CASE #1: Fairphone

Creation of Zero Impact Packaging

the dieline AWARDS 2016

OUTSTANDING ACHIEVEMENTS

The Fairphone packaging has been awarded with an outstanding achievement by the dieline awards.

RETHINK

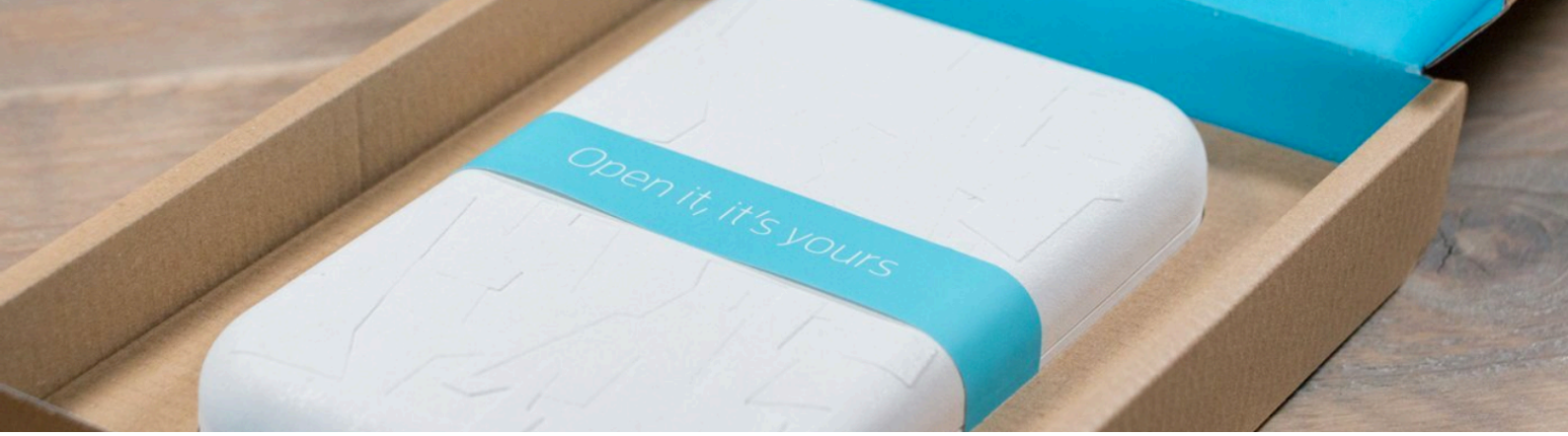
58% less material used in comparison to the packaging of the best-selling mobile phone this decade.

RECYCLE

75% reduction of carbon footprint. Mainly paper recycled and biodegradable raw materials used. The final packaging is 100% recyclable with Paper.

REGENERATE

48 trees are planted per 100k packs produced to compensate the remaining carbon footprint.



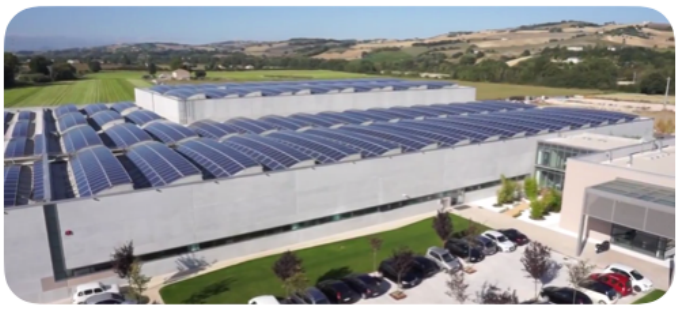
RETHINK

FAIRPHONE PACKAGING versus **INDUSTRY STANDARD PACKAGING**

Packaging weight: 136 grams.
Production: Europa (local supply)
Carbon footprint*: 0,125 kg CO2eq / pack.

The carbon footprint is compensated by planting 48 trees per 100.000 packaging produced. The FairPhone packaging has no plastics and has a total weight of 136 grams.

