



**DIGITAL
FOR
PLANET**

DIGITAL INNOVATION FOR SUSTAINABLE DEVELOPMENT

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AT WORK TO MAKE IT HAPPEN!

<●/> **DIGITAL
FOR
PLANET**

DIGITAL FOR PLANET –D4P

is a non-profit association that aims to grow a **strong network of individuals and organisations** at work to **develop and foster the adoption of digital technologies** that **respect and contribute to the sustainability of our planet** and are beneficial to society

#togetherisbetter **#aloneisimpossible**



> DIGITAL WITH PURPOSE

ICT FOR SUSTAINABLE DEVELOPMENT

Across several sectors - *smart energy/ grids, connected mobility, smart factories, smart buildings, smart farming, smart water*, digital technologies and solutions allow for:

- > More efficient use of resources
- > Optimisation of processes
- > Environmental impact monitoring
- > Access to essential (and not only) services, e.g., education, health care...



"ICT has the potential to maintain global CO₂ emissions at 2015 levels, decoupling the past pattern where each 1% of growth in GDP equated to an 0.5% increase in CO₂ emissions, and promote sustainable growth through 2030".

SMARTer 2030, GESI

> BUT AS WE KNOW



**DIGITAL TECHNOLOGIES AND
THEIR OVERCONSUMPTION
ARE ALSO A BIG PART OF
THE PROBLEM**

Technology drives electricity demands

- › Estimates show that ICT could consume 20% of global electricity by 2025, generating 5.5% of CO₂ emissions - with 25 billion “connected things” by 2021 (!)

Technology is damaging the environment

- › Production, use and disposal have direct effects
- › Mining rare minerals destroys natural ecosystems
- › eWASTE - 53.6 million tonnes only in 2019 (!)

