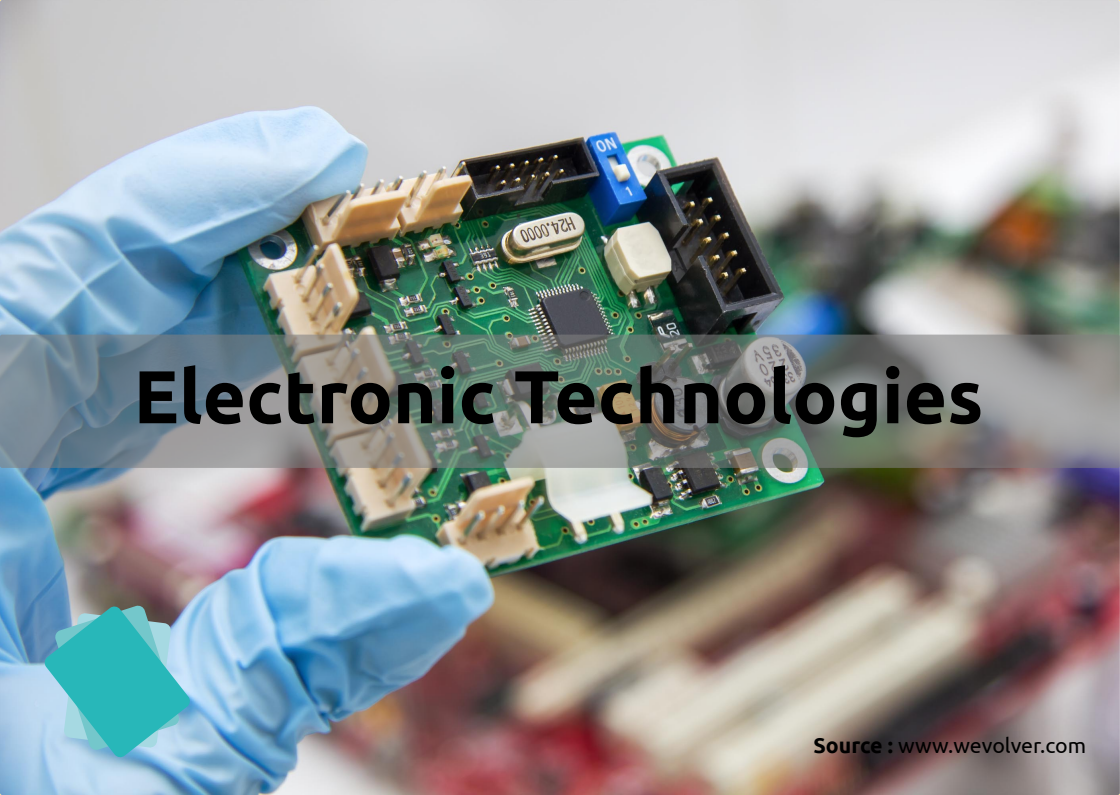


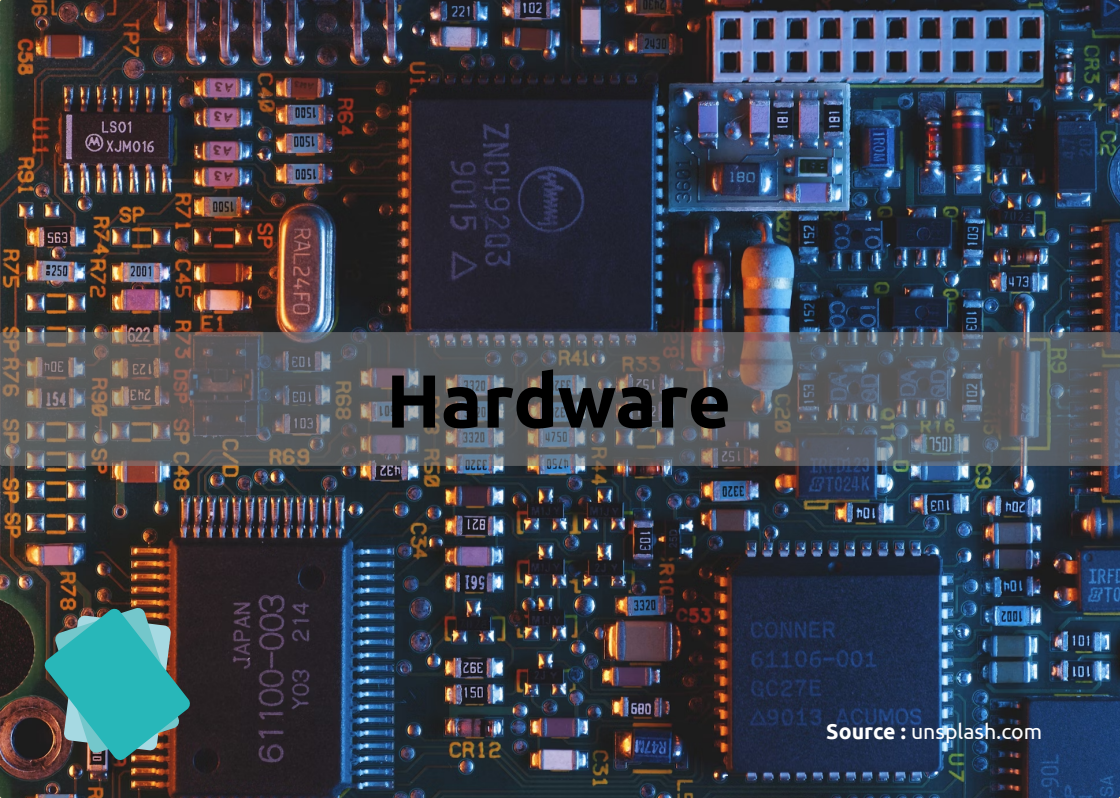
Electronic Technologies

Source : www.wevolver.com

Electronic Technologies

Electronic technologies encompass all technologies reliant on electronics for operation, including computers and modern cars.

These are the most polluting types of technologies at the moment.


Hardware
Source : unsplash.com

Hardware

Hardware refers to the physical components of a computer or electronic system whose production entails an environmental cost.

Source : impactco2.ademe.fr/numerique

CL!MATE FRESK
All the cards are in your hands!

