company, meaning that we offer our employees the flexibility to work remotely up to 60% of their time per month. The goal has been to stimulate our staff to stay connected with each other and engaged with Fairphone, while also having the freedom and trust to work remotely. Several in-person and hybrid work/social events were also organized when Dutch COVID-19 measures allowed.

## The points from our team

We have been working on keeping our sickness leave below 5% throughout the second year of the pandemic. On average, the sickness absence for 2021 was 4.2%. The turnover rate of personnel was 4.75% in 2021.

Linked to the annual performance cycle, employee performance was evaluated with a company-wide rating system. Staff members across all teams and hierarchy levels who exceeded expectations were granted employee stock options (ESOP).

Our quarterly pulse surveys showed strong performance across multiple employee-related concerns. The average employee engagement

rate, meaning how proud people are to work for Fairphone and if they would recommend us as employer to friends (top 2 box), was 85%. Leadership remained strong with a 79% satisfaction rate, and the physical work environment averaged 83% satisfaction.

Work-life balance ratings improved by 21% over 2021 to 63%. A new measure was introduced to provide an insight into cross-team collaboration, which averaged 54%.

To further strengthen our culture and way of working, the new Fairphone core **values** were introduced: Care, Collaboration, Transparency, and Challenging. These guide our behaviors and decision making.





3.

# LAUNCHING THE NEXT LEVEL OF FAIR: FAIRPHONE 4

With each previous Fairphone model, we've raised the bar of our challenge to the electronics industry on both people and planet.

In September 2021 we launched the Fairphone 4. Our latest device is a challenge to the industry to rethink the modern smartphone: True innovation should be about solving problems, rather than creating new ones. This purpose of design shines through in every aspect of the Fairphone 4.

## FAIRPHONE 4

### Social & Environmental Passport

# 85/100

Eco Rating

Best in industry for sustainable electronics



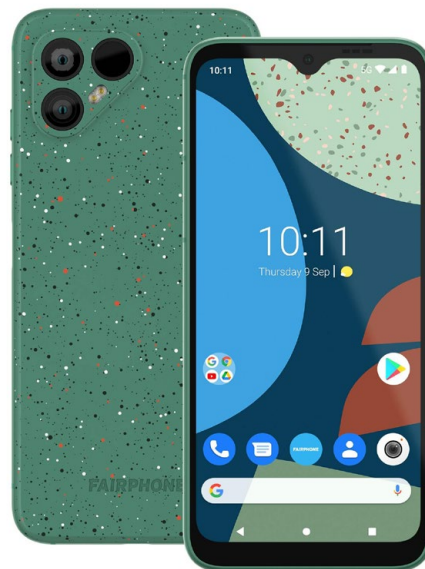
ecoratingdevices.com



blauer-engel.de



tcocertified.com



# 70%

 of 14 fair materials by 2023

#### Recycled\*

Rare Earth 86%  
Plastics 60%  
Tin 50%  
Magnesium 17%  
Zinc 9%  
Nickel 6%  
Copper 2%

#### Fair mined\*

Tungsten 99%  
Aluminium 89%  
Gold 9%

#### In progress\*

Indium  
Cobalt  
Lithium  
Silver



\*In 2021

Fairphone is the first smartphone company to integrate **Fairtrade gold** into its supply chain

# 5

 years warranty  
years software support  
years hardware support incl.  
spare parts availability

# 10/10

iFixit Score

#### World leading reparability

We aim to remain the easiest smartphone to repair on the market.



French Repairability Index score

# 50kg CO<sub>2</sub>

#### Life cycle carbon emissions

(5 year usage time, incl. battery replacement)

# \$2

 living wage bonus to factory workers  
(USD)

# 100%

#### Electronic waste neutral

Fairphone 4 is the first e-waste neutral device on the market: we commit to reuse or recycle as many phones as we sell.



# 4.

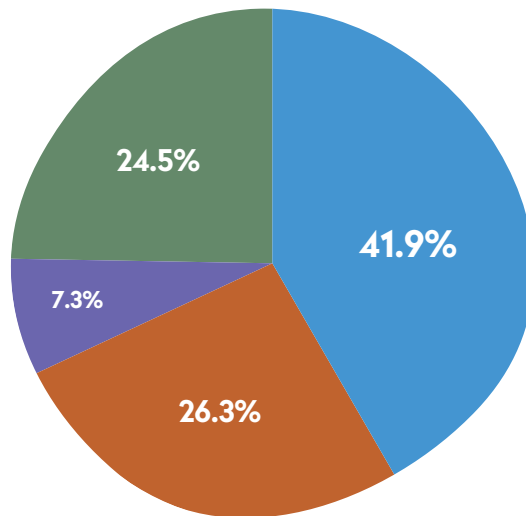
## **THE IMPACT OF OUR EFFORTS ON PEOPLE & PLANET**

At Fairphone, we view ourselves as innovators and solutioneers, using our business to prove that fair alternatives to the electronic industry's social and environmental challenges are possible. Proof of concept is just the first step, and if we stand alone, the impact of our achievements is never going to be enough.



## 4.1 Improving our environmental performance

Setting and meeting our goals is all well and good, but what do they add up to? What are the actual environmental impacts of the work we do as measured by our key performance indicators? How did our choices in the past year actually help the planet? We measure two areas of cumulative effect across multiple KPIs: e-waste and CO2 emissions avoided.



### E-waste avoided

8 tons of e-waste avoided in 2021.

In Europe we account for e-waste taken back through our **Reuse and Recycle Program**, our **Module Take Back Program**, **B2B take-back**, and phones collected by Fairphone paying fees under **Europe's Waste Electrical and Electronic Equipment Directive**. Additionally we support e-waste collection and responsible recycling of phones from countries without sufficient formal recycling systems by purchasing phone waste compensations from our partner **Closing the Loop**. In the future, we aim to participate in programs addressing issues in urban mining, which many people depend upon for a living.

#### How we avoid e-waste

- Longevity (related to KPI 2)
- EU-EU - Take-back financed by WEEE fee (related to KPI 3)
- EU-FP - Take-back programs combined (related to KPI 3)
- Take-back from countries w/o sufficient formal recycling (related to KPI 3)

#### Closing the Loop

With its commercial circular business model of waste compensation, **Closing the Loop** (based in Amsterdam) purchases end-of-life scrap phones in African countries, where many used phones from Europe and the US end up in landfills. The collected waste is recycled in Europe. In this way **Closing the Loop** turns scrap phones into valuable resources (Urban Mined Metals) and an income for people in developing countries. Its goal is to prevent mobile phones and other electronic hardware from ending up in dump sites, while creating a more sustainable telecom industry.

