DIGITAL RESET

« Redirecting Technologies for the Deep Sustainability Transformation

Summary

Governments around the world, as well as the European Union and United Nations organisations, are currently putting forward new initiatives to govern digital technologies and media infrastructures. However, most of these policy initiatives disregard the broader implications of digitalisation for environmental sustainability and social justice.

This report argues that governing the megatrend of digitalisation must step up to today's societal challenges. Runaway climate change, biodiversity loss, increasing social polarisation and an erosion of democracy require swift and decisive action. The state of scientific knowledge demonstrates that digitalisation, in its current and mainstream form, does not deliver solutions and that incremental changes are insufficient to remedy this situation. What is needed, therefore, is a Digital Reset: a fundamental redirection of the purpose of digital technologies towards a deep sustainability transformation. To this end, governance should follow several principles: Technologies should be built according to **regenerative designs** and pursue **system innovations** that advance **circularity** and **sufficiency**, improve economic **resilience**, and foster digital **sovereignty** and social **equity**.

The report details how the principles can guide the use of digital technologies for deep sustainability transformations in the following sectors:

- In **agriculture**, digital technologies can support a transformation towards locally adapted and ecological farming practices rather than optimising high-impact industrial monocultures.

- In **mobility**, governance should responsibly open up data and code and advance those applications and platforms that foster low-carbon multi-modal mobility rather than high-tech automobile transportation.

- In **industry**, digital technologies can foster resilient and circular production patterns rather than prolong growth-dependent linear economies.

- In the **energy** sector, policymaking should improve the use of digitalisation to support distributed systems based on 100% renewable energy carriers.

- In the **building** sector, fostering a new data culture can decrease demand for new construction, reduce energy consumption in the operation of buildings and facilitate circularity in design and refurbishment.

- Regarding the general **consumption** of goods and services, policies should mitigate the potential of new digital marketing to spur overconsumption, foster new technologies for sufficiency-oriented consumption habits and move towards greener products and services.

Three requirements must be met for digitalisation to work for sustainability:

- The social and environmental impacts of producing and operating **digital devices, infrastructures and data centres** must be reduced. To make a difference in the short term, this report presents a combined strategy for digital sufficiency, repairability, circularity, and efficiency.

- The growth-oriented **business models of Big Tech companies** must be controlled and eventually replaced by business models that are oriented towards the common good. This report points out three policy pathways that can initiate this transition.

- The governance of **data and artificial intelligence** needs to actively pursue an information-based circular economy. This report shows which new institutions are required, and which policies can put data and AI in the service of sustainability.

A successful redirection of digitalisation requires decisive policy action and a clear vision of the role of digital technologies for the realisation of decent lives for all people within planetary boundaries.

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