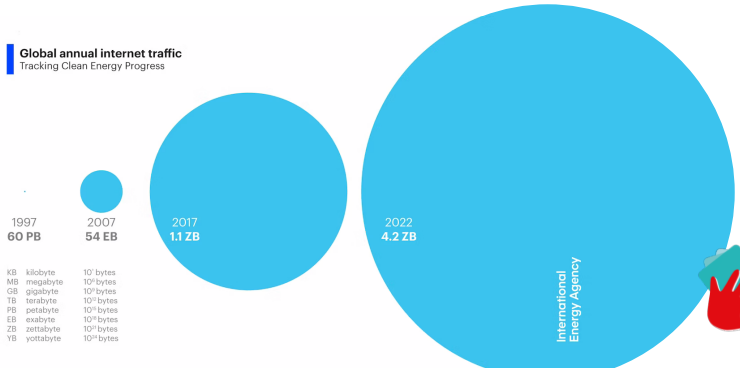
Digital Data

Source : lejournal.cnrs.fr

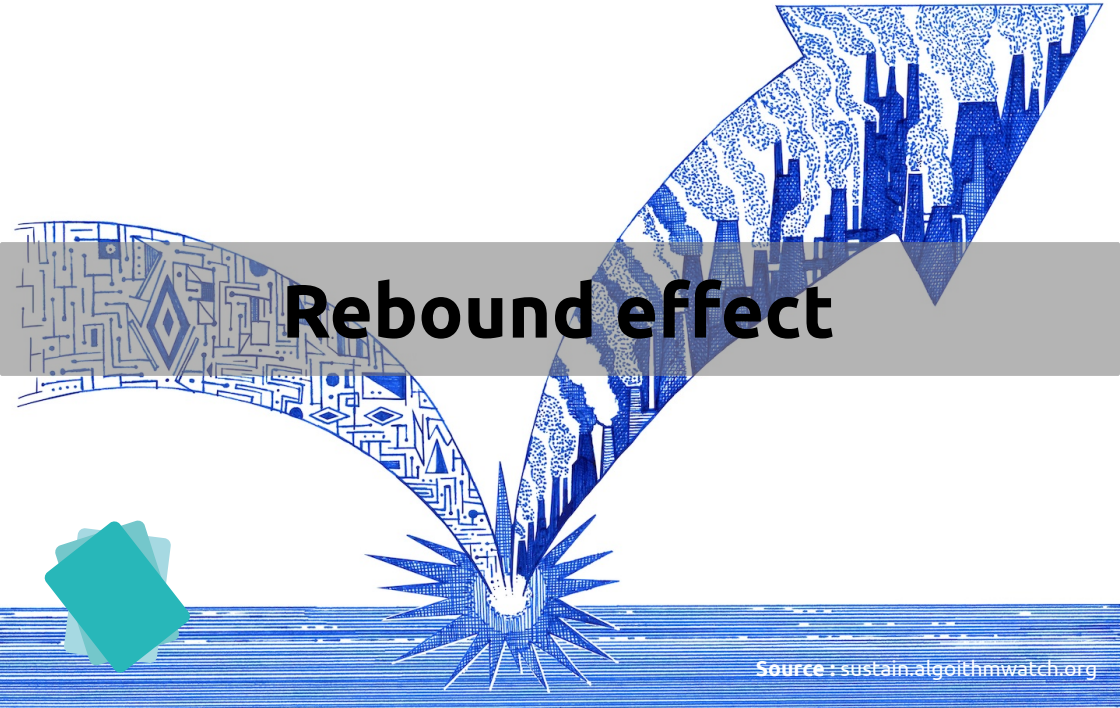
Digital Data

Digital data is information that is stored and processed in a digital format, such as photos, videos, emails, and documents. These data can be accessed **online** or offline.

Digital data requires a significant infrastructure, including **data centres**, which have a considerable environmental impact.



Rebound effect

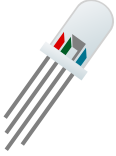


Source : sustain.algoithmwatch.org

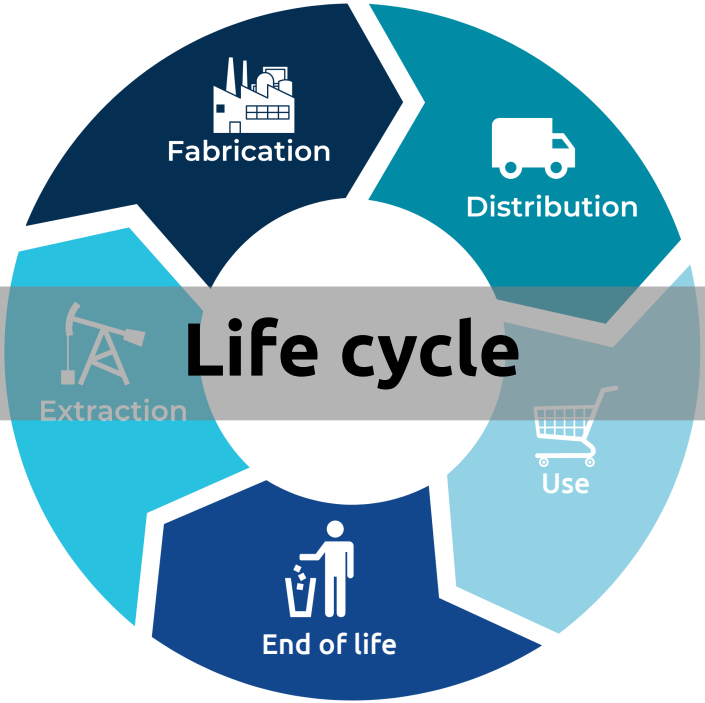
Rebound effect

The rebound effect occurs when a highly efficient product gains popularity in the market, replacing less efficient alternatives. However, the **increased demand** for the efficient product can lead to **greater overall environmental** impact than the products it replaced.

The classic example is the apparition of **low-consumption LED lights**, which are very cheap, resulting in an **overutilization** of the product and an **increase** of the **energy consumption.**



Life cycle



Life cycle

The product **lifecycle** of technological goods encompasses the various stages, from conception to disposal, and influences their overall environmental impact.

Life cycle assessment measures the environmental impact of a product or service throughout its entire life cycle, from raw material extraction to disposal.

