Ilias Iakovidis
DG CONNECT

New Commission Priorities

- ***A European Green Deal***
- ***A Europe fit for the digital age***
- *An economy that works for people*
- *Protecting our European way of life*
- *A stronger Europe in the world*
- *A new push for European democracy*

*'..a once-in-a-generation opportunity to ensure Europe leads the way on the **twin ecological and digital transitions**'.*

Twin transition:
The nexus of Green transition & Digital Transformation

European Commission

Synergies

- **Digital transformation for climate neutrality. It can reduce 15-20% of total GHG emissions**
- **Green transition for sustainable financing and new jobs in green digital transformation**

Conflicts

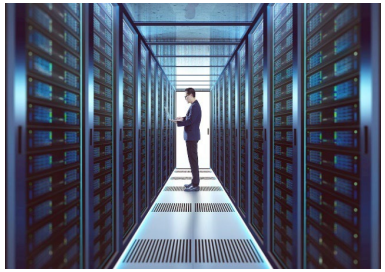
- ICT footprint: 2.1 and 3.9% of total emissions; eWaste- fastest growing waste category
- Green transition may block certain digitalisations patterns (built in obsolescence, blockchain mining, single use electronics, etc).

- Today's focus is mostly on the Conflicts because they are measurable.
- What is needed: To realise benefits of Synergies for sustainability and digital sector
- How: Science based methods to measure the contribution of digital to environment

-> leading to sustainable finance for green digital (EU Taxonomy, Green Public Proc.)

Sustainable Digital Technologies

Climate Neutral and highly energy efficient datacentres by 2030: review **JRC's CoC,** the Energy Efficiency Directive and the Taxonomy Regulation



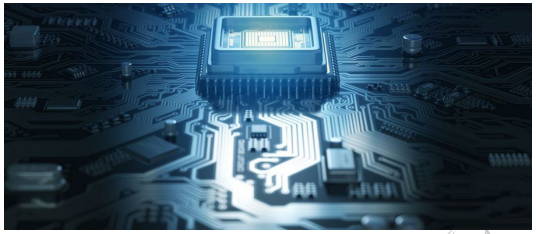
Greener electronic communications by 2030:

- Transparency measures
- Administrative incentives for green deployment

Circular Electronics Initiative: Better durability, reparability, refurbishment, recycling for consumer and industrial electronics & IoT

"Right to repair" for consumers.

Low power processors, software and AI: investing in new ultra-low-power



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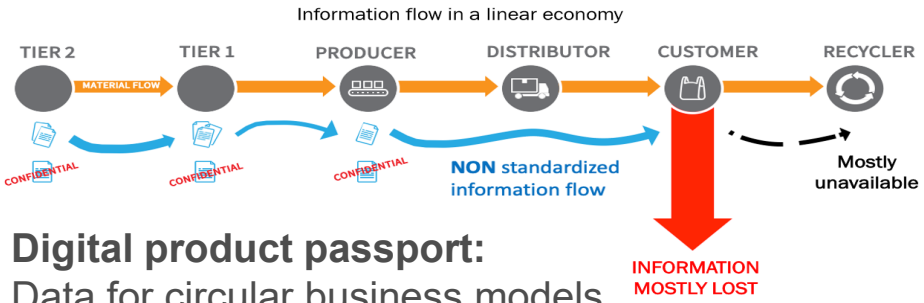
Digital contribution to environment & climate



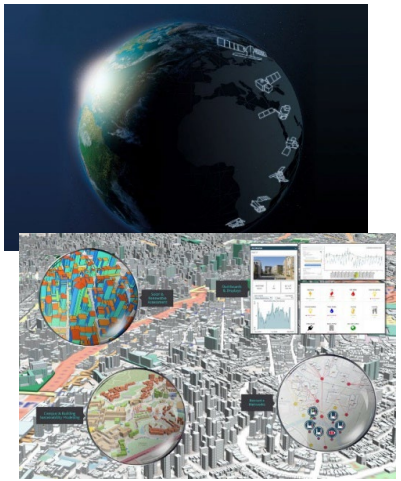
ETSI ES 203 199 V1.3.0 (2014-12)

Digital contribution: reduction by up to 15%-20% of total emissions with deployment of today's technology.

Digital product passport:
Data for circular business models, Sustainable, integrated Single Market

Smart mobility: reduction of transport emissions up to 37%; **smart buildings** with emissions reduction by 17%;

Destination Earth / digital twins: High Performance Computing, AI for better anticipation of extreme events prediction, climate modelling.



