

SUSTAINABLE ELECTRONICS



Transparency &
Corporate Social Responsibility

Trend Analysis 2014

Sample of 20 Global Electronics Brands

The Sustainable Electronics Report 2014 provides an analysis of the transparency and sustainability performance of 20 global electronics brands.

The report provides an overview of the key sustainability issues that brands in the consumer electronics industry face, and names those brands which are demonstrating best practices for each of the analyzed sections: climate policy, ecology and labor conditions policy.

Rank a Brand strives for a sustainable society and wants to make sustainability a buying factor. Our rankings on sustainability are published on our website. We want to encourage brands to become more sustainable and to be open in their reporting on sustainability performance. For more information send an email to kontakt@rankabrand.de

IMPRINT

Published by: Rank a Brand e.V.

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Berlin/Amsterdam, June 2014

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As sustainability challenges become bigger and more tangible, brands in the electronics industry are starting to consider sustainability as being material to their business. This is caused by a number of interrelated factors, such as a growing consumer awareness triggered by mainstream media coverage on human rights controversies, and increasingly, the notion that climate change and collapsing ecosystems represent real business risks.

All 20 of the global electronics brands that we have investigated, report on sustainability. However, the information provided by a significant number of brands is not considered substantial; it lacks detail and focus on relevant issues. As a consequence, 75% of brands that report in some way on sustainability have been put on the Rank a Brand 'Greenwashing Alert'. This Alert lists brands that receive the lowest score when ranked against our climate, ecology and labour conditions criteria, which means that the information they provide is either of marginal or no relevance, and is not explicit about sustainability performance.

This result is concerning when considering the major environmental and social impacts that the consumer electronics industry has around the globe - ranging from considerable climate footprints from operations, environmental issues from devices produced and global supply chains, a high use of hazardous chemicals such as PVC or phthalates, waste of materials, insufficient product life cycles, high water- and land footprints, conflict minerals, to inhuman labour conditions in the factories where the brands devices are finally assembled.

In light of these important issues, we hope that the Sustainable Electronics Report 2014 can contribute to an increased awareness about the responsibility that electronics brands have when deciding how to produce their products, and how to communicate this to consumers.

In particular this report tries to highlight positive developments so that electronics brands can learn from each other. Best practices are demonstrated by Fairphone and several other brands. These are the examples that show the negative social and environmental impacts of consumer electronics can drastically be reduced and that a fair and green mobile is within our reach.

Niels Oskam
Founder Rank a Brand

&

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Founder Rank a Brand - Germany

Rank a Brand maintains a database of more than 500 consumer brands. The selection of these brands is made based on popularity: as publicised in the media and advertising and at the request of our website visitors. We focus on the popular brands and brand profiles on our website with relatively low visitor rates are regularly cleared from our system.

We learn from our surveys that a portion of our visitors actively pursue a green lifestyle and make responsible purchasing choices. Consequently, the selection of requested and then ranked brands in our database reflects the mainstream consumer brands, flavored with some niche 'green' brands.

For the Sustainable Electronics Report 2014 analysis we used our latest data dump (effective by May 2014) and selected 20 popular global consumer electronics brands selling devices with a screen. The evaluation criteria for those brands were developed based on research into specific sustainability issues, expert views, and the better and best practices in that particular sector. This does not imply that a company manifesting better and best practices is necessarily 'good'; better and best practices simply reflect the status of what is proven possible in the researched sector at a certain moment in time. Companies must continually adapt their policies and operations to stay up to date with current progressive trends.

Our standard evaluation themes are climate protection, ecology and fair trade / labour conditions in global supply chains. For all references and background information related to our individual criteria, please visit the following pages or browse www.rankabrand.org. For feedback on our criteria, feel free to email us at kontakt@rankabrand.de.

Data from the researched electronics brands is collected from the brand website, brand owner website, and credible third parties who work with the brand such as Carbon Disclosure Project or member organizations like the Fair Labor Association. The research is performed by our team of volunteers. The research is quality checked on a peer to peer basis and supervised by the head of research.

