



# OCP

FUTURE  
TECHNOLOGIES  
SYMPOSIUM

## OCP Global Summit

November 8, 2021 | San Jose, CA

# Sustainability-as-a-Service: A new IT hardware business model for the 21<sup>st</sup> century

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$$\frac{\text{Performance + Reliability}}{\text{Competitive Cost}} =$$



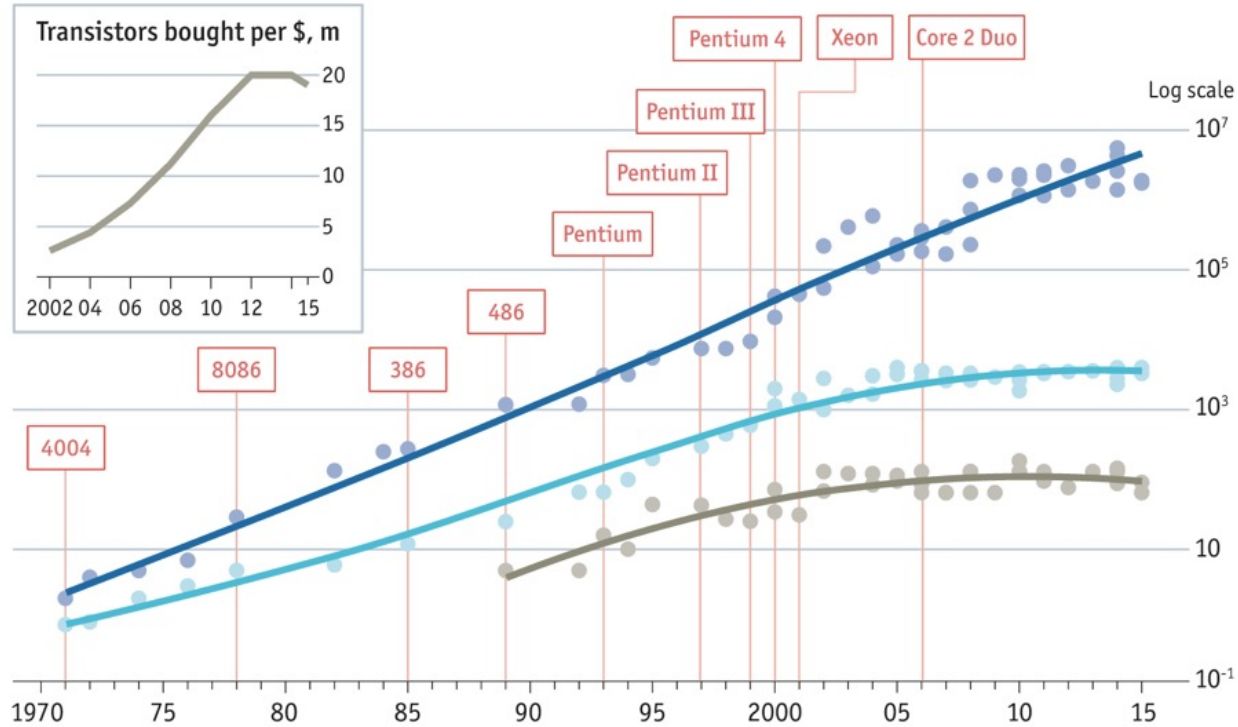
# Stuttering

● Transistors per chip, '000

● Clock speed (max), MHz

● Thermal design power\*, w

□ Chip introduction dates, selected



Sources: Intel; press reports; Bob Colwell; Linin Group; IB Consulting; *The Economist*

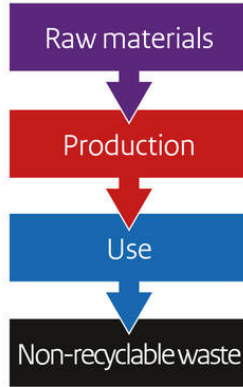
\*Maximum safe power consumption

Source

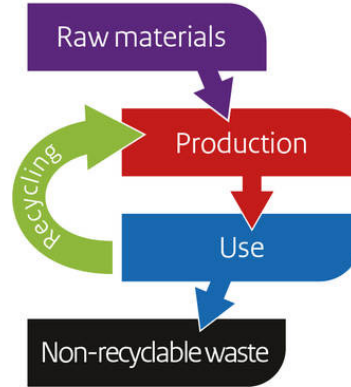
Why haven't upgrade cycles been prolonged as well?

