DIGITAL FOR PLANET

TOWARDS ZERO POLLUTION COMMUNICATION NETWORKS

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EU GREEN WEEK 2021 PARTNER EVENT

ZERO POLLUTION #EUGreenWeek

for healthier people and planet

MARTEL innovate

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DIGITAL INNOVATION FOR SUSTAINABLE DEVELOPMENT

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WHY GREEN DIGITAL

DIGITAL WITH PURPOSE IS A NECESSITY

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DIGITAL TECHNOLOGIES POTENTIAL IS HUGE

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

- More efficient use of resources
- Optimisation of processes
- Environmental impact monitoring
- Access to essential services, e.g., education, health care...

"ICT has the potential to maintain global CO_2 emissions at 2015 levels, decoupling the past pattern where each 1% of growth in GDP equated to an 0.5% increase in CO_2 emissions, and promote sustainable growth through 2030".

SMARTer 2030, GESI

...HOWEVER, AS WE KNOW

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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 CO_2 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

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OUR PLANET CALLS!

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

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

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WHO WE ARE

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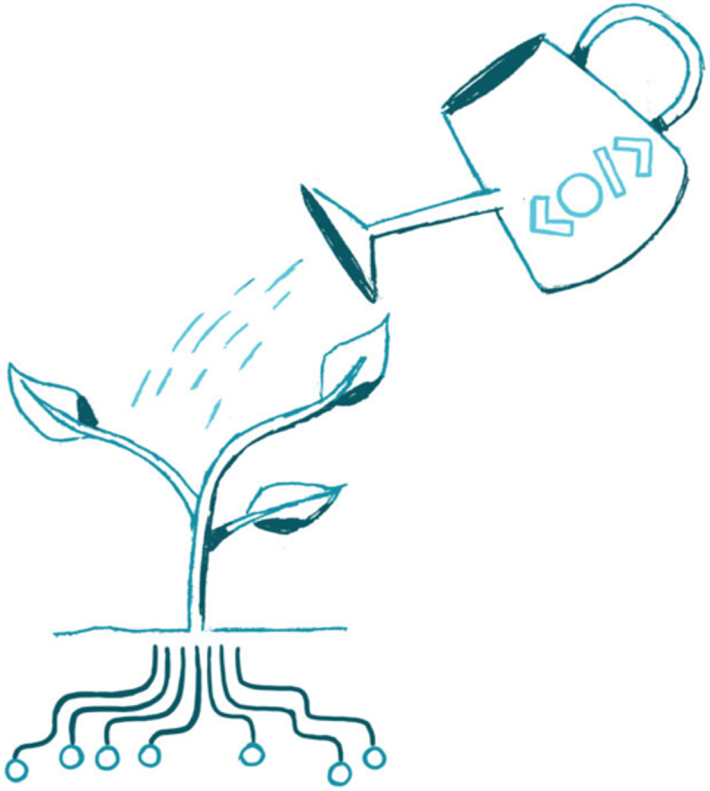
D4P IS A NON-PROFIT ASSOCIATION BASED IN SWITZERLAND THAT SUPPORTS THE **DEVELOPMENT AND ADOPTION OF GREEN DIGITAL TECHNOLOGIES AND SOLUTIONS** FOR SUSTAINABLE DEVELOPMENT OF OUR ECONOMY AND SOCIETY.

DIGITAL FOR PLANET - THE HUB TO GREEN DIGITAL INNOVATION

- **D4P IS AN OPEN NETWORK** facilitating collaboration and promoting awareness about green digital initiatives
- **D4P GATHERS KNOWLEDGE, EXPERTS AND TOOLS** to accelerate the green digital transition and save our planet
- **D4P HELPS RESEARCHERS AND INNOVATORS** to acquire funding for green digital projects and initiatives



WHAT WE DO

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D4P aims to accelerate the green digital development of our society and economy, in line with the European Green Deal ambition and the UN Sustainable Development Goals

- We help seek funds for green digital research and innovation
- We help communicate and promote green digital innovation
- We conduct research and studies, by engaging top experts
- We organise events and co-creative sessions on selected topics
- We develop roadmaps and strategic policy-driven agendas
- We connect people, communities and green digital initiatives
- We foster collaboration among our members and beyond
- We gather and openly share tools and knowledge about green deal