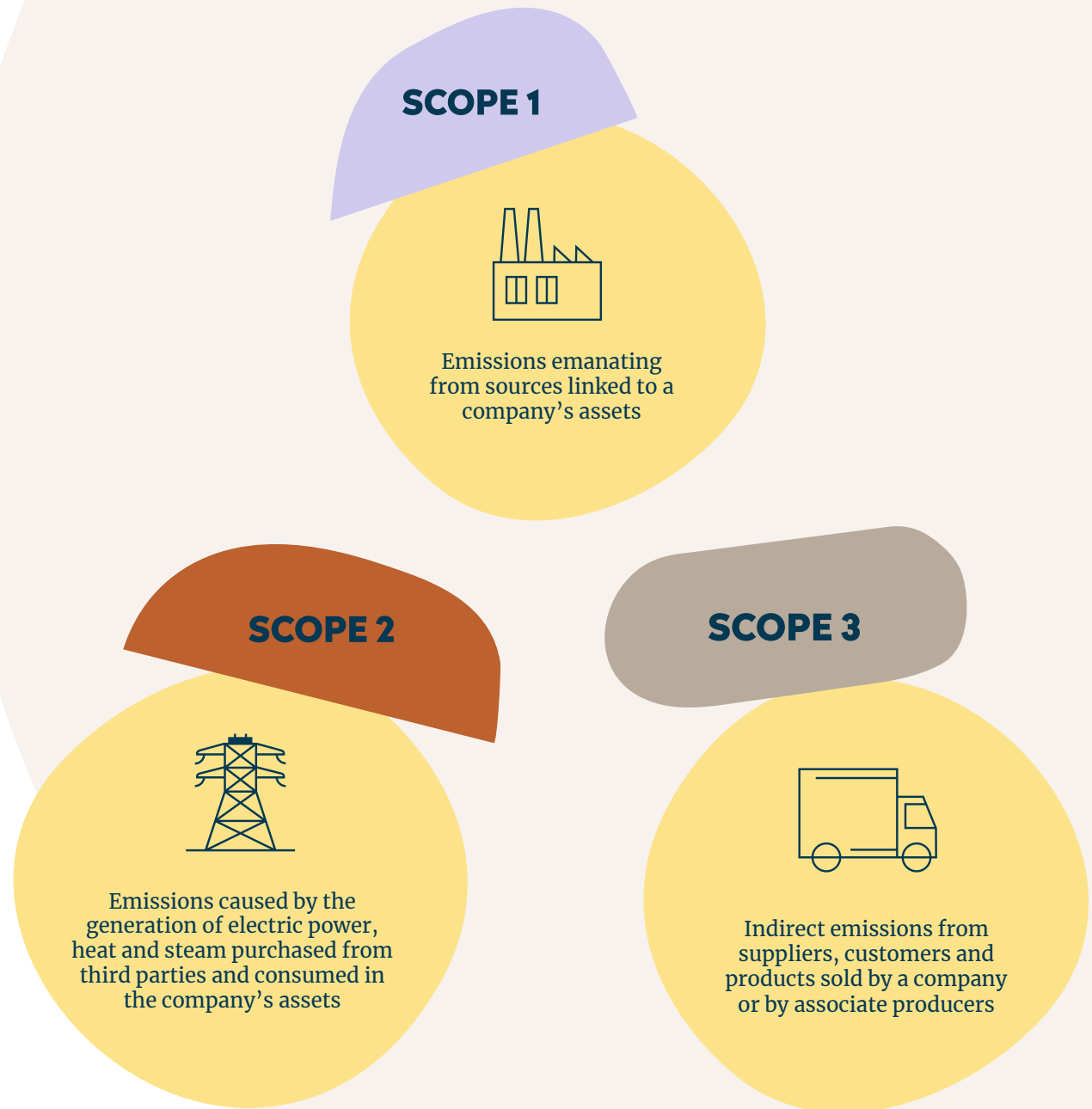


## CO2 avoided

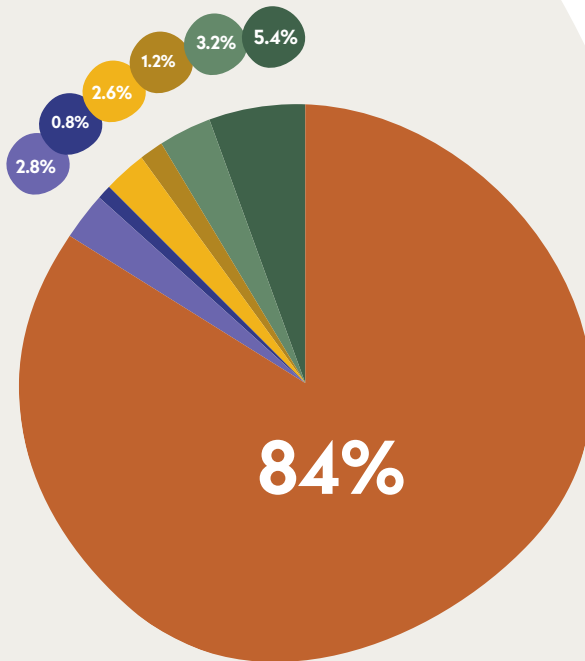
### 668 tons of CO2 avoided in 2021.

Manufacturing any phone has a carbon impact. But comparing the **mine-to-factory emissions** doesn't tell the whole story. A phone built to last and kept for longer in the consumer's hands is going to have a far lower yearly carbon footprint than a phone designed to be replaced in two years. When phone manufacturers trumpet CO2 savings because they've put solar panels on their offices or reduced transport emissions, it can mask the fact that these savings are dwarfed by the carbon cost of pushing out a new model every year.

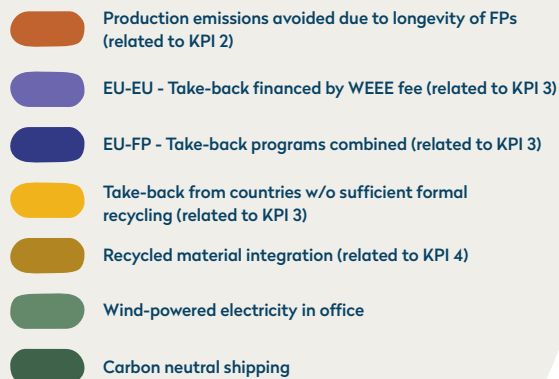
In 2021, we gathered insights into the impact of our efforts to avoid and reduce the creation of e-waste and carbon emissions. We set up our greenhouse gas emissions inventory for scope 1 and 2 and, in line with the **Science Based Targets initiative's (SBTi)** target setting options for SMEs, have set a reduction target of 46% by 2030 based on our 2019 emissions. Since we believe we can contribute beyond this target, we set ourselves the additional goal to reduce our Scope 1 and 2 with 100% already by the end of 2022. Furthermore we plan to inquire our scope 3 emissions in 2022 and explore reduction strategies.







### How we avoid CO2



Our current CO2e avoidance relates to the following areas: longevity, e-waste, fair materials, Fairphone's office, and outbound distribution in Europe.

### CO2 avoidance through longevity

We were able to estimate how much CO2 and e-waste was avoided when our Fairphones are used for longer than the market average. This was based on:

- the Life Cycle Assessment of our Fairphones.
- the market average percentage of phones active in a certain phone age group, based on a lifetime of 2.7 years.
- the number of Fairphones active per phone age group.

For each phone age group, we calculate how the percentage of active Fairphones compares to the percentage of active smartphones on average in the market. For the difference in percentage we calculate how many phones were not purchased (and produced) thanks to Fairphones being used for longer.

### CO2 avoidance through E-waste reduction

We estimate CO2 avoidance via our take-back, reuse and recycling efforts by calculating the CO2 gains of making secondary raw materials available through recycling. We use a conservative approach by assuming that all phones and modules are recycled,

since the gains by reusing a phone are likely to be larger than by recycling it.

### CO2 avoidance through Fair Materials

In relation to our fair materials, we estimate how much CO2 is avoided through our efforts to integrate recycled materials in Fairphones. These calculations are based on data gathered through a literature review by our partner [Fraunhofer Institute for Reliability and Microintegration \(IZM\)](#).