RANKING CRITERIA - CONSUMER ELECTRONICS

Climate

Is there a policy for the brand (company) to minimize, reduce or compensate carbon emissions?	Has the brand (company) disclosed the annual absolute carbon footprint of its 'own operations' (Scope 1 & 2) and has the brand already reduced or compensated 10% of those emissions in the last 5 years?	Has the brand (company) set a target to reduce the absolute carbon footprint of its 'own operations' (Scope 1 & 2) by at least 20% within the next 5 years?	Does the brand (company) publish the annual carbon footprint that also covers the major suppliers, and does the brand have an effective policy in place to reduce these carbon emissions?	Is at least 35% of the electricity used by the brand (company) generated from renewable resources, such as wind or solar energy?	Do all new products of the brand meet energy efficiency requirements such as Energy Star (where applicable)?
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This overview shows all the criteria applied to the 20 electronics brands. The criteria are grouped under the three themes: Climate, Ecology and Labor Conditions.

The methodology for analyzing brands in the electronics sector uses both generic criteria that apply to other sectors and criteria specific to the electronics sector. The relevance of these criteria has been established with thorough research on the sustainability issues within the electronics industry. The complete background information for the development of these criteria can be found on manual.rankabrand.com












Ecology

Has the brand (company) eliminated PVC in all new products?	Has the brand (company) eliminated BFR's in all new products?	Has the brand (company) eliminated at least 2 of the 3 groups of suspect chemicals (boryllum, antimony and phthalates) in all its new products already?	Does the brand (company) publish its annual material footprint, or alternatively material footprints for each sold product, that includes packaging materials, and does the brand have an effective policy in place to reduce the overall environmental impact of material use?	Does the brand (company) only use universal plugs for chargers (where applicable) or does the brand offer the charger as optional to the product?	Does the brand (company) source at least 10% of its plastics from recycled plastic streams and does the brand have an effective policy to increase this percentage to at least 25% by 2025?	Does the brand (company) source at least 20% of its plastics from recycled plastic streams?	Does the brand (company) have an effective policy in place to reduce the environmental impact of its consumer packaging and does the brand already show best practices, such as using at least 80% environmentally certified or recycled paper products?	Has the brand (company) a take back program and is the take back recycling rate higher than 5% of the weight of the annually products sold?	Is the take back recycling rate higher than 10% of the weight of the annually products sold?	Has the brand (company) an active policy in place to increase the product life-span of products, such as longer warranty periods or easy repair with easy ordering of spare parts?	Does the brand (company) use replaceable batteries in all portable devices?	Does the brand (company) provide online manuals for repair services for all products?	Does the brand (company) guarantee supply of spare parts and software updates for all products, for at least 3 years after end of production?	Does the brand (company) give at least a 3 years warranty on all products?	Does the brand (company) publish a water and/or land use footprint and is there a policy to minimize, reduce or compensate this footprint?	Does the brand (company) publish a water and/or land use footprint that also covers its most important suppliers?
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Labour Conditions

Does the brand (company) regularly publish an updated list of smelters that are identified in the own supply chain?	Does the brand (company) have a clear policy to only source from smelters that have passed the conflict-free audits, and has the brand already achieved this for at least one metal/mineral?	Is the brand (company) significantly involved in at least 1 initiative that addresses the urgent appeal to improve the social and environmental conditions of mining metals and minerals: for example tin from endangered tropical islands Bangka and Belitung, conflict minerals from Congo, etc?	Is the brand (company) significantly involved in at least 2 initiatives that addresses the urgent appeal to improve the social and environmental conditions of mining metals and minerals: for example tin from endangered tropical islands Bangka and Belitung, conflict minerals from Congo, etc?	Is the brand (company) significantly involved in at least 3 initiatives that addresses the urgent appeal to improve the social and environmental conditions of mining metals and minerals: for example tin from endangered tropical islands Bangka and Belitung, conflict minerals from Congo, etc?	Is the brand (company) significantly involved in at least 4 initiatives that addresses the urgent appeal to improve the social and environmental conditions of mining metals and minerals: for example tin from endangered tropical islands Bangka and Belitung, conflict minerals from Congo, etc?	Does the brand (company) have a Code of Conduct (CoC) for both its own factories and those of its suppliers, which includes the following standards: No forced or slave labor, no child labor, no discrimination of any kind and a safe and hygienic workplace?	Does the brand's (company's) CoC include at least 3 of the following workers rights: 1. a formally registered employment relationship 2. a maximum working week of 48 hours with voluntary paid overtime of 12 hours maximum 3. a sufficient living wage 4. form and join labor unions and bargain collectively: and in those situations where these rights are restricted under law, to	Does the brand (company) have a published list of direct suppliers that have collectively contributed to more than 90% of the purchase volume?	Is the brand (company) a member of a multi stakeholder initiative (MSI), wherein independent NGO's or labor unions are represented, that collectively aims to improve labor conditions and that carries out independent audits? Or does the brand (company) significantly purchase its supplies from factories certified by such MSI's?	Does the brand (company) annually report on the results of its labor conditions policy? Is more than 95% of supplier monitored for labour conditions?	Is at least 25% of suppliers in high risk countries compliant to the Code of Conduct?	Is at least 50% of suppliers in high risk countries compliant to the Code of Conduct?	Is at least 50% of suppliers in high risk countries compliant to the Code of Conduct - including a living wage?
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This table contains all 20 researched electronics brands. The majority of brands received a D-Label, which means that they met less than 35 % of our criteria. This means that first milestones are reached, but the sustainability performance should be better. To receive an A-Label rating the brands need to score on more than 75 % of our criteria.