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D4P WORKING GROUPS

- Green Cloud-Edge-IoT Computing Working Group
  - March 11th
- Climate-Neutral and Sustainable Smart Cities Working Group
  - March 16th
- Sustainable Next Generation Internet Working Group
  - April 18th
- **Towards zero pollution communication networks WG**
  - **TODAY**

GREEN OPPORTUNITIES IN HORIZON EUROPE

THE EUROPEAN GREEN DEAL

The European Green Deal is a top EC priority. It is the plan to make the EU economy sustainable by ensuring:

- There are no net emissions of greenhouse gases by 2050
- Economic growth is decoupled from resource use
- No person and no place is left behind

THE EUROPEAN GREEN DEAL

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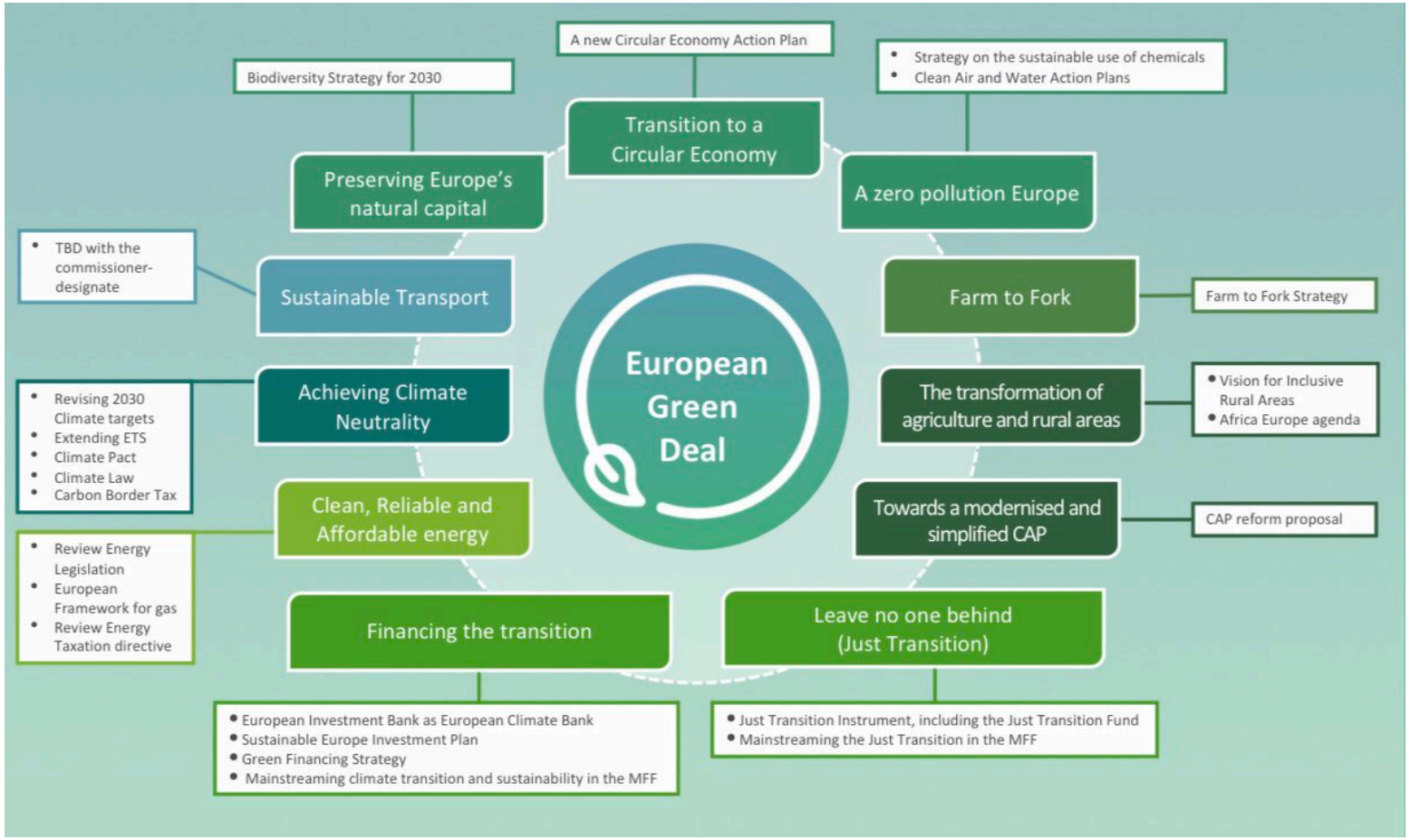
HOW TO GET THERE?