### CO2 avoidance through renewable sources at our HQ

We avoid emissions compared to using the current Dutch electricity mix by using electricity from renewable sources in our office. By participating in our logistic partners' carbon-neutral distribution programs, we furthermore offset the emissions of our products' distribution.

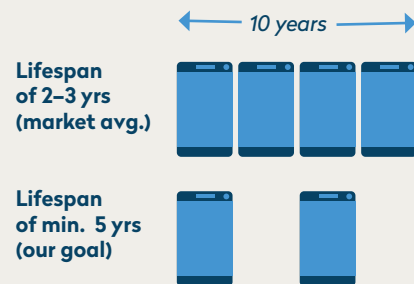
We avoid emissions compared to using the current Dutch electricity mix by using electricity from renewable sources in our office. By participating in our logistic partners' carbon-neutral distribution programs, we furthermore offset the emissions of our products' distribution.

## We challenge the industry to raise the bar on addressing climate change!

**1**  
Longevity is  
THE main driver  
to avoid CO<sub>2</sub>

75% of CO<sub>2</sub>e is caused during  
production

Therefore, keeping a phone  
>5 instead of 3 years already  
saves >30% CO<sub>2</sub>

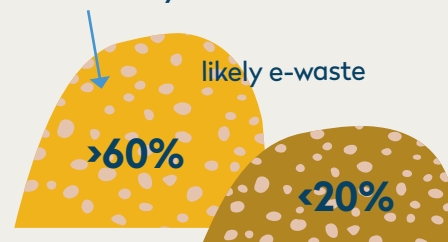


**2**  
Fairphone users are  
longevity champions

Fairphone users expect to  
use their phone for 5,5 years

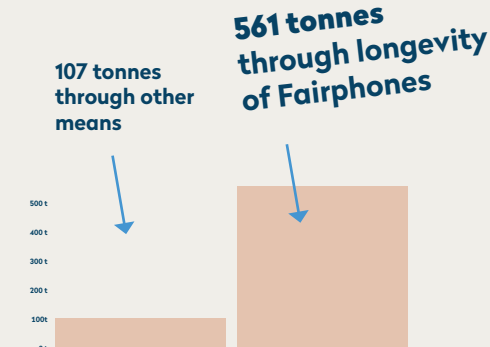
Of all phones sold 2.5 years ago:

<40% are still in  
use industry-wide      >80% Fairphones  
are still in use



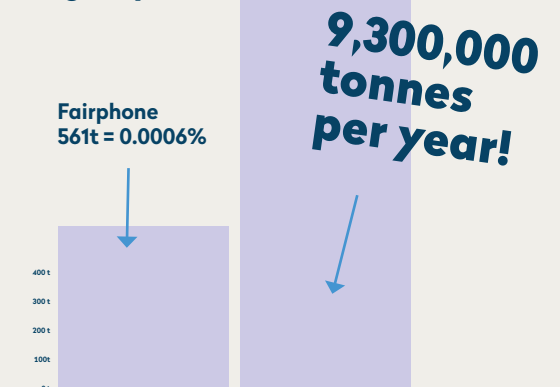
**3**  
With this we lead  
in CO<sub>2</sub> avoidance

Fairphone's CO<sub>2</sub>  
avoidance in 2021



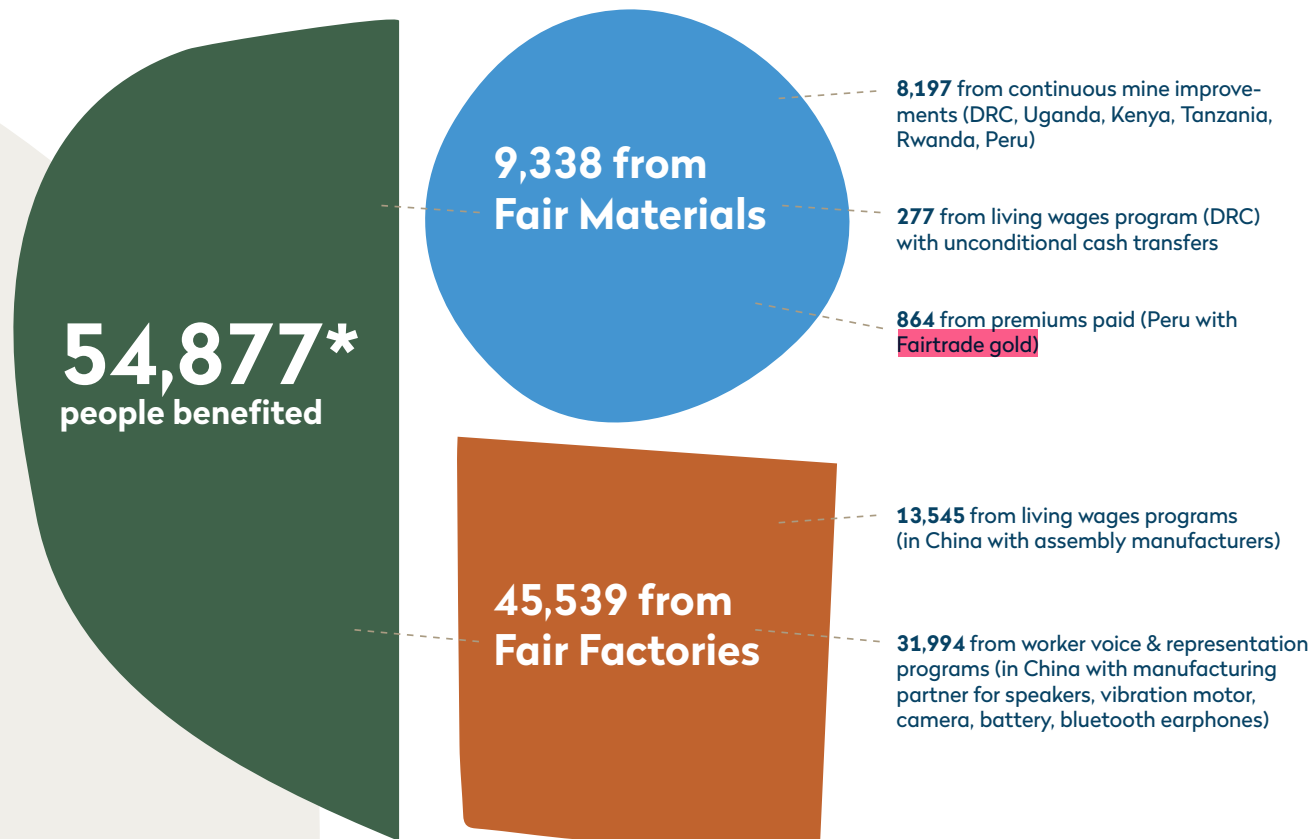
**4**  
Imagine what would  
happen if the smartphone  
industry followed

Total Industry's potential CO<sub>2</sub>  
avoidance per year through  
longevity