# From a linear to a circular economy

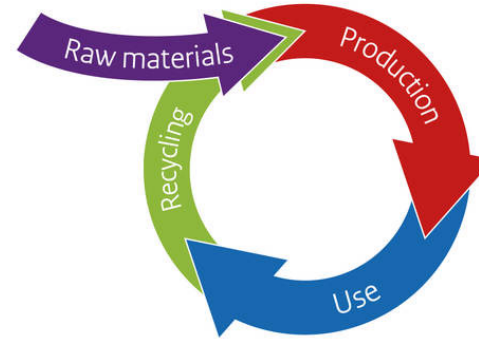
Linear economy



Reuse economy

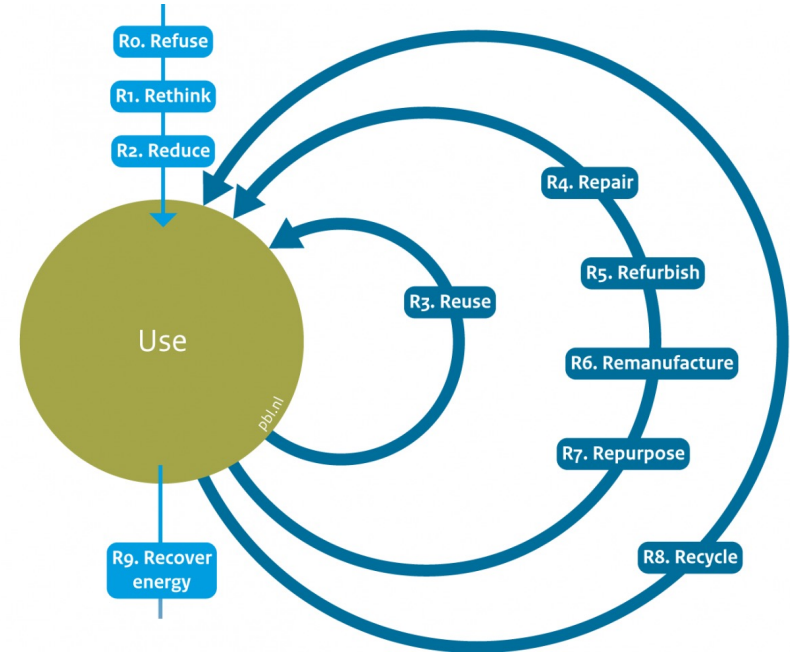


Circular economy



Source

- Repairability
- Firmware support
- Greater transparency
- New policy & regulation

