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**News release**

**For release**
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# First national study on the environmental impact of digital technologies in Switzerland

## A call to action for a more responsible digital world

**Lausanne, September 2025** – For the first time, a study conducted by the impact startup **Resilio** in partnership with Enterprise for Society Centre (EPFL, Unil and IMD) and 20 other organisations unveils the environmental footprint of the digital sector in Switzerland. Like the IPCC reports, this **scientific study** offers a quantified, accessible and operational inventory for **political decision-makers**, **companies**, and **citizens**.

**Study webpage:** sustainableit.ch

## Digital technology is a heavyweight: unprecedented figures for Switzerland

Digital technology plays a complex role: although it seems immaterial, it contributes significantly to the pollution and depletion of natural resources. Until now, Switzerland had to manage with figures extrapolated from the international market.

This study marks a **national first** and reveals that:

- The **Swiss digital sector consumes 12%** of the country's electricity, i.e. around **6.9 TWh**, the equivalent of 1.4 million households;
- **99%** of Swiss citizens are active Internet users, spending an average of **5 hours and 32 minutes per day online;**
- The digital sector is also responsible for **2% of the country's greenhouse gas emissions**, that's as much as **40% of the footprint of all flights departing from Switzerland;**
- In 2024, **user equipment accounts for 66% of the footprint**, but **data centres will become the majority by 2035** (56%).

Also, the study raises serious questions about the **recyclability** of equipment, and the **dependency** of an increasingly digitised economy on critical sectors located abroad... with strong implications of international reliance.

> "Buying a state-of-the-art smartphone is far from being insignificant from an environmental stand point! **Reducing the non-mandatory replacement** of our equipment and preferring **repairable and second-hand** purchase is advantageous for the wallet as well as for the environment. The high number of devices used (screens, smartphones, laptops, TVs, tablets etc.) revealed by the study reflects the high level of digitalisation and national consumption."
>
> — *Louise Aubet, co-author of the report*

In addition, the race for AI, and the explosion of **data centres**, in which Switzerland **is investing massively**, promise a very strong increase in the sector's footprint: both in terms of energy consumption, floor space, and even water.

> "Switzerland is investing heavily in AI and data centres: water, renewable electricity, living space and the finances of our pension funds. For what uses, with what risk and dependencies? Given the amount of investment, the question must be asked."
> — *Amael Parreaux-Ey, CEO of Resilio*

## A footprint that will grow rapidly by 2035

This trend can be explained by population growth and the development of new uses (generative artificial intelligence, virtual reality, etc.).

These are the results of a rigorous analysis conducted by the authors of the study (Louis Guégan, Louise Aubet and Léa Bitard), submitted to a panel of international experts.

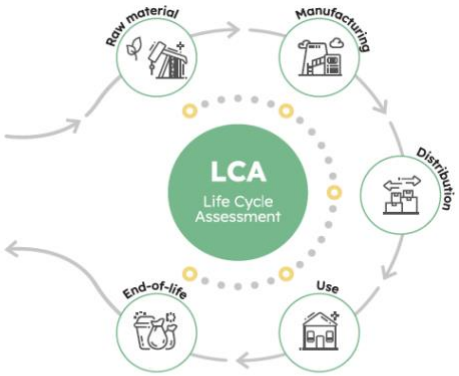


Figure 1- Diagram of life cycle stages usually considered in LCA

The methodology is based on **Life Cycle Assessment (LCA),** an approach to assess the environmental impacts of a system throughout its life cycle and according to multiple environmental indicators, such as the use of ores and metals (186 tonnes of antimony equivalent), greenhouse gas emissions (1.99 million tonnes of $CO_2$ equivalent) and the ecotoxicity of freshwater (65 billion CTUe).

The study takes into account all digital equipment and infrastructure used in Switzerland, for personal and professional purposes in 2024, as well as projections to 2035.