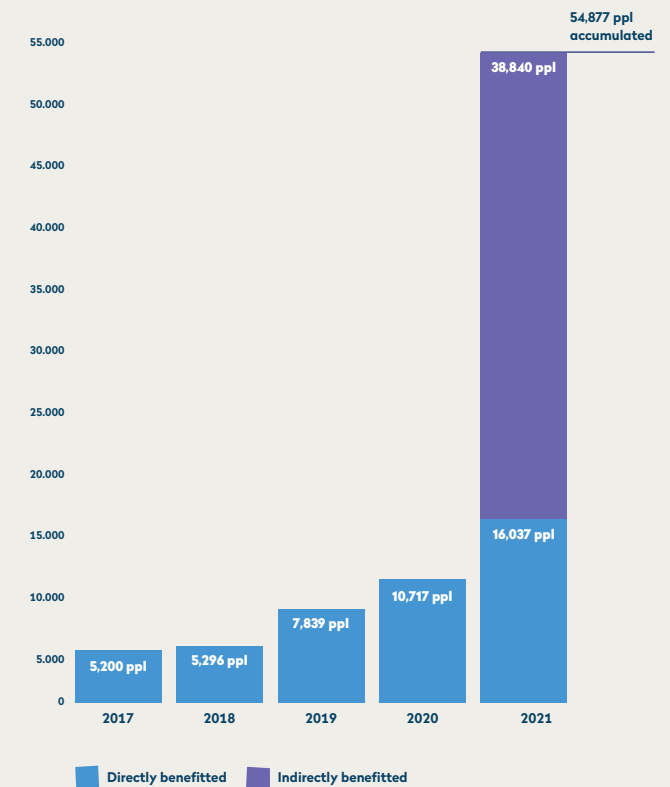
## 4.2 Improving the lives of the people that make our phones

In 2021, we improved the lives of 7,475 people directly and 18,224 indirectly.



\*Total number of people benefitted since 2013

# People benefitted from Fairphone's interventions and programs (accumulated)



Our work to support fair factories, fair materials, and the take-back of e-waste from outside of Europe are all part of driving a positive impact that we want to see the entire industry have: benefiting people. That means working towards improving the working and living conditions, which include: safer working conditions, fairer wages and increased family incomes, worker voice among others.

Since Fairphone's funding in 2013, a total of 54,877 people have benefited as a result of Fairphone's work. Of these, 16,037 people benefited directly and 38,840 indirectly. In 2021 alone, 7,475 people benefited directly and 18,224 indirectly\*.

When it comes to fair materials, our focus has been to address social issues that are usually associated with artisanal mining. Some companies actively distance themselves from artisanal mining sources, fearing the risks associated with potentially supporting child labor or funding armed conflict. Fairphone takes the opposite approach and engages directly with artisanal mining sources to mitigate those risks as a means to drive positive impact. Such

activities now include programs related to artisanal mining improvements in the [DRC \(for cobalt\)](#), [Kenya, Uganda](#) and Tanzania (for gold), and [Rwanda \(for tungsten\)](#). With these programs miners benefit from actions such as training in health and safety and support for legalization, availability of protective equipment, access to productive equipment finance solutions, or remediation and prevention of child labour. Furthermore, Fairphone has joined an innovative [program to provide a basic income through unconditional cash transfers to a tin mining community in the DRC](#). The integration of [Fairtrade gold](#) also means the transferring of a Fairtrade premium to the mining cooperative from where the gold originated, allowing for investments in productivity or increased income for the miners. Lastly, we have joined an [initiative to foster community engagement for water resource management](#) with the surrounding communities of lithium mines in northern Chile.

At the Fair Factory level, we envision workers having a decent life, a sufficient income, a safe workplace and the opportunity to be heard on their opinions and concerns. We are actively

engaging suppliers and jointly pushing forward living wage, worker voice & representation, environment health & safety programs with our various manufacturing suppliers. We are very proud of having initiated 2 [living wage programs](#) with our assembly manufacturers of Fairphone 3+ and Fairphone 4. In parallel, we have advanced our improvement agenda hand in hand with our speaker (Concraft), camera (Polight), battery (Kayo) and vibration motor (Baolong) manufacturers through worker voice and environment health & safety programs. We are happy to see tangible improvements such as increased worker satisfaction, improved communication between management and workers, better functioning worker representation, better and more diverse food in the canteen and renovated dormitories, this being a strong sign of how actors like Fairphone can incentivise and promote positive change in the supply chain.

*\*Please note that many of our programs run across multiple years, affecting yearly versus cumulative results.*

E-waste reduction is key to limiting the damage caused by so much of the currently unsafe and unsustainable practices in e-waste recycling. We also want to address the challenges in urban mining in the future, as many people depend on it for their livelihood.

Our ambition is to create an example and an environment in which Fairphone and the rest of the industry have a more sustainable, positive impact on the people involved in the supply chain of smartphones.

Ultimately, we can only achieve the impact we want through concerted effort, and our performance in this area is a challenge and invitation to other smartphone manufacturers. Similar to making our customers and shareholders benefit from the phones we make, let's ensure that those whose labor makes them possible benefit as well.





# Fairphone's industry challenge: a to-do list for people and planet

Imagine for a moment that the entire smartphone industry adopted our fairer and more sustainable approaches. The impact would be massive.

Together, we are capable of having an immediate, sustainable and long term impact on millions of people. We could substantially advance the [United Nations Sustainable Development Goals](#).

At Fairphone, we have proven every one of these steps is possible. We've shown that a company can take these steps and remain profitable. So now we're asking the rest of the industry: what's holding you back? These are the steps you need to take to assure your customers that buying your phone will be a positive step toward a more sustainable, fair, and equitable world.

## Checklist

- ✓ Check the boxes

### On E-waste and CO2 avoidance

- Publish the Life Cycle Assessment of your flagship products
- Report on the CO2 avoidance or surplus of CO2 generated in relation to the lifetime of your flagship products in comparison to the market
- Compensate for 100% of the e-waste footprint of your flagship products

### On Longevity

- Measure and report a longevity score for your flagship products
- Ensure users can repair your hardware devices (easy replacement of at least battery, screen, camera and speaker).
- Enable broader repair services beyond self-owned repair infrastructure
- Aim to provide users with software updates for a minimum of 5 years
- Enable users to choose their operating systems and software
- Publish the source code of all drivers, tools and interfaces under a free license

*\*We selected 14 focus materials: gold, tungsten, tin, plastics, rare earth, aluminum, lithium, cobalt, nickel, zinc, magnesium, indium, silver, copper following a detailed [assessment](#).*

### On Fair materials

- Go beyond accepting [ASM conflict-free materials](#) 3TG (Tin, Tantalum, Tungsten & Gold) and use our [Fair Material Roadmap](#) to assess how you can source high impact materials\* fairly
- Report the % of high impact materials\* you source in a fair or circular manner in your flagship products against the total volume of that material in your product
- Acknowledge the need for responsible mining in a fair transition to a circular economy, particularly artisanal and small-scale mining - engage and support them in a continuous improvement journey

### On Fair factories

- Ensure workers in the supply chain earn a living wage and pay a product price that enables living wage and income
- Co-invest with your strategic suppliers in improving working conditions including: environment, health, and safety; worker satisfaction; and worker representation
- Apply our [Fair Sourcing Principles](#) to both your materials supply chain and the working conditions in your manufacturing and assembly plants







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# Appendix 1:

## The scope of this report

So, what didn't we address in this document, and why?

### Suppliers' environmental (waste/water) management:

On this topic we request our suppliers to follow industry standards. It is not an area where we are actively driving change.