- Investing in environmentally-friendly technologies
- Supporting industry to innovate
- Rolling out cleaner, cheaper and healthier forms of private and public transport
- Decarbonising the energy sector
- Ensuring buildings are more energy efficient
- Working with international partners to improve global environmental standards
- A **European Climate Law** has been proposed - a legally binding target of net zero GHG emissions by 2050
- **Just Transition Mechanism** establishes a set of financial tools/mechanisms for most affected regions in Europe - mobilising at least €100 billion over the period 2021-2027

THE EUROPEAN GREEN DEAL PRIORITIES



FIRST HORIZON EUROPE CALLS ARE EXPECTED TO BE PUBLISHED END OF JUNE 2021 – DRAFT CIRCULATED

CLOSING END OF Q3 2021

GETTING READY FOR HORIZON EU CALLS

- **CLUSTERS of relevance**
  - 2) Culture, Creativity and Inclusive Society
  - 4) Digital Industry and Space
  - 5) Climate energy and mobility
- **MISSIONS of relevance**
  - Climate-neutral and smart cities
  - Adaptation to climate change including societal transformation
- **EIC funding** for green technologies

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ZOOMING INTO CLUSTER 4

DIGITAL, INDUSTRY AND SPACE

2021-TWIN-TRANSITION-01-08 Data-driven Distributed Industrial Environments (Made in EU Partnership) - 24 EURO million, up to 3 projects

- *Agile and secure architectures for collaborative smart nodes with decentralised or swarm intelligence… embed sensors and devices and wireless communication, both non-cellular and mobile 5G networks*

2021-DATA-01-03 Programming tools for decentralised intelligence and swarms (RIA) - 40 EURO million, up to 5 projects

- *Quick uptake of advanced 5G technologies by European manufacturing sector to support the convergence towards greater exploitation of industrial data and increase resilience and cybersecurity by design*

2021-DIGITAL-EMERGING-01-06 Advanced optical comms components – 26 Euro mil, up to 6

- *…develop ultra-dynamic photonic components and subsystems for data communication…saving energy*

2021-SPACE-01-11: End-to-end satellite communication systems and associated services (RIA) - 12 Euro mil, up to 2 projects

- *Providing connectivity to all more effectively*
- 2022-DIGITAL-EMERGING-01-30: European Enabling technologies for Beyond 5G/6G RAN disaggregated architectures (RIA)
- 2022-DIGITAL-EMERGING-01-39: Ultra low energy and secure networks (RIA)

JOIN DIGITAL FOR PLANET

THE PLANET NEEDS US ALL

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D4P WELCOMES BOTH ORGANISATIONS AND INDIVIDUALS

WHY WOULD YOU JOIN?

- **You need help greening your digital journey** – from acquiring know-how to changing processes and technological choices in your organisation
- **You need funding for green digital research & innovation** – from identifying opportunities / programmes / calls to defining strategies and executing plans
- **You want to promote green digital tech and knowledge** on a broad scale, increasing your visibility and outreach
- **You want to shape and lead the green digital future** of our economy and society, by liaising with relevant stakeholders
- **You want to become part of a growing community** – alone is impossible, together is a necessity

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MEMBERSHIP BENEFITS

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AS A MEMBER YOU...

- Get a chance to lead and shape D4P activities
- Propose, join, contribute and eventually lead D4P Working groups
- Get support to access relevant funding opportunities for green digital transformation
- Collaborate with other members for joint research and innovation proposals/projects
- Learn, contribute, influence and amplify policy and regulatory-driven efforts
- Gain visibility across D4P online and offline communications
- Obtain discounted/free passes at selected events
- Participate as speaker / panellists to D4P events
- Get privileged access to knowledge, tools and events

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MEMBERSHIP PROGRAMME

D4P Membership Programme includes **Full Membership** and **Associate Membership**

FULL MEMBERS are entities with legal personality that can participate in all the activities of the Association, have full voting rights in the General Assembly, and propose representatives that can be elected to be part of the Executive Committee.

Full members annual membership fee:

- Large industry: € 5'000
- Research/academic institutions: € 2'000
- SMEs/Start-ups: € 2'000
- Municipalities/Public authorities: € 2'000
- NGOs / Non-profit: € 1'200

ASSOCIATE MEMBERS are individuals that can participate in all the activities of the Association, including the General Assembly, without voting rights and are not eligible to be elected as part of the Executive Committee.

