E-waste is growing — because of software!



44.7 million metric tons of e-waste were generated in 2016 — equivalent to 4,500 Eiffel Towers, which, when stacked, is 17 times higher than Mount Everest.



E-waste is the **fastest-growing** waste stream in the world.¹²



Although e-waste makes up only 2% of trash in landfills, it contributes **70% of toxic waste.**³



E-waste is often **driven by software.** In 2025, end of support for Windows 10 is estimated to make e-waste out of 250 million devices.⁴



Continuing to use out-of-date software is a security risk!

Sources

- ¹ World Economic Forum (2019), "A New Circular Vision for Electronics, Time for a Global Reboot"
- United Nations University (2017), "E-waste Rises
 by Weight in 2 Years as Incomes Rise, Prices
 Fall"
- Weee Forum (2021), "International E-waste Day:57.3M Tonnes Expected in 2021"
- ⁴ Canalys (2023), "The end of Windows 10 support could turn 240 million PCs into e-waste"
- ⁵ Apple (2019), "Environmental Responsibility Report: 2019 Progress Report, covering fiscal year 2018"
- ⁶ UBA (2012), "Zeitlich optimierter Einsatz eines Notebooks unter ökologischen Gesichtspunkten"
- ⁷ Free Software Foundation Europe (accessed 2024), "What is Free Software"
- ⁸ CE Delft (2021), "Carbon footprint of unwanted data-use by smartphones: An analysis for the EU"

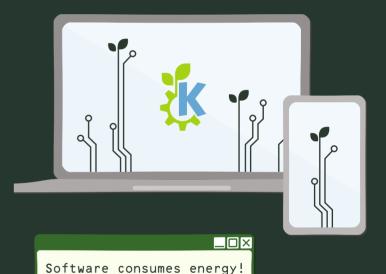




This project is funded by the Federal Environment Agency (UBA) and the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV). The funds are made available by resolution of the German Bundestag. The publisher is responsible for the content of this publication.

Environmentally-Friendly Software?!

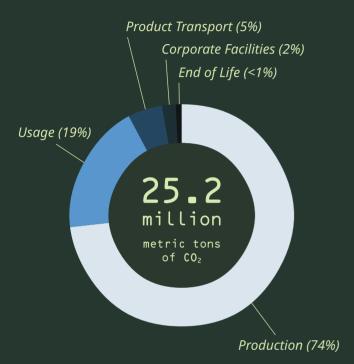
Software can render a device obsolete!



You can opt green today!

For the efficient and long-term use of hardware, install sustainable and independent Free & Open Source Software

The most environmentallyfriendly device is the one you already own!



Apple's carbon footprint (2019)



Production of a device accounts for 50-80% of CO₂ emissions over the device's lifecycle.⁵⁶



A German Environment Report estimates you'd need to use a computer for **30+ years** before efficiency gains in newly-produced devices justify their purchase.⁶

What's FOSS* got to do with sustainability?



FOSS guarantees **user autonomy** & transparency by design.



Remove vendor dependencies: **use your device how you want for as long as you want!**⁷



Avoid software bloat and stop unwanted ads from **consuming energy unnecessarily.**8



Use software designed for the hardware you have — lean, efficient FOSS runs on devices that are decades old!

* Free & Open Source Software (FOSS) is software that anyone can use, study, share, and improve.

Unlike proprietary software, FOSS allows you to take full ownership of your software, and thus hardware. Software freedom can make premature hardware obsolescence a thing of the past.

Combat e-waste, install FOSS!

You don't need a new computer to use secure, up-to-date software — **you just need the right software!**

PCs

<u>Newer hardware</u>

Kubuntu Ubuntu Linux Mint

Older hardware (10+ v)

Lubuntu Xubuntu

...and more!

Install Blue Angel eco-certified software

Smartphones/Tablets

<u>Android/Linux</u>

LineageOS CalyxOS /e/OS

Install FOSS apps from the F-Droid app store

GNU/Linux
postmarketOS with
Plasma Mobile
Phosh
Ubuntu Touch

...and more!

Spotlight: Okular

KDE's PDF and universal document reader Okular is the first ever Blue Angel eco-certified software!

Read more at <u>okular.kde.org/eco</u>



www.blauer-engel.de/uz215

- energieeffizient
- ressourcenschonend
- transparente Schnittstellen