It is available in several formats:

- A **concise 2-page summary for** public decision-makers, leaders and citizens;

- A **white paper** that explains the methodology, results, recommendations and conclusions, co-authored with **Enterprise for Society (E4S) centre** (EPFL, Unil and IMD);
- A **full report** of the study available in open access, in partnership with the **International Telecommunication Union (ITU),** will be published in autumn**.**

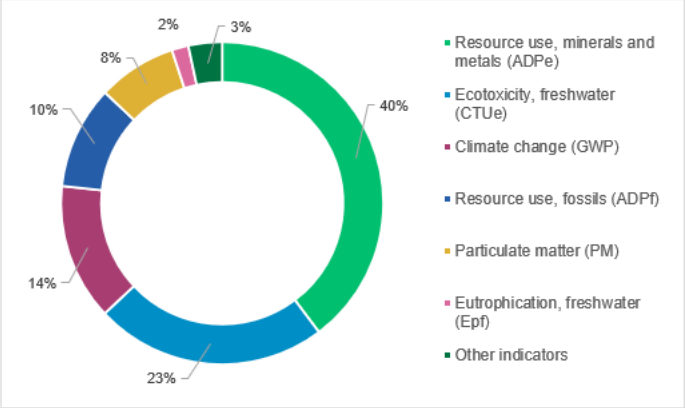


Figure 2- Contribution of the environmental indicators to the footprint

## For whom? And why now?

Faced with the climate emergency and the rapid growth of digital consumption in all areas, this study aims to equip **public authorities**, **economic players** and Swiss **citizens** to guide policies and behaviours towards a more **sober**, **circular** and **resilient digital world**.

> "Digital technology is both a solution and a challenge for the ecological transition. Above all, this study is an informative tool to take the right decisions." — *Louis Guégan, co-author of the report*

## 3 key recommendations

The study makes **concrete recommendations** for each actor:

- **Government**: Improve local e-waste collection and recycling.
- **Enterprises**: Adopt a BYOD (Bring Your Own Device) approach to combine personal and business use of equipment, reducing its total footprint.
- **Citizens and consumers**: Favor durable, repairable and second-hand equipment: more economical and more resilient.

## A collective of organisations mobilised to carry out the study

The study is the result of a **collective effort** and in particular a large number of academic and institutional reviewers who kindly agreed to review and comment on the study; the partners E4S

and ITU; the support of Swisscom, Infomaniak and the Canton of Vaud who contributed to the data collection; the companies Exoscale, Hidora, Nexthink, Orange Business Spark IT, and the Swiss Institute for Sustainable IT who offered their financial support; the HEIG VD, Be social, 42 Lausanne, CH Open and Swiss ICT who contributed to the communication and dissemination of the study.

## Next steps

The **white paper**, the **complete scientific study** and an **educational infographic** are available on the sustainableit.ch study webpage, and in 4 languages (French, English, German and Italian).

**Kick-off webinars** and several **public presentations** are also planned.
Dates:

- September 3 - Green Economy Symposium - Winterthur
- September 10 - Showcase - Lausanne
- October 1 - Swiss IT Forum – Geneva
- October & November- Upcoming webinar dates
- November 12 - Swiss Impact Forum - Bern
- November 18 - DynaCon - Bern

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## By the way

The International Telecommunication Union (ITU) is a United Nations specialized agency for digital technologies that strives to leverage innovation and connect everyone to ensure a better future for all.

Enterprise for Society (E4S) is a joint initiative of the University of Lausanne (UNIL-HEC), IMD and EPFL. It promotes a more **sustainable**, **resilient**, and **inclusive economy**.

Resilio is a Swiss impact startup that supports organisations towards responsible and circular digital technology.

## Details about the method:

*The study is based on the rigorous **Life Cycle Assessment (LCA)** method, a recognized approach that makes it possible to comprehensively assess the environmental impacts of a product or service throughout its life cycle, from the extraction of raw materials to the end of its life. To ensure the representativeness and reliability of the results, the authors combined data from public reports as well as field data provided by several large Swiss companies with data from their own databases, the result of many years of expertise in the field of responsible digital technology. This hybrid approach ensures an accurate and contextualized assessment of the impacts of digital technology on a national scale.*