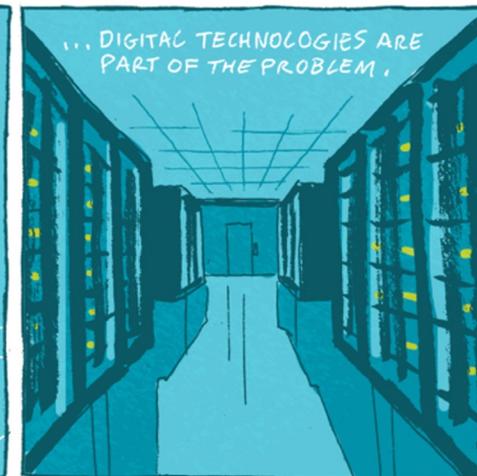
Technology is inducing overconsumption

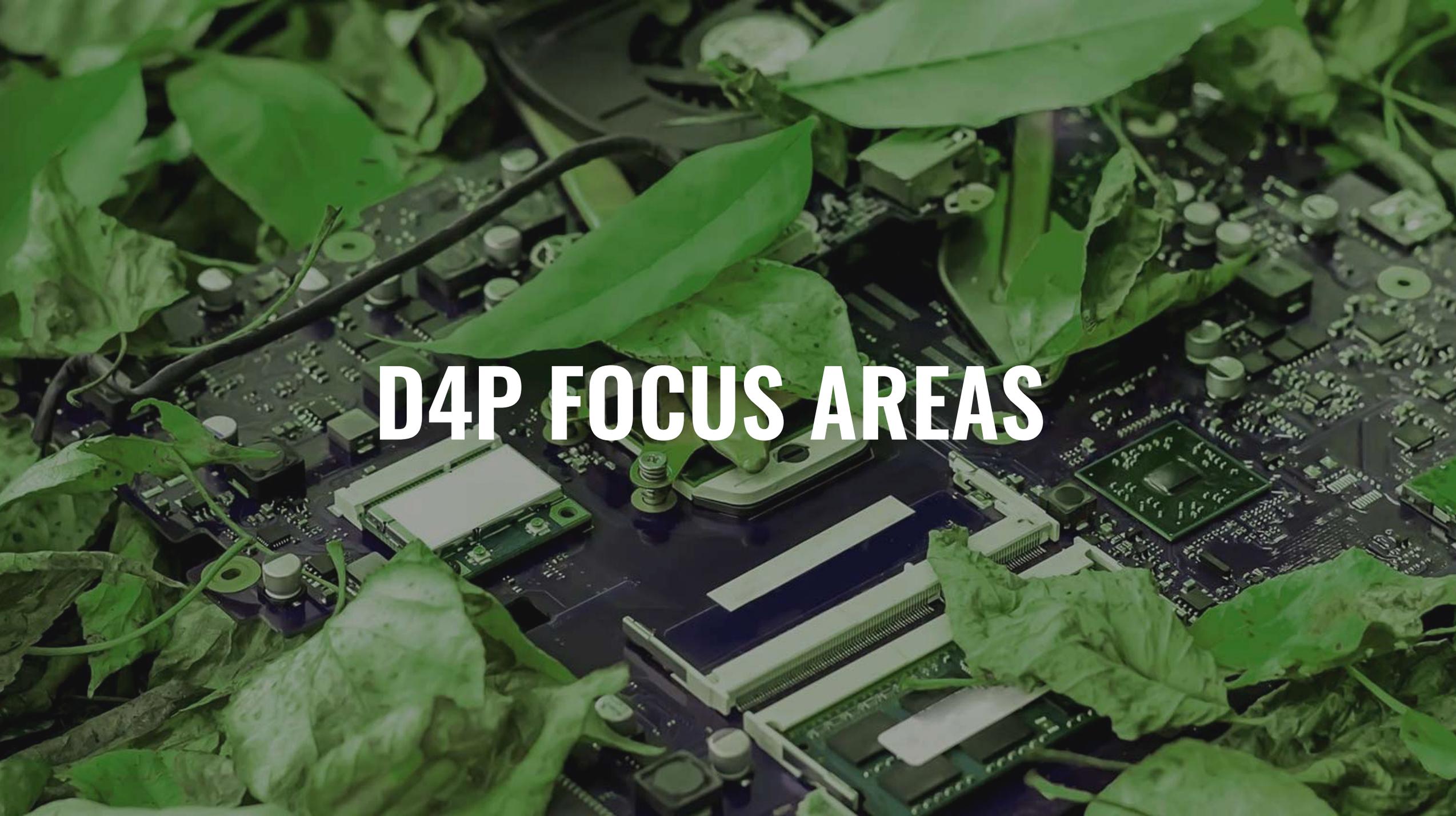
- › Enforcing culture of disposability
- › Replacement rather than repair approach
- › Software development vs. hardware upgrades

> OUR PLANET CALLS!

THE BALANCE OF POSITIVE VS NEGATIVE
OUTCOMES OF ICT DEPENDS ON
INCENTIVES AND POLICIES

WE NEED GREENING DIGITAL
TECHNOLOGIES FOR THE SUSTAINABLE
DEVELOPMENT OF OUR SOCIETY





D4P FOCUS AREAS

> D4P WORKING GROUPS

- Green Cloud-Edge-IoT Computing WG
- Climate-Neutral and Sustainable Smart Cities WG
- Sustainable Next Generation Internet WG
- Next Generation Smart Networks and Services WG



!!! AND DIGITAL FOR PLANET
IS HERE TO HELP!

> GREEN CLOUD-EDGE-IOT COMPUTING

- + All sectors of business and society will increasingly rely on the Cloud-Edge-IoT continuum
- + The ICT industry could use up to 20% of all electricity and emit up to 5.5% of the world's carbon emissions by 2025
- + **The Edge Computing promise:** decentralisation is inherently faster, greener, more private and secure
 - Reduced latency
 - Reduced energy consumption
 - Intelligence and data value creation closer to users
- + Is that all so easy? Are we ready?
- + What is the European market space?



> D4P GREEN C-E-IoT WORKING GROUPS

- + At work for development of technologies and policies to **ensure the development of an eco-friendly cloud-edge-IoT-empowered market** accessible to both public and private organisations
- + **D4P Green C-E-IoT WG** is active on:
 - Roadmap and R&I agendas definition
 - Facilitate entry points for SMEs as key market players in Europe
 - Engage experts and stakeholders from multiple industries and disciplines
 - Inject in EU Green Deal objectives / EC policies as relevant
 - Facilitate liaisons and dialogue across relevant initiatives



> CAN EUROPE MAKE THE DIFFERENCE?



- Major investments are planned for the MFF 2021-2027
- The EU Green Deal financial plans will offer many opportunities
- Across several H2020 projects, several organisations are at work for:
 - Greening ICT
 - Using ICT to green our planet
- There are a number of EU initiatives that are at work on digital sovereignty
- But we need creating stronger unity of intents at policy, regulatory, financial, research and innovation levels



D4P IN ACTION

YOUR HUB TO GREEN DIGITAL INNOVATION

- › **Boost and support the creation of a global body** facilitating dialogue and liaising with innovators, researchers and policy makers as well as with civil society players.
- › **Foster strategic road mapping, knowledge sharing and collaboration** among private, public and research institutions in the area of sustainable ICT.
- › **Increase and facilitate access to a variety of resources** – from funding to events, publications, tools... - on green ICT.
- › **Mentor and advise businesses and public institutions** on innovation road mapping and technology transfer towards sustainable ICT.
- › **Raise awareness about environmentally-friendly** digital behaviours and technologies through events, information and communication campaigns.