### Suppliers' due diligence:

this follows industry standards and is described in our [Fair Sourcing policy](#) as well as in [Fairphone's Way of Working Together](#). As these two documents can be easily accessed online, we don't report on them here.

### Our strategic suppliers list:

Our strategic suppliers list is not included here as it is available online in our supply chain due diligence report, [Supply Chain Engagement 2021](#).

### Sourcing policy:

Our [Fair Sourcing policy](#) explains how, next to standard due diligence, we select our focus materials and work with our strategic suppliers to create impact. As it is quite a long and detailed document, we decided to leave it out of this particular report.

### Governance set-up:

As a company claiming to have a noble mission to change our industry, it is important to be transparent about how decisions are made and who “pulls the strings”. In our audited annual accounts, to which we apply the [Dutch GAAP reporting standard](#), we report this set up. We publish these accounts via the [Chamber of Commerce](#), open for everyone who is interested.

What did we include and why?

### Our impact KPIs:

Results and progress, as the backbone of our business and the main focus of this document.

### Financial results:

As they are both crucial to Fairphone's health as a business, and as a proof-point of our business model.

### Our team's composition and general wellbeing:

Fairphone's achievements are only possible thanks to our team, especially during this phase of our scale up, and we are careful to take the team's makeup and wellness into account.

Photo by: Jose and David



## Appendix 2: Fair factories

### Where is the Fairphone 4 assembled?

TCL Mobile Communications  
Huizhou, China

**SA8000  
certified**

the factory has good  
working conditions

**ISO45001  
certified**

the factory is a safe  
and healthy workspace

**ISO14001  
certified**

the factory has good  
environmental management

### Living Wage Bonus:

\$1,99 USD per Fairphone 4 goes to factory workers

### Social Compliance Fairphone 4

**Tier 1:** Audited: 100% (1 out of 1 suppliers)  
Results: 100% **SA8000 certified**



In 2021, Fairphone worked together with these seven direct and indirect suppliers to improve working conditions, worker voice and living wages.

Supplier	Environment, Health & Safety	Worker Satisfaction	Living Wage &	Worker Representation
Final assembly FP4	●		●	
Camera supplier FP4		○		
Vibration motor supplier FP4 & FP3+	○	●		○
Speaker supplier FP4 & FP3+		●		
Battery supplier FP4		○		
Wireless earbuds supplier	○	○		
Final Assembly FP3+	○	○	●	○

#### Legend

- High maturity
- Improving with Fairphone
- Improved with Fairphone
- Improved with Fairphone <2021
- Improved with Fairphone but not counted for KPI

#### Scoring for KPI fairness levels

- 2 x ● at one supplier = 1 point
- 1 x ● = 1 point



To protect the health of workers and the environment, Fairphone does not allow the following chemicals to be used in the production process at suppliers, such as in solvents or cleaners:

- Benzene
- Arsenic and its compounds
- Ozone depleting substances
- Tetrachloroethylene
- Trichloroethylene (TCE) and other chlorinated compounds
- n-Hexane
- Toluene
- Xylene
- Formaldehyde
- Dichloromethane (Methylene Chloride)
- N-Methyl-Pyrrolidone (NMP)
- 1-Bromopropane
- Methanol

## Appendix 3: Memberships

### Fairphone is also an active member of:

- Responsible Business Alliance
- Responsible Minerals Initiative
- Responsible Labor Initiative
- European Partnership for Responsible Minerals (EPRM)
- Clean Electronics Production Network
- UN Global Compact
- Dutch Agreement for Responsible Gold
- Initiative for Responsible Mining Assurance (IRMA)
- B Corporation
- Social Enterprise NL
- Fair Cobalt Alliance
- Responsible Lithium Partnership
- European Raw Materials Alliance
- Circular Electronics Partnership (CEP)
- Right to Repair Campaign
- MVO Nederland
- IDH Roadmap to Living Wages Working Group
- Aluminum Stewardship Initiative



United Nations  
Global Compact



IRMA  
Initiative for Responsible  
Mining Assurance



European  
Partnership  
for Responsible  
Minerals



Responsible Business Alliance  
Advancing Sustainability Globally

Gold  International  
RBC | S&P

# Appendix 4: Basis of Reporting

## Fairphone 2021 - Company Impact KPIs

### Company Impact KPI - objectives

These indicators are based on Fairphone's theory of change (raise awareness, provide proof, and create followers) to measure Fairphone's impact created to mobilize the industry towards fairer electronics.

### E-waste avoided

<b>KPI unit of measure</b>	Tons of e-waste avoided; related to KPI 2: Longevity score and KPI 3: E-waste neutrality
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<b>Key objective</b>	To demonstrate the avoidance of environmental impact in terms of e-waste, by facilitating and encouraging (fair)phone users to extend the usage time of products, to bring them back at their end-of-use, by integrating recycled materials in the produced devices.
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<b>Key definitions</b>	<p><b>- E-waste avoided:</b> The electronic waste which is removed from the global economic system (i.e. taken back at its end-of-use) or prevented from entering the global economic system (i.e. through longer lifetimes of electronic devices which slows down the need for purchasing and producing new ones) due to the efforts undertaken by Fairphone.</p> <p><b>- Standard practices on the market:</b> Practices by parties participating in the markets (e.g. consumer, manufacturer etc.) in which Fairphone is active; described by 3rd parties as standard, common, average or with similar words indicating applicability of the results to the majority of the described group.</p>
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<b>Boundaries of data</b>	<ul style="list-style-type: none"> <li>- Phone purchases avoided due to longevity</li> <li>- FP3 and FP4 (related to KPI 2) as well as FP2</li> <li>- EU e-waste take-back (related to KPI 3)</li> <li>- E-waste take-back through WEEE fee payments (related to KPI 3)</li> <li>- E-waste take back from countries with insufficient formal recycling infrastructure (related to KPI 3)</li> </ul>
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<b>Key data sources</b>	<ul style="list-style-type: none"> <li>- Activation date and (in)active status of Fairphones collected in Fairphone's backend</li> <li>- Impact audit reports of earlier years</li> <li>- Jaeger-Erben, Melanie and Hipp, Tamina (2018). All the rage or take it easy - Expectations and experiences in the context of longevity in electronic devices. Descriptive analysis of a representative online survey in Germany. Obsolescence Research Group (Ed.), OHA texts 1/2018.</li> <li>- Life cycle assessment Fairphone 3 and Fairphone 4</li> <li>- Data on Fairphone's take-back (see KPI 3)</li> </ul>
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CO2 avoided	
<b>KPI unit of measure</b>	Tons of CO2e avoided; related to KPI 2: Longevity score, KPI 3: E-waste neutrality and KPI 4: Fair materials as well as other measures
<b>Key objective</b>	To demonstrate the avoidance of environmental impact in terms of CO2e, by facilitating and encouraging (fair)phone users to extend the usage time of products, to bring them back at their end-of-use, by integrating recycled materials in the produced devices as well as other measures to reduce or avoid CO2e emissions.
<b>Key definitions</b>	<p>- <b>CO2e avoided:</b> CO2 emissions or GHG equivalents reduced or avoided due to Fairphone efforts versus standard market practice.</p> <p>- <b>Standard practices on the market:</b> Practices by parties participating in the markets (e.g. consumer, manufacturer etc.) in which Fairphone is active; described by 3rd parties as standard, common, average or with similar words indicating applicability of the results to the majority of the described group.</p>
<b>Boundaries of data</b>	<ul style="list-style-type: none"> <li>- Phone purchases avoided due to longevity - FP3 and FP4 (related to KPI 2) as well as FP2</li> <li>- CO2e reduction through EU e-waste take back (related to KPI 3)</li> <li>- CO2e reduction through e-waste take-back through WEEE fee payments</li> <li>- Related to KPI 3: CO2e reduction through e-waste take back from countries with insufficient formal recycling infrastructure (related to KPI 3)</li> <li>- CO2e reduction through recycled materials integrated in Fairphones produced as compared to using virgin materials (related to KPI 4)</li> <li>- CO2e reduction related to scope 1/2 emissions</li> <li>- CO2e reduction related to carbon neutral shipping in Europe</li> </ul>
<b>Key data sources</b>	<ul style="list-style-type: none"> <li>- Impact audit reports of earlier years</li> <li>- Jaeger-Erben, Melanie and Hipp, Tamina (2018). All the rage or take it easy - Expectations and experiences in the context of longevity in electronic devices. Descriptive analysis of a representative online survey in Germany. Obsolescence Research Group (Ed.), OHA texts 1/2018.</li> <li>- Life cycle assessment Fairphone 3 and Fairphone 4</li> <li>- Data on Fairphone's take-back (see KPI 3)</li> <li>- Data on fair materials (see KPI 4)</li> <li>- Data on energy use in office building by landlord</li> <li>- Data on carbon neutral shipping by logistics partner</li> </ul>