BRAND	LABEL
-	A
	B
 NOKIA	C
SONY <i>acer</i>     PHILIPS MOTOROLA  <i>BlackBerry</i> <i>lenovo</i> TOSHIBA	D
 LG ASUS <i>htc</i>  ZTE中兴   HUAWEI	E

REPORTING ON SUSTAINABILITY

All brands report on sustainability,

but the percentage of clear answers on the evaluation criteria are 34 %.

75 % of all brands are listed on the Greenwashing Alert.

CLIMATE PROTECTION

Top brand: Nokia.

All brands implement credible climate policy measures.

50% of all brands reduced its total GHG footprint by at least 10 % in the last 5 years.

ECOLOGY

Top brand: Fairphone.

Reporting good, performance lacks at 75% of all brands.

only Apple, Fairphone, Nokia & Motorola eliminated PVC from their products.

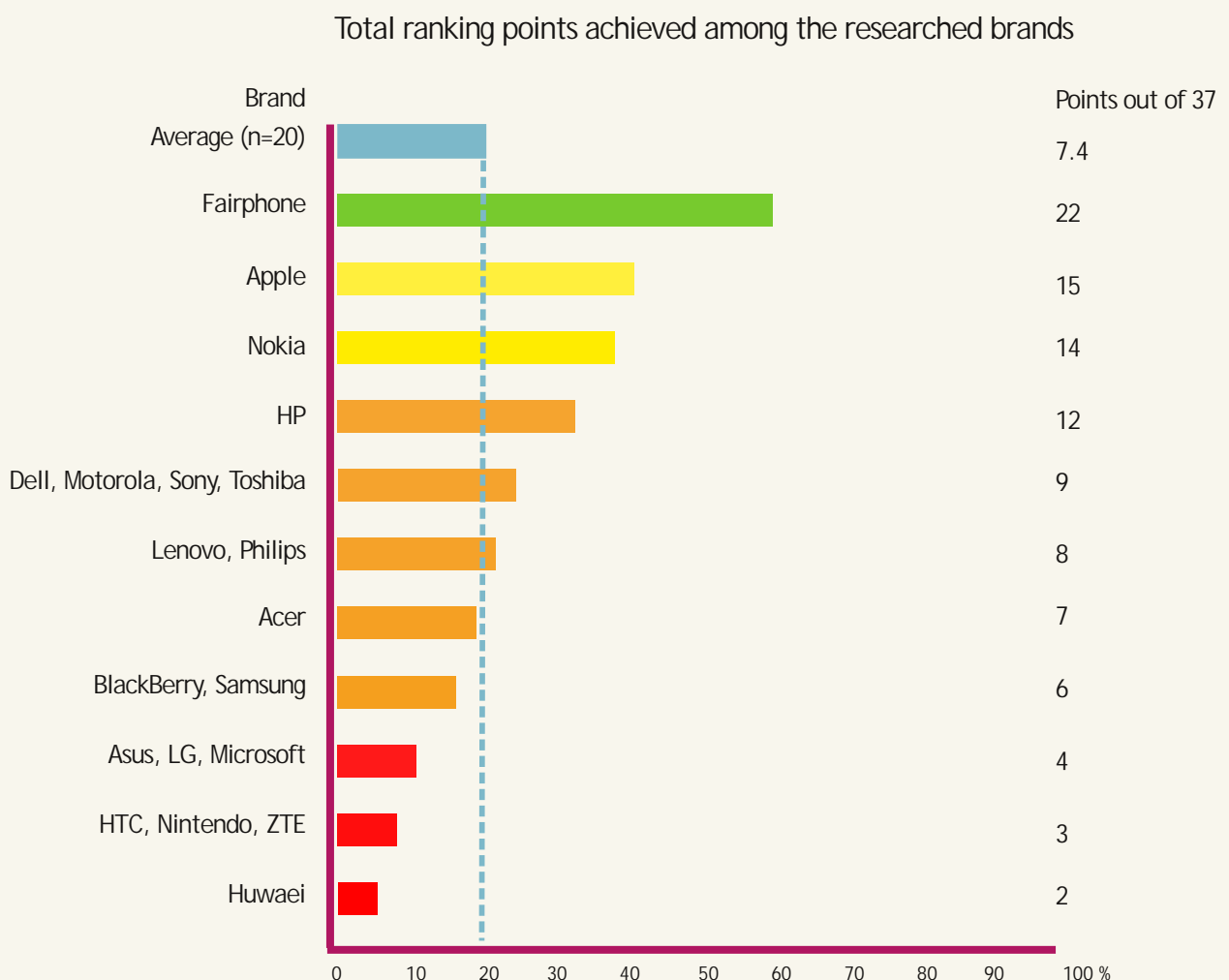
FAIR LABOUR

Top brand: Fairphone.

85 % of all brands take actions on conflict minerals.

No brand can yet deliver a proof of producing fair electronics.

OVERALL - PERFORMANCE INDEX



Among all of the researched brands Fairphone, which scores a B Label, clearly stands out as the only brand which is really well on its way to sustainability. In particular Fairphone's measures on environmental protection, and establishing fair labour conditions in its supply chain, are promising and have been already affirmed by meeting some clear milestones.

Apple and Nokia, scoring a C-Label, follow on in 2nd and 3rd place. Both brands implement several credible measures in all subject areas and have achieved some good results already - but still could do much more when it comes to clearly reporting sustainability performance.

The largest group of brands we researched were assigned a D-Label Ranking, meaning that first milestones are just defined. However, in general these brands are still far away from demonstrating good performance. The weakest performing brands, scoring an E-Label are HTC, Nintendo, ZTE, Huawei and LG. Currently, these brands have hardly started their journey towards sustainability with Huawei and LG being most notable in lagging behind.

ELECTRONICS GREENWASHING ALERT

BRANDS ON THE GREENWASHING ALERT



