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# The Green Machine

Does iPhone produce environmentally  
sustainable technology?





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Apple have come a long way throughout the production and manufacturing of iPhones, to introducing more ethical materials into the process, and slowly inching towards more safer systems to manufacture their products. Technology has adapted into making our lives easier. The endless capabilities of modern equipment are transforming our world, but is it for the better? Any product that is mass-produced in a factory is bound to leave a carbon footprint. So how sustainable is Apple?

Apple has recently begun to adapt a plan to make their products carbon-neutral by 2030. The Apple Environmental Progress 2022 states that there are three main areas which the company informs their goals in the way they can best accomplish a difference: climate change, resources, and smarter chemistry. Being one of the largest and leading technology companies in the world, Apple is dedicated to 'reducing our emissions by 75 percent compared with 2015, and then investing in carbon removal solutions for the remaining emissions'. They aim to create



their products and packaging with only recycled and renewable materials, eliminating all plastic use by 2025. So far, Apple have managed to eliminate toxic materials from the production of their iPhones. Since the beginning of the operation, BFRs, PVC, mercury, cadmium and lead from iPhone batteries have been scrapped from production, but how has this helped the environment since then?

*"Equity also drives the mission of our Power for Impact initiative, which we launched to help connect underserved communities with clean, renewable energy. In communities from South Africa to the Philippines, from Thailand to Israel, we've helped bring solar and wind energy to schools, hospitals, and rural communities."*

Apple has so far released a series of initiatives that have contributed to the sustainability of the carbon footprint of mobile communication. Since 2018, Apple has obtained all its renewable energy from a 200-megawatt wind farm located

in Montague, Oregon. It powers all its facilities, such as offices, data centres, and retail stores, and is successfully one of its biggest projects to date. Using only 100% renewable energy, it allows for a purer environment, powerful economy and a reduction of carbon emissions. This project has influenced the other 10 supporting renewable electricity projects also located around the globe. They seek to create a balanced and environmentally friendly initiative which is aimed to create healthy economic growth and social impact.

However, the main issue in the production of mobile phones, is the lifespan. YouGov have conducted research and surveyed different age groups concluding with '45% of smartphone owners would rather upgrade than repair their phone with cost of repairs being the main culprit.' Every year, Apple sets out to introduce and newer and improved version of the latest iPhone, but overtime physical damage and other factors will force users to upgrade.

Apple's annual goal to create a current iPhone has left smartphone manufacturing be at fault for 70% of Apple's carbon emission released into the atmosphere. As iPhone models become more contemporary, and the cost for materials and fragile design are developed, it would overall be cheaper and more convenient to purchase a newer phone model.

Apple is constantly trying out contemporary and introducing sustainable and green initiatives. However, since being named as one of the most successful technology companies in the world, it is bound to leave a significant trace of carbon footprint, despite its' best efforts. Nevertheless, Apple still is very aware of the impact its company makes on the world and tries its best to create a toxic free product which can be distributed and manufactured in a way that is non-hazardous for the environment.

#### References:

Antonia. (2020, March 4). Are iPhones Bad for the Environment? Compare and Recycle Blog - Mobile Phone News, Leaks and Cost Cutting Tips. <https://www.compareandrecycle.co.uk/blog/are-iphones-bad-for-the-environment>

Apple Inc. (2022). Environmental Progress Report. In Apple (pp. 5–7). [https://www.apple.com/au/environment/pdf/Apple\\_Environmental\\_Progress\\_Report\\_2022.pdf](https://www.apple.com/au/environment/pdf/Apple_Environmental_Progress_Report_2022.pdf)

Nolsoe, E., & YouGov. (2020, May 7). 45% of smartphone owners would rather upgrade than repair | YouGov. Yougov.co.uk. <https://yougov.co.uk/topics/technology/articles-reports/2020/05/07/45-smartphone-owners-would-rather-upgrade-repair>

Press Release. (2020, July 21). Apple commits to be 100 percent carbon neutral for its supply chain and products by 2030. Apple Newsroom. <https://www.apple.com/au/newsroom/2020/07/apple-commits-to-be-100-percent-carbon-neutral-for-its-supply-chain-and-products-by-2030/>

Ranking of iPhone Pro Max models and their carbon emissions