People benefitting	
<b>KPI unit of measure</b>	The accumulated # of people directly or indirectly benefited by interventions and/or programs in which Fairphone was involved either in the fair materials, fair factories, or take-back impact areas.
<b>Key objective</b>	To get a clear measure of the extent of the people that benefit directly and indirectly with the work Fairphone does across its supply chain in three mentioned impact areas. Ultimately, what we are aiming to achieve is a sustainable impact for the people in our supply chain.
<b>Key definitions</b>	<p>- <b>Directly benefitting:</b> are all the people that are direct beneficiaries of an intervention and/or program where Fairphone is or was involved.</p> <p>- <b>Indirectly benefitting:</b> are all the people that are indirectly beneficiaries of an intervention and/or program where Fairphone is or was involved. Examples of these could be the immediate family members of factory workers that have received a living-wage bonus</p> <p>- <b>Interventions and/or programs where Fairphone is/was involved:</b> are all programs and/or interventions set up under the fair materials, fair factories and take-back impact areas where Fairphone is a leader or a partner of. These might include financial and/or in-kind contributions by Fairphone (including time spent). These include interventions where Fairphone actively sources fair materials, projects, and programs where Fairphone has a degree of involvement.</p>
<b>Boundaries of data</b>	Data for this KPI only originates from interventions and/or programs in which Fairphone was involved either in the fair materials, fair factories or take-back impact areas.
<b>Key data sources</b>	<ul style="list-style-type: none"> <li>- Reports by project partners on program activities</li> <li>- Reports by manufacturing partners on total number of employees</li> <li>- UN Household Size and Composition data</li> </ul>

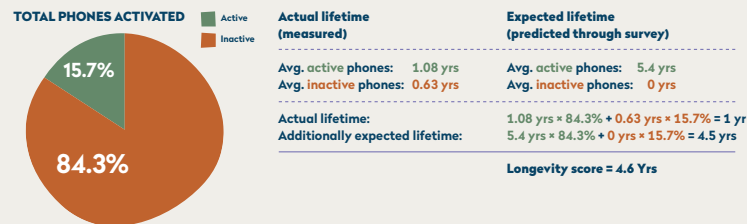


**Fair Outcome KPIs - objectives**

These indicators are to measure the effectiveness Fairphone put in key impact pillars at the outcome level.

**KPI 2: Longevity score****KPI unit of measure**

Avg. lifetime of active Fairphones and avg. age when the user stopped using their Fairphones according to the share of overall Fairphones activated since January 2020, plus users' expected additional lifespan of their Fairphone (average over all users participating per survey). The survey responses are assumed to be representative for all at that moment in time still active phones sold since January 2020.

**Key objective**

To predict the average useful lifetime of Fairphones before the end of their lifetime by combining measuring the current actual lifetime (active phones), the average lifetime reached (inactive phones) and the by users additionally expected lifetime of their phone.

**Key definitions**

- **Active phone:** A Fairphone which has responded to the activity check from Fairphone's back-end within the last 29 days.

- **Activity check:** A signal which is sent from Fairphone's back-end once a week to the Activator App when Fairphone OS (Android) is used. The signal triggers a response signal from the phone if the phone can be reached. The phone can be reached when it is switched on and it is connected to the internet at the moment when the Fairphone back-end sends the signal to the Activator App. The Activator App is preinstalled on all Fairphones since 01-01-2020, thus starting from Fairphone 3.

- **Additionally expected lifetime:** The average value customers respond to the Longevity Question which is asked to Fairphone users using a Fairphone 3(+) or higher in a survey triggered by the MyFairphone app.

- **Actual lifetime:** The time between a Fairphone's activation date and:  
If the phone is active: the last day of the quarter which is reported on  
If the phone is inactive: its deactivation date.

- **Deactivation date:** The date on which a Fairphone responds to the activity check from Fairphone's back-end for the last time. Since the data collected in the weekly activation check is stored as active in 'week 1', 'week 2' etc. of a specific year, the last day of the week in which the phone responded is used as the deactivation date.

- **Activation date:** The date on which a Fairphone 3(+) or any following Fairphone model connects for the first time to the internet and sends an activation signal to Fairphone's back-end.

**Boundaries of data**

The Longevity Score represents all Fairphones starting from Fairphone 3 (released September 2019) on which we know that Fairphone OS (Android) is used. We want to gain insights into the Fairphones' lifetime when being used by consumers, therefore the score does not include phones on which potentially another OS has been installed since this prevents us from knowing if they are still active. Neither included are Fairphone 4 which are used as demonstration phones at our indirect sales partners' shops. The only group of phones which are not used by consumers but are included in the scope are Fairphone 3(+) demonstration phones since we are not able to identify these among the activated phones.

**Key data sources**

- Survey to Fairphone users via MyFairphone App  
- Activation date and (in)active status of Fairphones collected in Fairphone's backend

**KPI 3: E-waste neutrality****KPI unit of measure**

% of electronic end-of-use products taken back vs. new device X and device X modules sold

**Key objective**

To measure the outcome of our efforts to direct e-waste into responsible recovering processes in comparison with the e-waste we create through bringing new smartphones on the market.

**Key definitions**

- **End-of-use product:** A product, which is not used, regardless of the reason. Therefore, the end-of-use product or parts thereof can potentially be suitable for direct reuse, repair/refurbishment and remarketing or it serves as input for recycling.