This alert lists brands that report in some way on sustainability, but still receive an E-Label - either in total or in at least one of the subject areas - climate protection, environmental protection or fair labour conditions - and therefore achieve a very low score in terms of the Rank a Brand sustainability criteria. This means that the information they provide is either of marginal or no relevance, or is not explicit about sustainability performance.

We provide this alert because we believe that the consumer will not be able to easily assess the quality of the information provided and therefore could be misled by assuming that reporting on sustainability performance is the same as providing evidence of good performance. We also include this alert to show that the brands listed are at particular risk of being accused of greenwashing in the future.

15 out of 20 researched electronics brands are listed on Rank a Brand Brand's Greenwashing Alert in 2014, which equates to 75%.



Levels of transparency about sustainability among the researched brands



Compared to other sectors, such as the textile industry, brands in the consumer electronics industry have not yet reached a stage at which reporting on sustainability has become comprehensive and transparent: on average only 34 % of all our evaluation criteria were either answerable with a clear "Yes" or "No", and 66 % of all our evaluation criteria remained unanswerable and therefore received a "?".

The brand which reports most comprehensively on sustainability is Fairphone. On 62 % of all evaluation criteria it was either possible to assign a clear "Yes" or "No". This means that Fairphone currently provides the most transparent and clear reporting about its sustainability performance. In contrast Huawei is least transparent and clear about its current sustainability measures, achieved results so far, and policy objectives for the future.

CLIMATE - KEY FINDINGS

POLICY MEASURES

All brands report climate protection policy measures.

But, only 3 out 20 brands convincingly tackle GHG emissions in their supply chains too: Nokia, HP & Lenovo.

CLIMATE FOOTPRINT

80 % of brands publish a detailed climate footprint of own operations.

Largest relative reduction over the last 5 years of total GHG emissions: Samsung (-33 %).

Highest relative increase over the last 5 years of total GHG emissions: BlackBerry (+125 %).

REDUCTION GOALS

Only 20 % of brands have progressive reduction goals for the next 5 years.