The Luxury packaging weight is 43 grams and consists of 1 insert and a 2 piece shell, all made from PaperFoam of which the raw materials are mainly starch and fibre. The PaperFoam parts are made in Europe, where pack-out takes place.
The single shipper used to ship the luxury packaging is a 93 grams e-flute corrugated box. This single shipper 68% made of recycled material and 32% virgin fibre. The volume is designed smaller so 60% more single shippers fit in a truck.



Both Luxury Packaging as well as single shipper are made in factories using green energy.
Click here to visit the Fairphone website and learn more about their side of the story.

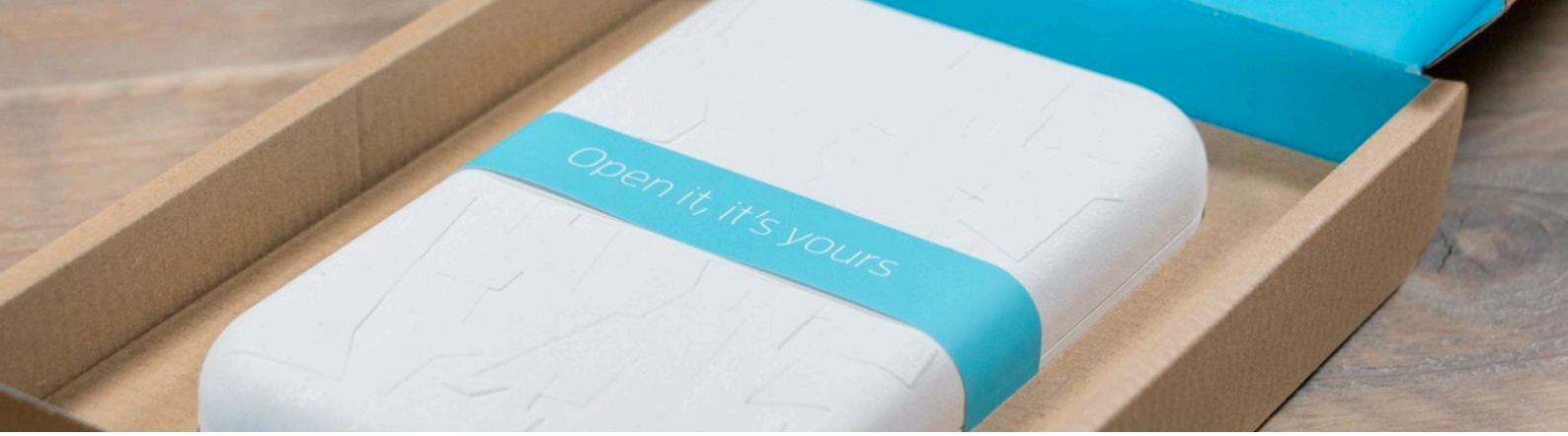
Packaging weight: 324 grams.
Production: Mainly China
Carbon footprint*: 0,503 kg CO2eq / pack.

To show the impact of an optimised design we used the packaging of the best selling mobile phone as a reference case. The reference packaging weights a total of 324 grams and consists of the following;

The luxury packaging consists of 131 grams rigid box, 11 grams e-flute corrugated insert plus a 32 grams of polypropylene insert to postion the phone and the accessories. This luxury box is made in China.

This luxury pack is shipped in a single shipper made from 150 grams high quality kraft (100% virgin fibre) corrugated plus 3 grams of polyethylene film. The single shipper is considered to be made in Europe.

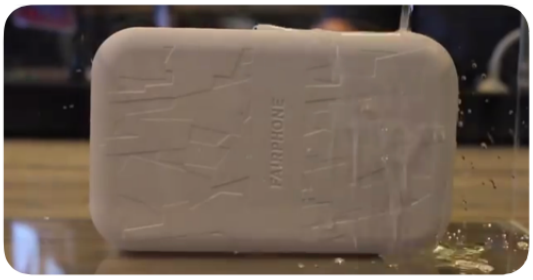
* The carbon footprint is calculated from Cradle to factory gate using EcoInvent data. For the Fairphone packaging we additionally used advanced software to calculate a more specific footprint.

