

FAIRPHONE

Press Release

FOR IMMEDIATE RELEASE

Keeping phones for 5 years cuts yearly impact on global warming by around 31%, finds Fairphone's latest life cycle assessment

Amsterdam, the Netherlands, May 3, 2022 – Fairphone, the Dutch social enterprise building a market for ethical smartphones, has published a life cycle assessment (LCA) report for the Fairphone 4, detailing the impact their most recent device has on the environment.

The study, conducted by the German Fraunhofer Institute for Reliability and Microintegration IZM, confirms Fairphone's key message that smartphones should be kept in use for as long as possible. In three different scenarios, the researchers project that using the Fairphone 4 for five instead of three years could reduce the phone's annual carbon footprint by 31%. When used for seven years (including two battery replacements), the emissions per year even dropped by 44%. Fairphone aims to make these scenarios reality by providing a five-year extended warranty for the Fairphone 4 and guaranteeing software support until at least the end of 2025.

The report also validates the assumption that replacing or repairing parts of the phone significantly reduces the environmental impact, since the lion's share of emissions and finite resource consumption occurs during production. To facilitate repair, the Fairphone 4 consists of eight modules, including the battery, the cameras and the charging port, that can easily be replaced by users. With the exception of the core, the report shows that such replacements to repair the phone pay off quickly. Repairing single modules to then reuse them, however, holds little advantage over simple replacement for most modules. The emissions created by producing the spare parts, packaging and shipping them to the user, or sending the device to a repair center are then theoretically compensated after just a few weeks of additional use of the repaired device. On top of that, the additional connecting parts enabling the phone's modularity hardly cause additional impact on the environment, a significant improvement compared to earlier Fairphone models.

The researchers estimate the total contribution of the device to global warming at 43 kilogram CO₂ eq. and therefore at 4 kilos higher than Fairphone 3. The study attributes this difference mostly to the increased functionality of the newer model, as well as to a higher proportion of shipping by air during Covid-19 and the chipset crisis. For the first time, the Life Cycle Assessment also analyzes the impact of the accessories available for the phone, including charging cables and plug, wireless earbuds, protective cases and a screwdriver.

The full report can be found [here](#).

Thea Kleinmagd, Circular Material Chains Innovator, comments “The ‘smarter’ the phone, the higher its impact. Given that the chips in Fairphone 4 are a big step forward when it comes to performance, it is no surprise that the carbon footprint is slightly larger than the one of Fairphone 3. However, we are happy to see that the report confirms that Fairphone is on the right track: The best way to reduce the impact a phone has on the environment is to make sure that it can be used for as long as possible. Parts that can be easily replaced or repaired allow this – which helps to minimize the phone’s effects on people and the planet.”

About Fairphone

Fairphone is building a market for ethical phones, motivating the industry to act more responsibly and pioneering more sustainable ways to make smartphones. Our latest device, Fairphone 4, is described with the tagline ‘Sustainable. Long-lasting. Fair.’ Fairphone 4 offers an unprecedented 5-year warranty*, is a unique electronic waste-neutral handset and contains fairly sourced materials, challenging the electronics industry to take a more responsible approach. It is the only smartphone on the market certified with the German eco-label Blue Angel and TCO Certified (for sustainable IT products).

- 5G and dual SIM
- Modular design for easy repair
- 5-year warranty* for maximum longevity
- 48MP dual rear cameras with supporting sensor and 25MP selfie camera

The smartphone was launched in 2021 at a suggested retail price of €579 (6GB RAM, 128GB internal memory) or €649 (8GB RAM, 256GB internal memory). The two variants of the device are available in Europe from a wide distribution network of (online) retailers and network operators and Fairphone’s website. To learn more about Fairphone 4 click [here](#).

*if bought before 31/12/2022, and warranty activated within 90 days on [Fairphone.com/warranty](https://www.fairphone.com/warranty)

About Fraunhofer IZM

The Fraunhofer-Gesellschaft, headquartered in Germany, is the world’s leading applied research organization. With its focus on developing key technologies that are vital for the future and enabling the commercial exploitation of this work by business and industry, Fraunhofer plays a central role in the innovation process. As a pioneer and catalyst for groundbreaking developments and scientific excellence, Fraunhofer helps shape society now and in the future. Founded in 1949, the Fraunhofer-Gesellschaft currently operates 76 institutes and research institutions throughout Germany. The majority of the organization’s 30,000 employees are qualified scientists and engineers, who work with an annual research budget of 2.9 billion euros. Of this sum, 2.5 billion euros are generated through contract research.

The Fraunhofer IZM: Invisible - but indispensable: nothing works without highly integrated microelectronics and microsystems technology. The basis for their integration into products is the availability of reliable and cost-effective packaging and interconnection technologies. Fraunhofer IZM, a world leader in the development and reliability assessment of electronic packaging technologies, provides its customers with customized system integration technologies at wafer, chip and board level. Research at Fraunhofer IZM also means making electronics more reliable and providing its customers with reliable information on the durability of the electronics.

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