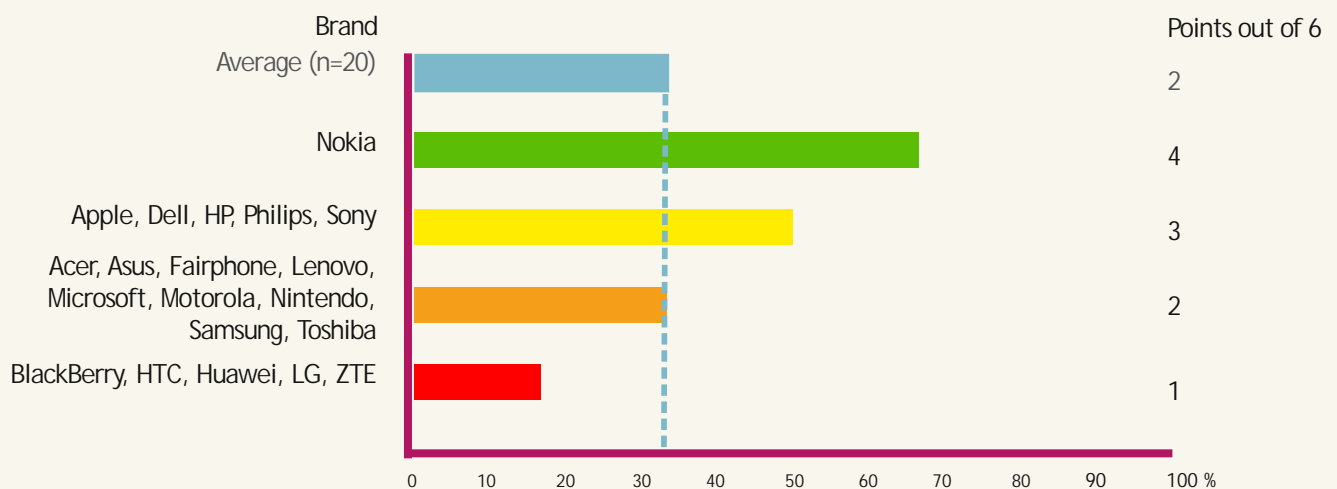
RENEWABLE ENERGY

Apple : 73 % renewable electricity in 2013 - only convincing brand.

CLIMATE - PERFORMANCE INDEX



Ranking points achieved on climate protection measures



The consumer electronics industry has a large impact on the global climate footprint. This reality holds true not only within the production process, but also with respect to the energy efficiency of its devices being in use by consumers. Our evaluation indicates that all researched brands take climate protection into account and therefore implement various measures to reduce, minimize or compensate greenhouse gas emissions (GHG). However, none of the brands can entirely convey a compelling climate protection policy.

Top Brand: Nokia

Nokia performs best among the researched brands, scoring 4 out of 6 possible points. The Finnish producer of mobile devices implements several policy measures including the use of renewable energy and improving the energy efficiency of its own operations and devices. Nokia's climate footprint shows that between 2011 (195,000 tonnes GHG) and 2012 (171,000 tonnes GHG) GHG emission reductions of around 14% were achieved. Furthermore Nokia also implements credible climate policy measures in its supply chain. However, with respect to reduction goals, and the use of renewable energy, Nokia does not belong to the group of most progressive brands. Here, the best practice brands are Dell (reduction goals) and Apple (renewable energy use).

Weakest Brand: HTC

Comprehensive reporting on sustainability is the key precondition for a good score against Rank a Brands' criteria. Here, with respect to its climate policy measures, HTC is lagging behind all other brands - even in comparison to the other lowest scoring brands BlackBerry, Huawei, LG and ZTE. In comparison with these companies, such as LG which reports a modest decreases in total GHG emissions, HTC provides quite some information on its corporate responsibility website too, but is leaving us in the dark with respect to all key information.

HAZARDOUS CHEMICALS

No brand has entirely eliminated Phthalates, Beryllium, Antimony, BFR's and PVC in production.

But the Best on track brands having phased out at least 3 out 5 hazardous chemicals, are Nokia & Motorola.

MATERIAL FOOTPRINT

Best Practice reporting on materials used: Apple & Toshiba.

2 out 20 brands source at least 10 % of their requirements from recycled plastics: Fairphone & Samsung.