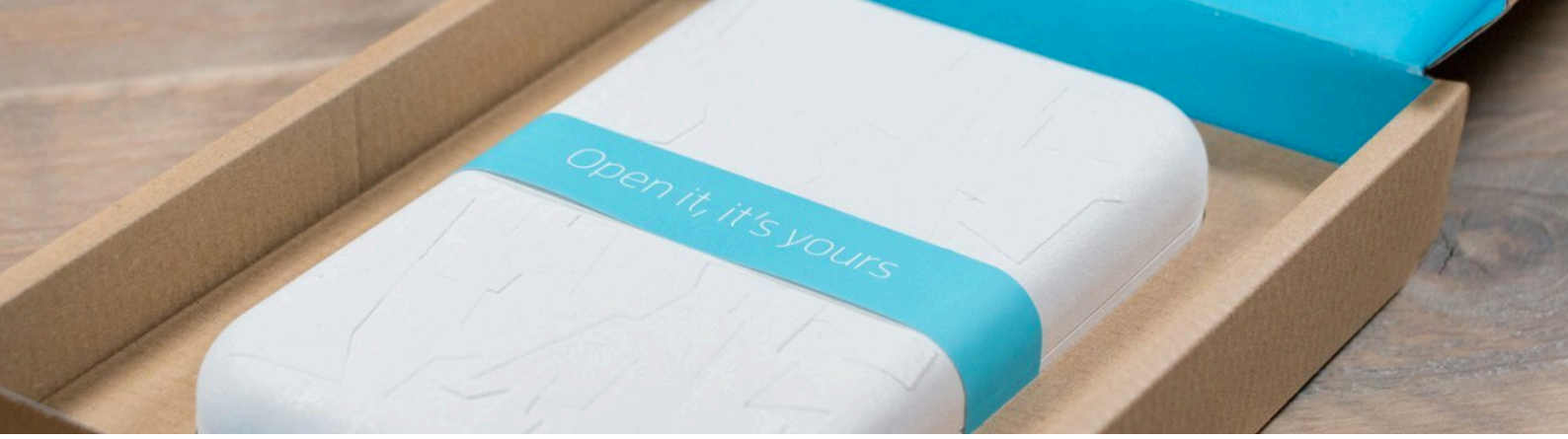


RECYCLE

During the RECYCLE step we search for the optimum materials, highly recyclable or biodegradable.
In this case we choose recyclable for the single shipper and biodegradable for the luxury packaging. The single shipper may be used by the customer to return the old mobile phone to Fairphone. The luxury packaging can be disposed of in the waste paper bin and can even be home composted. Nature itself helps breaking down the material in a matter of weeks, pollution free with no harmful leftovers. A hassle free, responsible and eco-friendly solution for manufacturers and consumers. PaperFoam has the best biobased score according Vincotte label S349.

Fairphone made their own study, click here and watch how the Fairphone 2 packaging dissolves when you leave it in water.





REGENERATE

To compensate the total carbon footprint of all packaging supplied to Fairphone, ZeroPackaging manages the planting trees on an eroded terrain in Spain. The terrain where these trees are planted has suffered from erosion, following low infiltration rates of loam soils, generating erosive surface runoff flows during high rainfall intensity events.

Once trees are established, soil conditions are expected to improve amongst others by increased infiltration rates and subsequently reduced erosion hazard. Additionally, organic inputs from litter fall and decomposing organic material will increase soil organic matter (and soil carbon !), further improving infiltration rates and associated plant water availability.

Together with nutrients mineralising from organic matter, latter processes allow succession vegetation to settle as well. As the forest regenerates, additional ecosystems services are met, including the increase in biodiversity and land productivity (e.g. timber), which directly benefits local communities, thus gaining their support to continue maintaining the forest, beyond the initial 30 years period.

The Carbon capturing will be monitored by a combination of on-ground measurements as well as remote sensing techniques using drone and satellite technology to assess biomass production for carbon sequestration calculations, and to monitor changes in soil conditions.