- Associate members annual membership fee € 250
- D4P annual membership fee for students is € 100

To apply for Membership, please fill in the form at:

https://digital4planet.org/membership-programme

Your Application will be sent to the D4P Executive Committee for approval and you will be informed about the status of your application within a short period.

STAY CONNECTED

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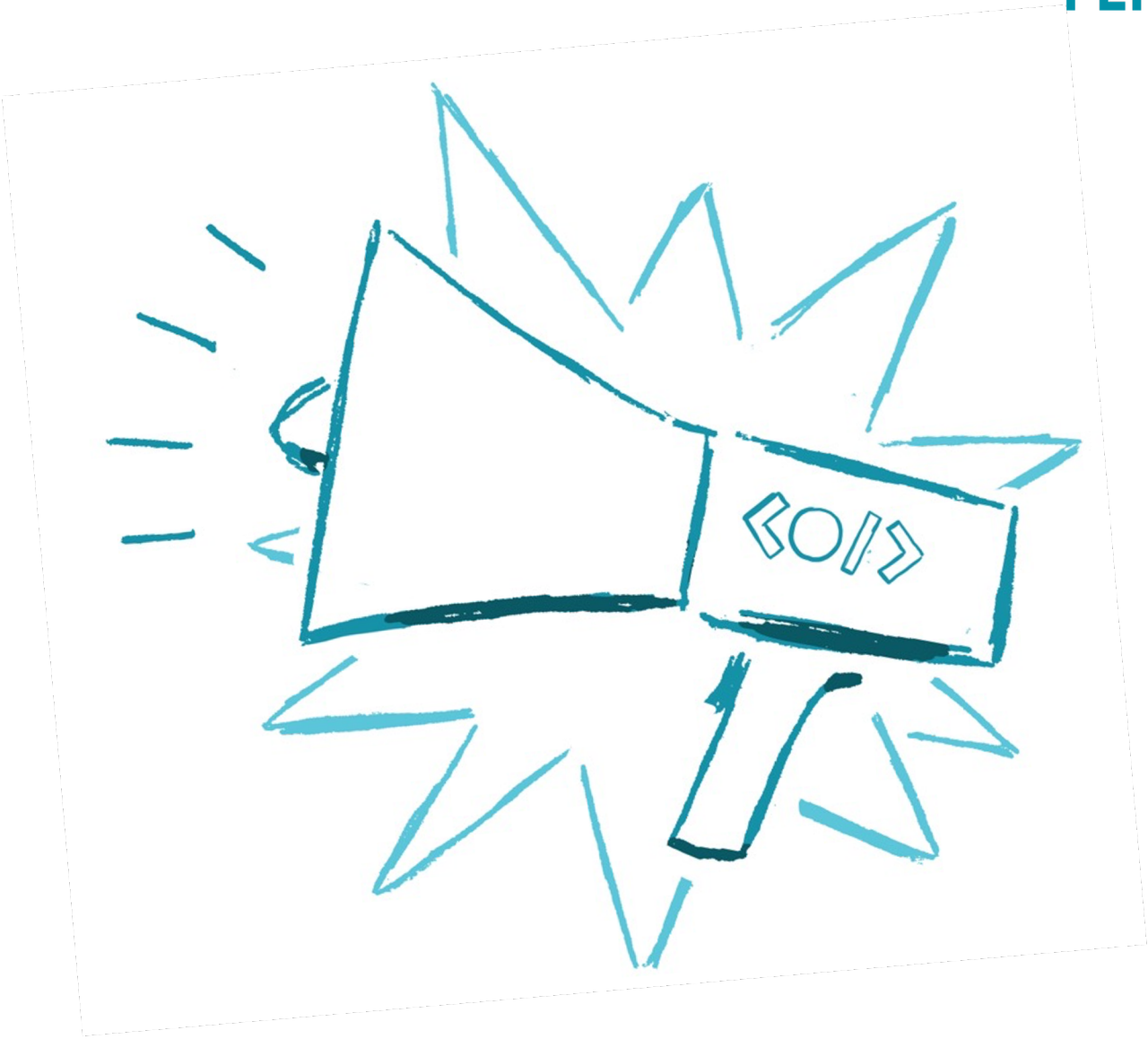

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THANK YOU FOR YOUR ATTENTION

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