PRODUCT LIFECYCLE

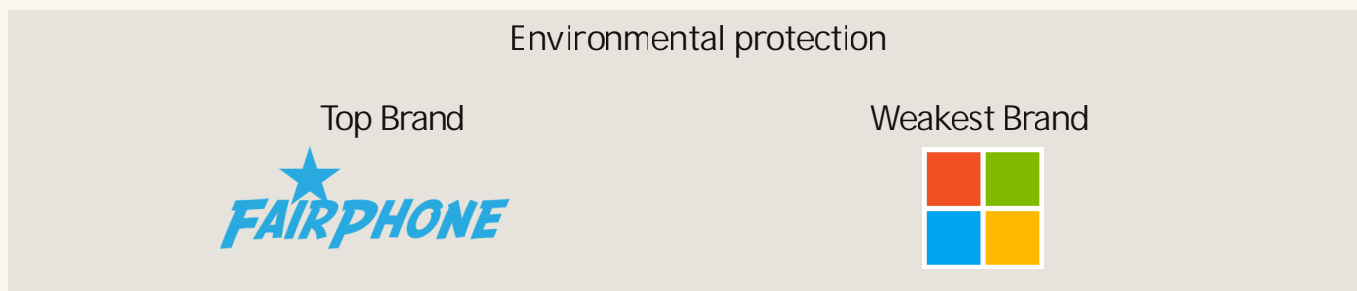
Most convincing overall measures by: Fairphone.

0 out of 20 brands have a standard 3 year guarantee period to ensure longer product lifespan.

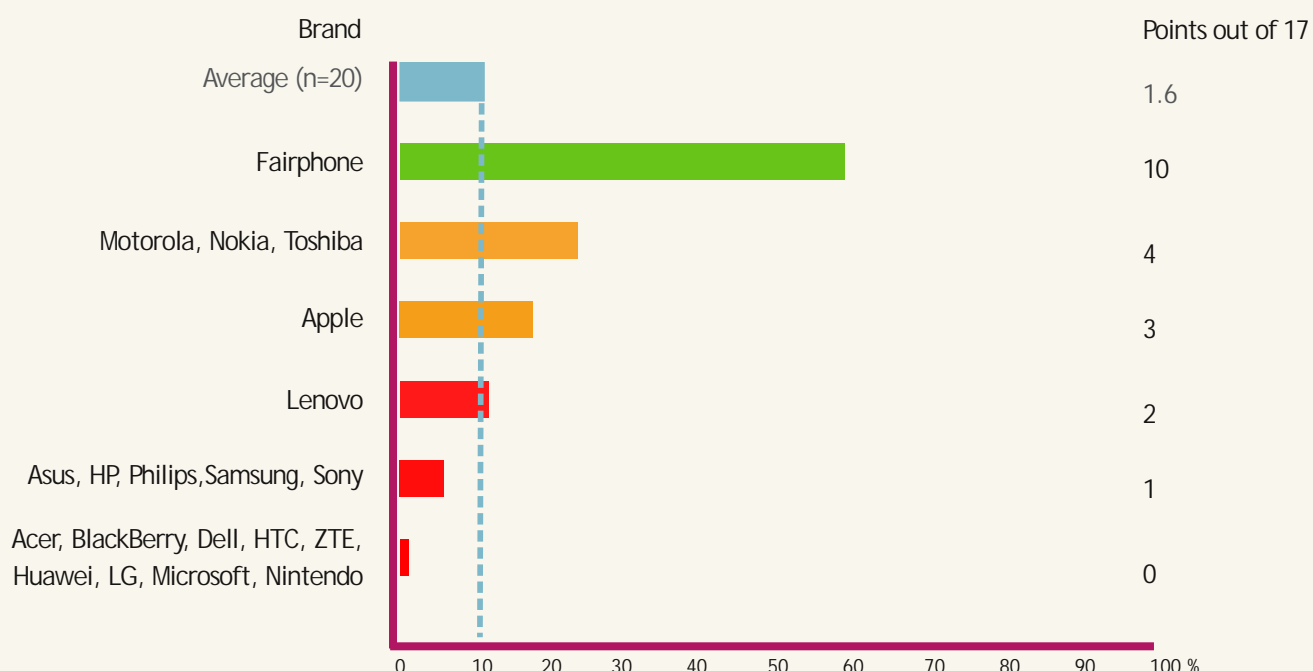
WATER AND/OR LAND FOOTPRINT

25 % of all brands publish a water footprint,
but 0 % of brands publish a land footprint.