	<p>- <b>E-waste:</b> An electronic device becomes e-waste once it has been discarded by its owner as waste without the intent of reuse.</p> <p>- <b>Responsible recycling:</b> Responsible recycling means that companies processing the products fulfill environmental, safety, efficiency, and ethical standards at least comparable to the currently enforced <b>legal requirements in the EU</b>.</p> <p>- <b>Take-back:</b> Take-back refers to activities which serve to physically absorb electronic end-of-use products in our logistics supply chain, in that of one of our contracted partners for repair, refurbishment, remarketing or recycling. A product is taken back as soon as the owner handed it over to Fairphone or a partner of Fairphone in a manner which cannot be reversed. Alternatively, a phone can be accounted for as 'taken back' when credibly declared by a customer to Fairphone as handed in at a third party which responsibly treats WEEE, motivated by Fairphone.</p>
<b>Boundaries of data</b>	<p>The take-back activities accepted to count into the indicator score differ per region.</p> <p><b>Take-back in Europe:</b> Electronic end-of-use products which are: returned through Fairphone's Reuse and Recycle Program returned through take-back projects owned or under contract by Fairphone reported to Fairphone as handed in for reuse/recycling at a responsible collection point as a result of our efforts to motivate reuse and recycling. Responsible collection points are e.g., public recycling centers, shops of telecom operators, e-waste collection points in shops which are part of extended producer responsibility schemes returned through recycling programs of partners motivated by Fairphone's efforts (clear guidelines to avoid double counting of returned devices to be agreed on per partner and program) returned through Extended Producer Responsibility (EPR) Schemes to which Fairphone is obliged to pay fees in line with <b>Directive 2012/19/EU on waste electrical and electronic equipment (WEEE Directive)</b> for collection and recycling of the products sold in the European Market</p> <p><b>Take-back in countries with insufficient formal recycling infrastructure:</b> E-waste which is diverted from informal recycling or landfilling in countries with insufficient formal recycling infrastructure and supplied to responsible recycling facilities.</p>

	<p><b>Take-back through as-a-service contracts:</b> Phones which are serviced through Fairphone or a partner of Fairphone. Since for these electronic products the ownership stays with Fairphone, customers are obliged to return their phone.</p> <p><b>Phones and modules sold</b> The total amount of device X and device X modules sold in the respective year, regardless of its application (e.g., module upgrade, spare part). This does not include spare parts which are used to repair a phone at our repair center, since the faulty part is swapped, and no additional part is put on the market. Thus, no additional electronic component enters the market. Other models or products can be added to the scope, which will be made explicit in the target.</p>
<b>Key data sources</b>	<ul style="list-style-type: none"> <li>- Sales actuals of phones and modules</li> <li>- Collected device and module processing reports from take-back partners</li> <li>- Invoices for e-waste compensation purchases</li> <li>- Documentation of other e-waste collection projects</li> </ul>
<b>KPI 4: Fair materials</b>	
<b>KPI unit of measure</b>	Average % of # focus materials [in weight & separately measured] sustainably sourced by Fairphone [Frontrunner or Thought leader solutions] of device X.
<b>Key objective</b>	To provide the example of sourcing fair materials to trigger the industry recognition and demand as a catalyst for investments needed to develop fair mined and post-consumer recycled materials.
<b>Key definitions</b>	<p><b>Sustainably sourced:</b> is defined as (the amount of the) specified material that is used in the supply chain of the defined component that supports a source or origin that has a specific social and/or environmental benefit and the supply chain is transparent and traceable to a certain extent (incl. book &amp; claim, mass balance, physical integration).</p>
<b>Boundaries of data</b>	<p># Focus materials selected are based upon the results of a detailed Material Assessment.</p> <p>This resulted in the following list of focus materials (14) for our smartphone device: Cobalt Lithium</p>

	Copper Gold Tin Tungsten Rare Earth (incl. Neodymium, Dysprosium & Praseodymium) Plastics Silver Indium Zinc Nickel Aluminium Magnesium
<b>Key data sources</b>	<p>The material percentage is calculated based on the full material declarations (FMDs) collected from component suppliers. All collected FMDs are gathered and extracted as a Product Report, allowing for the filtering and aggregation of different material volumes and percentages. The FMDs are closely examined and verified by external sources.</p> <p>Furthermore, proof of focus materials being sourced from sustainable sources is collected. As different materials have different sustainable sources the type of proof/data source differs and be in the form of third-party verification, self-declarations, partner reports.</p>
<b>KPI 5: Fair factories</b>	
<b>KPI unit of measure</b>	% of strategic [Device X] suppliers that demonstrate X maturity level improvements, or a high level of maturity, on decent work.
<b>Key objective</b>	To set the example of advancing decent work and implementing social and environmental best practices at Fairphone's suppliers, both directly and indirectly contracted, with focus on strengthening worker-voice and representation and driving wages towards living wages.
<b>Key definitions</b>	<p><b>Device X:</b> the most recent device that accounts for the majority of Fairphone's supply chain spend. Currently: Fairphone 4</p> <p><b>Strategic suppliers:</b></p> <ul style="list-style-type: none"> <li>- The supplier performs the final assembly of the relevant device, or</li> <li>- The supplier supplies a key component of devices modules or its core.</li> </ul> <p>This includes the following components: speaker, camera, battery, display, vibration motor, Printed Circuit Board (PCB) and case (battery cover).</p>

	<p><b>Decent work levels:</b></p> <p>We divided the work we do with suppliers into three themes:</p> <p>Level 1 Environment, Health &amp; Safety (EHS),</p> <p>Level 2 Worker satisfaction and</p> <p>Level 3 Worker representation and living wages.</p> <p>Here, level 3 is the highest level of "fairness" and most challenging to achieve.</p> <p><b>Improvement on maturity level</b></p> <p>An improvement is demonstrated when:</p> <ul style="list-style-type: none"> <li>- The supplier is considered engaged with Fairphone and</li> <li>- The supplier can provide evidence that actions have been performed aimed to advance on at least one level of decent work, in line with the plan agreed with Fairphone, and /or</li> <li>- The supplier can provide evidence of improved results versus the baseline situation on at least one indicator for at least one level of decent work through audits, assessments, or surveys.</li> </ul> <p>A point means the supplier has improved its maturity on a decent work level, by demonstrating at least one improvement.</p> <p><b>High Maturity:</b></p> <p>We count suppliers towards the KPI if they demonstrate a high maturity on two or more decent work levels, of which one must be a high maturity on Environment, Health &amp; Safety.</p>
<b>Boundaries of data</b>	<p>The KPI focuses on suppliers of "Device X" (Fairphone 4 currently), our programs with suppliers of other products or accessories are not counted towards the KPI Fair Factories.</p> <p>Suppliers may score a maximum of one point for demonstrating improvements per decent work level per year, regardless of how many improvements were demonstrated on that specific decent work level in that year. A supplier may thus score a maximum of 3 points per year.</p> <p>The time period will be based on the anticipated production cycle of the relevant device, which is normally 3 years, starting in the year in which mass-production starts.</p> <p>All strategic suppliers who achieve maturity level improvements, or demonstrate high maturity, in the defined time period will be counted towards the KPI, regardless if the start of the improvement program was in the defined time period or before. The points will be accumulated for reporting during the defined time period for the device.</p>