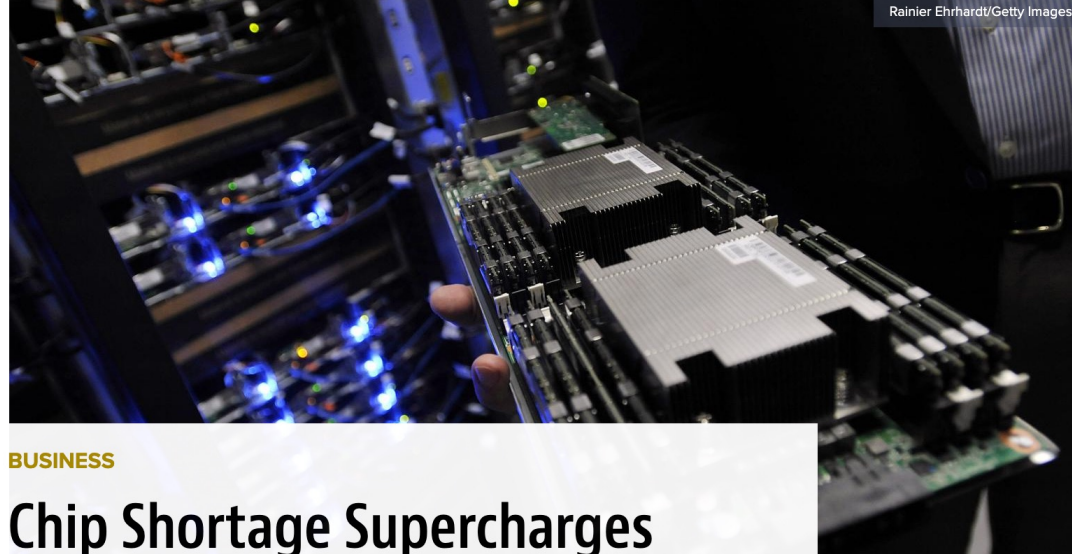


Source

OK, we need a circular  
economy – but how?



# From threat to (lucrative) opportunity



**BUSINESS**

# Chip Shortage Supercharges Used Data Center Hardware Sales, Says ITRenew

A server tray in Facebook's  
Forest City, North Carolina,  
data center, 2010

Hyperscalers' decommissioned gear flies off the shelves  
as soon as it's available, according to the vendor.

Yevgeniy Sverdlik | May 25, 2021

[Source](#)

# Our proposal: IT Hardware-as-a-Service

# IT Hardware-as-a-Service

1. Echoes other viable models
2. Beneficial to producers & customers
3. Creates new business opportunities
4. Significantly improves sustainability



# Four key challenges

1. Commoditization of server hardware
2. Reshaping OEM balance sheets
3. Security & data ownership
4. Innovation & research incentives



# Sustainability is good for business

## **A review of 100 studies crushes assumptions about conflict between profit and sustainability**

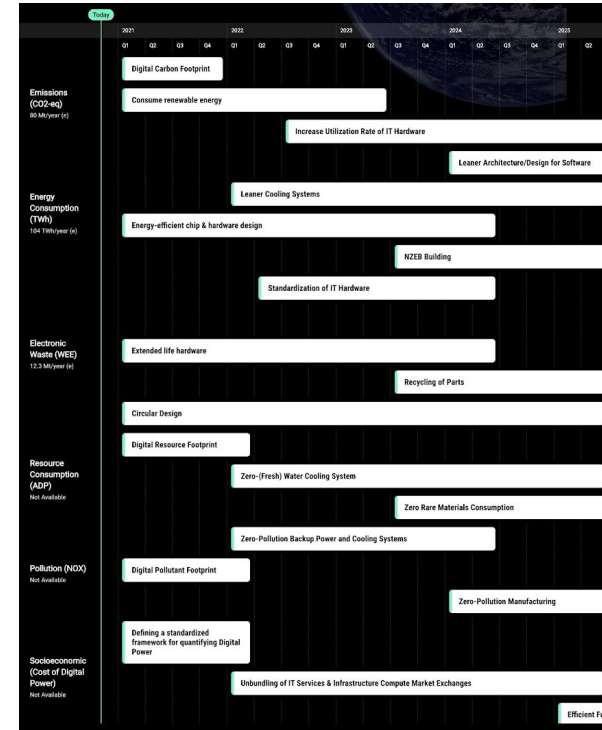
Only two studies found negative effects on the bottom line from adopting sustainability practices

[Source](#)

The SDIA is the leading platform for driving sustainability in the digital sector – will you join us?



- **Visit our booth:** C14 in the Expo Hall
- **Read more:** <https://bit.ly/OCP-SDIA>
- **Roadmap:** <https://sdialliance.org/roadmap>
- **LinkedIn:** <https://bit.ly/SDIA-LI>
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