ECOLOGY - PERFORMANCE INDEX



Ranking points achieved on environmental protection measures



In comparison to the other subject areas, the brands we researched are performing most weakly on the ecology criteria. Reporting on PVC phase out and the water footprint of their own operations is the most common practice among the researched brands. Only Apple, Fairphone, Motorola and Nokia have eliminated PVC from their products. And, only Dell, HP, Motorola, Philips and Toshiba make the water footprint for their own operations public. None of the brands were able to score on the criteria for reporting a water and land footprint once the scope was extended to include their most important suppliers. Product guarantee periods was another area of weakness and shows a lack of commitment to extending product life span. With the exception of Fairphone, clear life span policies were not found. We believe this is the most urgent area for action amongst the consumer electronic brands.

Top Brand: Fairphone

The by far best performing brand in our research is the Dutch start-up Fairphone. With respect to measures which extend product life span, and, achieve the highest proportions of recycled plastics in manufacturing, Fairphone stands out head and shoulders above all other brands. In contrast, their weak point so far is footprinting for materials and water use as well as impact on land. Also, Fairphone needs to be clear about the use of some hazardous chemicals, such as Beryllium, Antimony, Phthalates and BFR's, in their products.

Weakest Brand: Microsoft

Among the big group of zero scoring brands Microsoft stands out for two less flattering reasons: Next to HTC, Microsoft's reporting is the least insightful on its environmental protection measures, and exhibits a 'wait-and-see' attitude when it comes to phasing out hazardous substances such as PVC or BFR's.

LABOUR CONDITIONS - KEY FINDINGS

SUPPLIER CODE OF CONDUCT

95 % of all brands report application of a supplier code of conduct, but **only** the supplier code of conduct applied by Fairphone meets all criteria, including a living wage for workers.

REPORTING ON RESULTS

Only Fairphone & HP report comprehensively on the implementation of their labour conditions policy.

No brand reports a supplier code of conduct compliance for at least 25 % of production volume.

CONFLICT MINERALS

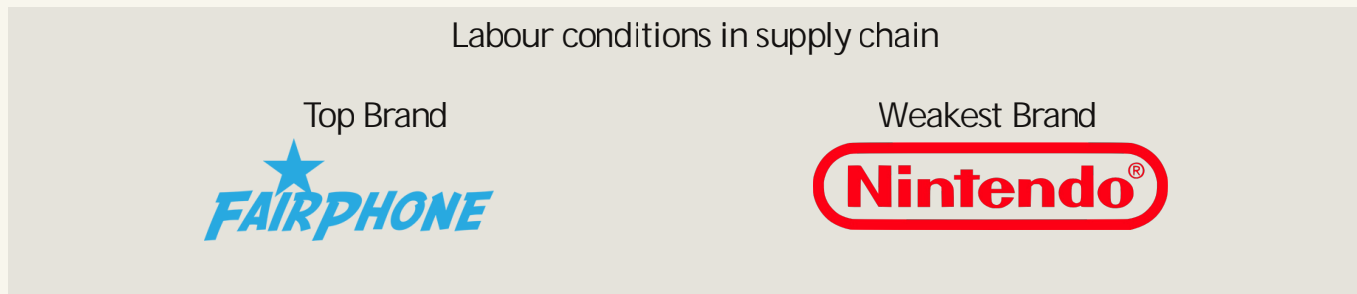
85 % of the brands are involved in at least one initiative to tackle problems caused by conflict minerals. But, **only** Apple & Fairphone can report already sourcing at least one conflict-free mineral.