<b>Key data sources</b>	<p>Evidence may include:</p> <p>Action plans or roadmaps, in combination with:</p> <ul style="list-style-type: none"> <li>- Reports on capacity building or coaching by 3rd parties, and/or</li> <li>- Audits, assessments, worker surveys or self-assessments that have been verified by 2nd or 3rd parties, and/or</li> <li>- Invoices, and / or</li> <li>- Photo's, and / or</li> <li>- Reporting by the supplier</li> </ul>										
<b>KPI 6: Industry influence score</b>											
<b>KPI</b>	# of points scored on industry players that adopt/apply one of Fairphone's Thought Leadership solutions beyond our supply chain – [accumulated, by points, counted only once per follower]										
<b>Key objective</b>	To drive Fairphone to develop scalable impact solutions that go beyond Fairphone's own supply chain and that create followers to trigger higher transparency, social and environmental performance in the industry.										
<b>Key definitions</b>	<p>- <b>Industry players:</b> are companies operating in the electronics industry, or other sectors relevant for the Thought leadership solution, or associations, institutions or organizations that relate to the extraction of raw materials, processing, manufacturing, retailing, repairing, recycling or certification of electronic devices and components.</p> <p>- <b>Thought leadership solutions:</b> are programs, coalitions, methodologies, sourcing models or any other type of interventions developed, initiated or founded by Fairphone with the purpose to drive impact/increase fairness in its four impact areas: fair materials, fair factories, longevity and circularity. It is these interventions required to achieve our targets on KPI 2-5.</p> <p>- <b># of points scored:</b> The larger the size of the company, the bigger we expect the influence and impact to be. Therefore, points are allocated per size (market capitalization) of the company:</p> <table> <tr> <th>MARKET CAPITALIZATION OF INDUSTRY PLAYER</th><th>POINTS</th></tr> <tr> <td>\$10b+ (Large Cap)</td><td>3</td></tr> <tr> <td>\$2b+ (Mid Cap)</td><td>2</td></tr> <tr> <td>Below \$2b+ (Small Cap), or companies those not listed on any stock exchange</td><td>1</td></tr> <tr> <td>Associations and other non-company actors/institutions that become member of a FP founded program/consortium or update a standard/ policy with proof of company members that apply the solution</td><td>3, 2, or 1; depending on accumulated market size members as per left column</td></tr> </table>	MARKET CAPITALIZATION OF INDUSTRY PLAYER	POINTS	\$10b+ (Large Cap)	3	\$2b+ (Mid Cap)	2	Below \$2b+ (Small Cap), or companies those not listed on any stock exchange	1	Associations and other non-company actors/institutions that become member of a FP founded program/consortium or update a standard/ policy with proof of company members that apply the solution	3, 2, or 1; depending on accumulated market size members as per left column
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	<p>Note that the score of a follower is measured by its ultimate ownership. Therefore, if a company is fully owned by a publicly traded company, we look at the market cap of its parent company.</p>
<b>Boundaries of data</b>	<p>The scope of this indicator is not limited to the electronics industry but can include any industry sector as long as the actor can have significant influence on the impact areas and related ambitions Fairphone focuses on. Whereas electronics will be the key sector to influence, this could also include other industries, e.g. automotive, mining companies but also for example consultancy industry if the actor becomes a member of a consortium and/or contribute (through their own means) with their core services to the goal.</p> <p>To accurately count the impact of followers, Fairphone counts at the level of individual follower, i.e., company. If multiple companies join the (membership-based) initiative/platform co-founded/established by Fairphone, this KPI calculates on the basis of each industry follower. If member companies of an initiative/platform/association non-founded by Fairphone adopt and apply a Fairphone solution, the accumulated market share of all members counts.</p> <p>Note, if a company is part of Fairphone's supply chain, it can be counted only if evidence indicates that the company expands the solution beyond Fairphone's supply chain.</p>
<b>Key data sources</b>	<ul style="list-style-type: none"> <li>- Proof of companies/associations adopting and applying Fairphone's thought leadership solution, such as becoming part of a Fairphone co-founded consortium (membership agreement), signing a contract/ agreement or letter of commitment to a program Fairphone started.</li> <li>- Proof of an association/platform/initiative/standard updating its policy or standard following Fairphone's campaign or lobby and (part of) its company members applying the solution in their businesses.</li> <li>- Proof that companies are following Fairphone's solutions and are adopting/ applying a solution or changing their behavior/ discourse/business practices following FPs example.</li> <li>- Per industry player the capital is determined based on financial data derived from the respective annual reports.</li> </ul>

# Appendix 5: Assurance Statement

## Independent Assurance Statement to Fairphone B.V.

Fairphone B.V. ('Fairphone') engaged ERM Certification and Verification Services Limited ('ERM CVS') to provide limited assurance in relation to specified information in Fairphone's Impact 2021 (the 'Report') as set out below.

Engagement summary	
Scope of our assurance engagement	<p>Whether the data listed below for the reporting year ended 31 December 2021 are fairly presented in the Report, in all material respects, with the reporting criteria:</p> <p><b>Impact KPIs</b></p> <ul style="list-style-type: none"> <li>E-waste avoided (tons of e-waste avoided)</li> <li>CO2 avoided (tons of CO2e avoided)</li> <li>People benefitting (number of people)</li> </ul> <p><b>Outcome KPIs</b></p> <ul style="list-style-type: none"> <li>KPI 2: Longevity score (Expected lifetime in years of activated FP3/+ and FP4)</li> <li>KPI 3: E-waste neutrality (% of electronic end-of-use products taken back vs. new FP4 and FP4 modules sold)</li> <li>KPI 4: Fair materials (Average % of 14 focus materials sustainably sourced)</li> <li>KPI 5: Fair factories (% of strategic suppliers who demonstrate improvements or high maturity)</li> <li>KPI 6: Industry influence score (Number of points scored on key industry players adopting Fairphone solutions)</li> </ul>
Reporting criteria	Fairphone basis of reporting as described in Appendix 4 of the Report.
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements <b>ISAE 3000</b> (Revised).
Assurance level	Limited assurance.
Respective responsibilities	<p>Fairphone is responsible for preparing the specified information and for its correct presentation in reporting to third parties, including disclosure of the reporting criteria and boundary.</p> <p>ERM CVS's responsibility is to provide a conclusion on the agreed scope based on the assurance activities performed and exercising our professional judgement.</p>

### Our conclusion

Based on our assurance activities below, nothing has come to our attention to indicate that the data, as listed in "Scope of our assurance engagement" above for the reporting year ended 31 December 2021, are not fairly presented in the Report, in all material respects, with the reporting criteria.

### Our assurance activities

Our objective was to assess whether the reporting of the data is in accordance with the principles of completeness, comparability (across the organisation) and accuracy (including calculations, use of appropriate conversion factors and consolidation). We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions. A multi-disciplinary team of sustainability and assurance specialists performed the following activities:

- Web-based and telephone interviews with relevant staff at Fairphone corporate offices to understand and evaluate the data management systems and processes (including IT systems and internal review processes) used for collecting and reporting the selected data;
- Review of the reporting criteria, definitions and conversion factors used;
- An evaluation of the completeness and accuracy of the corporate data consolidation, including further testing of data to source evidence; and
- Reviewing the presentation of information in the Report to ensure consistency with our findings.

### The limitations of our engagement

The reliability of the assured data is subject to inherent uncertainties, given both the available methods for determining, calculating or estimating the underlying information and the dependence on partner organisations to provide performance information. It is important to understand our assurance conclusions in this context. We do not provide any assurance on future performance or the achievability of Fairphone's goals and targets.



Gareth Manning  
Partner, Corporate Assurance

17 June 2022

ERM Certification and Verification Services Limited, London  
www.ermcvs.com | [post@ermcvs.com](mailto:post@ermcvs.com)

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS employees that have undertaken this engagement have provided no consultancy related services to Fairphone B.V. in any respect.

**ERM CVS**  
Informed Assured

# ***FAIRPHONE***

Change is in your hands