JOIN US!

> STAY CONNECTED



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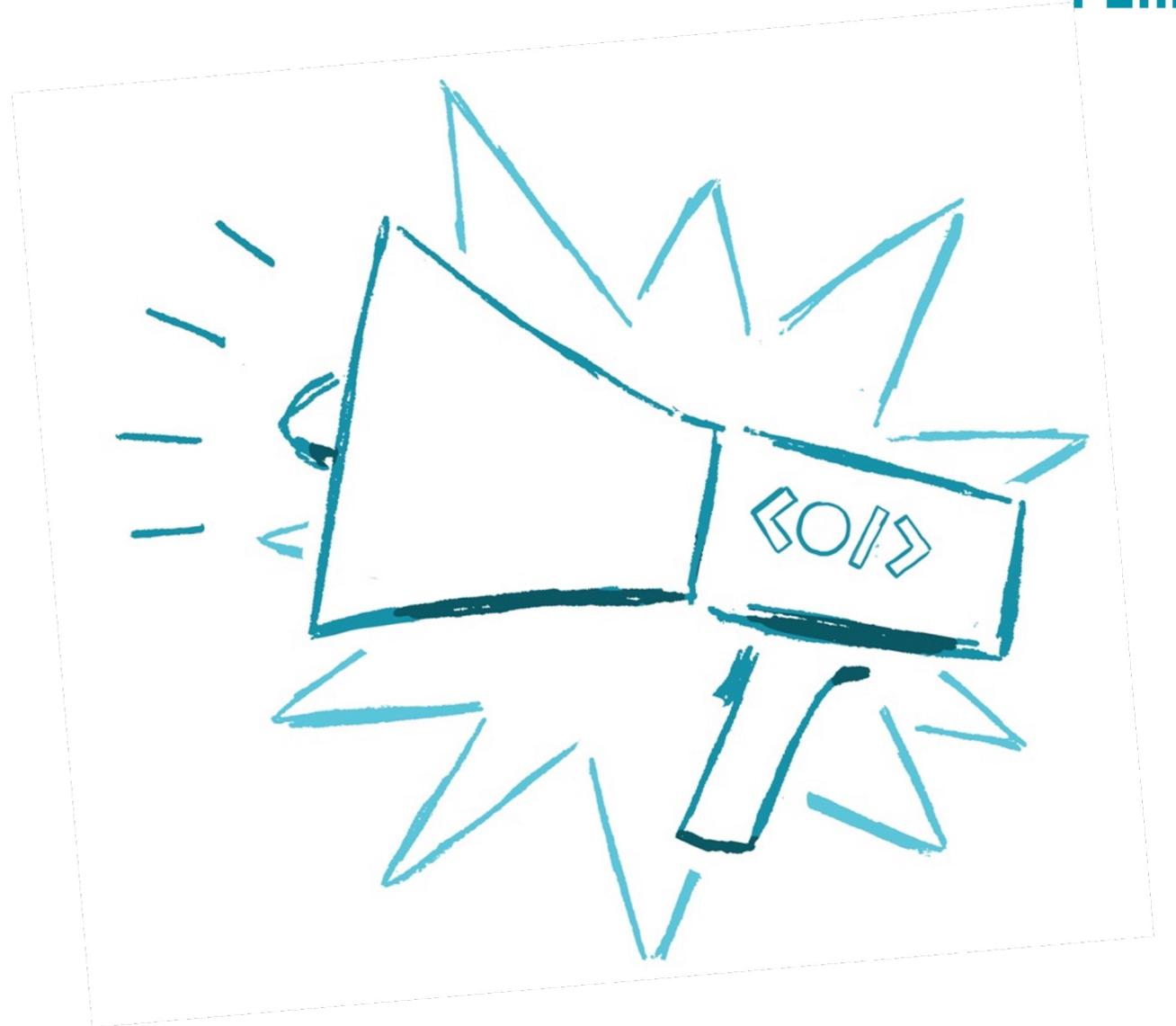
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THANK

YOU

FOR YOUR

ATTENTION!



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