TRANSPARENCY

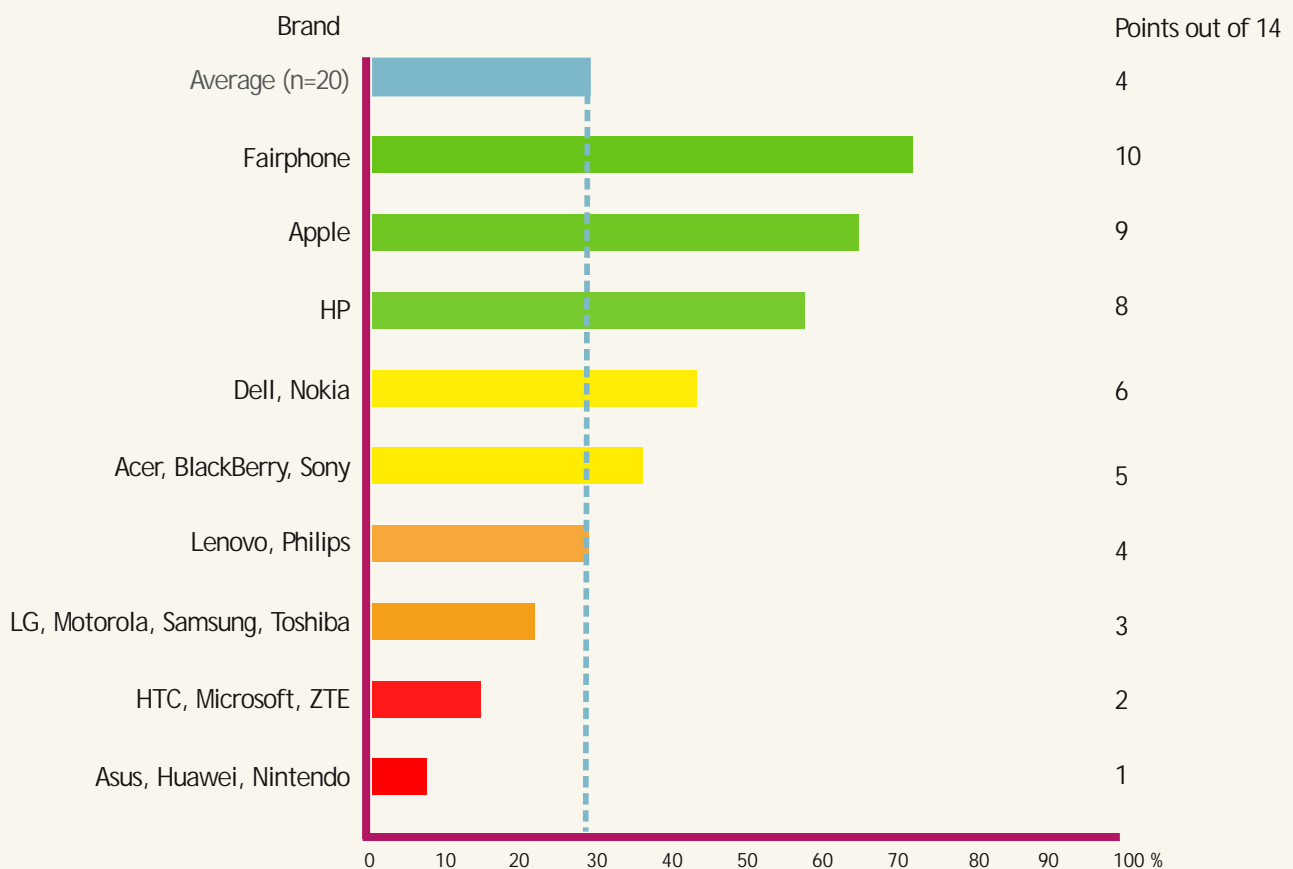
Only 3 brands publish supplier lists for smelters & factories, namely:

Apple, Fairphone & HP.

LABOUR CONDITIONS - PERFORMANCE INDEX



Ranking points achieved on labour conditions policy measures



Labour conditions in the production chain appears to be a particularly sensitive issue in the consumer electronics industry and this is clearly reflected in the results of our research. Most brands report on labour conditions policy measures, publish a supplier code of conduct and participate in collective initiatives to tackle inhumane labour conditions in the production chain. However, beyond first actions there are very obvious differences in commitment to implementing and monitoring progress on labour conditions policies. Still, no brand sells fair electronics.

Top Brand: Fairphone

Fairphone shows the most best practices in the labour condition section. The company already sources tin and tantalum as conflict-free and is working towards using Fairtrade gold. Concerning labour conditions in the electronics factories, Fairphone is the only company that strives towards a living wage for workers, and is transparent about the progress. From the biggest brands HP and Apple have the most progressive policies for more responsible mining and labour conditions in factories.

Weakest Brand: Nintendo

Apart from reporting that this brand follows the EICC code of conduct, Nintendo doesn't publish any other significant information in its CSR Report 2013. Among all of the brands we researched, Nintendo raises most questions about its labour conditions policy.

We have prepared this report with our best efforts to achieve objectivity and accuracy . Neither Rank a Brand e.V., nor the authors of this report, will be held liable for any actions or consequences taken by others based on the contents of this report.

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You like our work?

That is just great! Because, we did it for you. We ask brands many questions and present our findings so that you can make a better choice. At the same time we urge brands to become more transparent, green and fair.

To continue our work and to do research on more brands we can sure need your support, big or small, regular on one time only.

More details: www.rankabrand.org

Many thanks!

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