Source : globalclimateinitiatives.com

Digital ecology

1 

Delete and unsubscribe from unwanted newsletters and spam.
Let *Cleanfox* help you!

2 

Turn off windows that you do not use.
Check *The Great Suspender*!

3 

Opt for a smartphone with a small screen or a fairphone.

4 

Use an ecological and responsible search engine.
E.g *Ecosia*, *Qwant* or *Lilo*

5 

Type directly the website url in the search bar if you know it.

6 

Disable notifications when not (really) necessary.

7 

Unplug your phone when it's fully charged.

8 

Privilege collaborative platforms to communicate with friends and at work.
E.g *Whatsapp* and *Workplace*

9 

Delete regularly apps you do not use.

Source : medium.com

Digital ecology

Digital ecology is defined here as the solutions that numerical actors (consumers, developers…) can use to **reduce the impact** of technologies on the **environment**.

For instance, **streaming** represents **100 millions tons** of CO2 per year and is estimated to take about 80% of the bandwidth. A partial solution is to reduce the quality of the videos and movies.

CL!MATE FRESK
All the cards are in your hands!

Low Tech

Source : wiki.lowtechlab.org

Low Tech

Low tech refers to simple and **sustainable** solutions that prioritize **functionality** and **accessibility** over complex technology. These approaches, using locally available resources, promote self-sufficiency and environmental conservation.

Ram pumps, for example, use complex fluid mechanics principles to draw in water **without the need for electricity or fuel.**

Visit lowtechlab.org for more !


Digital Polution
Google
Source : blog.offiscenie.fr

Digital Polution

Digital pollution refers to the various **environmental impacts** caused by the digital sector. These include greenhouse gas emissions, chemical contamination, the generation of electronic waste, and negative effects on biodiversity. Digital pollution refers to the various environmental impacts caused by the digital sector.

3.8% is the proportion of greenhouse gases caused by digital technology


E-Waste
Source : greenpeace.org

E-Waste

E-waste, short for electronic waste, encompasses all discarded or obsolete electronic devices that have not been recycled. It poses a significant **pollution** threat due to the harmful components present in these devices, which can negatively **impact biodiversity.**

62 Mt of e-waste was produced in 2022,
Up 82% from 2010


Source : gesrepair.com
Built-in obsolescence

Built-in obsolescence

Planned obsolescence is a marketing strategy that involves designing products with a deliberately **limited lifespan.** This practice forces consumers to buy new products more frequently, which boosts sales and profits for businesses. However, it also leads to **overconsumption** of materials and an increase in waste and pollution.

1 year is the lifespan of 33% of smartphones !

Consumerism

Source : unsplash.com

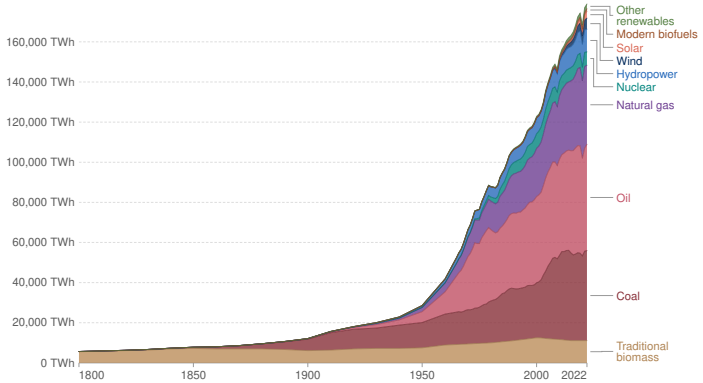
Consumerism

In a **consumer-driven** society shaped by **capitalism**, the impulse for constant **consumption** often eclipses the value and lifespan of existing goods. This results in premature discarding of products, contributing to rampant **overproduction**. This relentless pursuit of new purchases fuels a cycle of consumption that prioritizes novelty over sustainability and ecological responsibility, exacerbating environmental challenges.

Electricity consumption

Source : unsplash.com

Electricity consumption



Electronics technologies are responsible for almost all **electricity consumption.**

CL!MATE FRESK

All the cards are in your hands!

Climate impact

Source : unsplash.com

Climate impact

The widespread use of electronic and digital technologies **leads to climate change** due to **emissions**, **energy use**, **deforestation** for resources, and other environmental impacts.