Also: smart energy networks; Precision farming, Blockchain for emissions accounting, smart cities; AI for climate; smart manufacturing;

RRPs: Missed opportunity to use digital solutions for climate action

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EU countries commit to leading the green digital transformation

24 Member States and Norway and Iceland have signed a declaration to accelerate the use of green digital technologies for the benefit of the environment. They will deploy and invest more green digital technologies to achieve climate neutrality and accelerate the green and digital transitions in priority sectors in Europe, for example by using the NextGenerationEU and InvestEU funds.


DIGITALDAY2021
March 19th

A Green and Digital Transformation of the EU

Ministerial Declaration

Smart use of clean digital technologies can serve as a key enabler for climate action, environmental sustainability, and reaching the UN Sustainable Development Goals by improving energy and resource efficiency and facilitating circular economy, reduced emissions, pollution, biodiversity loss and environmental degradation, and improved resilience to climate change impacts. At the same time, the ICT sector should **ensure the environmentally sound design and deployment of digital networks and technologies and products**. Europe can compete globally in the green tech market, particularly by promoting innovative technologies, low-power electronics and environmental sustainability of ICT solutions.

In this context, **we welcome the establishment of the European Green Digital Coalition** that will accelerate the ICT sector's transition towards a sustainable, climate neutral, circular and zero pollution economy while at the same time contributing to innovative, sustainable, inclusive and resilient society and economy. We stand ready to engage with industry to contribute to the success of the Coalition.

Our goal is to accelerate and take the global lead on the green digital transformation, building on the Council Conclusions of 17 December 2020 on "Digitalisation for the Benefit of the Environment", as well as on the Digital Strategy [COM/2020/67 final].

We therefore will work together to use the significant potential of the Recovery and Resilience Facility and the earmarking of expenditure on reforms and investments to support the mutually reinforcing green (at least 37% of funding) and digital transitions (at

Example of commitments made:

- Making **green public procurement** the default option overall;
- Support the **deployment of green digital solutions** that accelerate the decarbonisation of energy networks, enable precision farming, decrease pollution, combat the loss of biodiversity and optimise resource efficiency;
- Propose permits for deployment of networks and **data centres** that comply with the highest environmental sustainability standards;

https://digital-strategy.ec.europa.eu/en/news/eu-countries-commit-leading-green-digital-transformation

European Green Digital Coalition Declaration

36 CEOs of ICT companies, with 2040 Net Zero targets, have committed to take action in the following areas:

- Investing in the **development and deployment** of green digital solutions with significant energy and material efficiency that achieve a net positive impact in a wide range of sectors.

- Developing **methods and tools** to measure the net impact of green digital technologies on the environment and climate by joining forces with NGOs and relevant expert organizations.

- Co-creating, with representatives of others sectors, **recommendations and guidelines** for green digital transformation of these sectors that benefits environment, society and economy.

https://www.greendigitalcoalition.eu/

Green-Digital Transition
Relevant EU policies and programmes (2021-2027)

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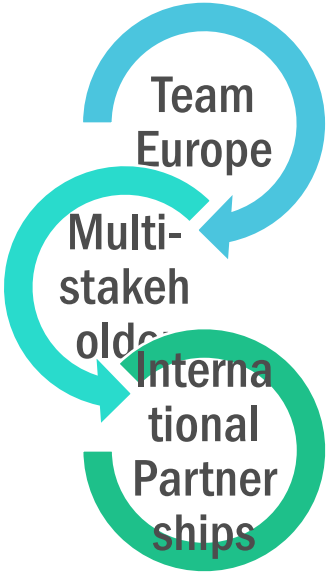
- European Green Deal Investment Plann – 1 Trillion €
- NextGenerationEU – (~700 Bil €) - 20% for digital, 37% for green
- Horizon Europe: R&I (95,5 Bil €) – 35% for digital, 35% for green,
- Digital Europe: Support to digital deployment (7,6 Bil €)
- Connecting Europe Facility 2: Digital (5G) Infrastructures (2,7 Bil €)
- Invest EU: Sustainable infrastructure: €11.5 billion
- Research, innovation and digitisation: €11.25 billion
- SMEs: €11.25 billion
- Social investment and skills: €4 billion

https://digital-strategy.ec.europa.eu/en/activities/funding-digital

The international dimension: Digital 4 Development Hub (D4D)



https://d4dlaunch.eu /

- Team Europe coordination platform
- Members: EU, Belgium, Estonia, France, Germany, Luxembourg, Spain, Lithuania, Netherlands, Portugal, Finland, Sweden
- Dialogue and creation of international strategic partnerships between institutions, industry, civil society, research
- Pooling of experts and resources at the service of joint projects aimed at creating new opportunities for investment, work and growth in the areas of digital transformation
- Four regional branches: (1) Africa, 2) Asia and Pacific; 3) Latin America and the Caribbean; 4) Neighborhood-Eastern Countries
- Launch event: December 8, 2020

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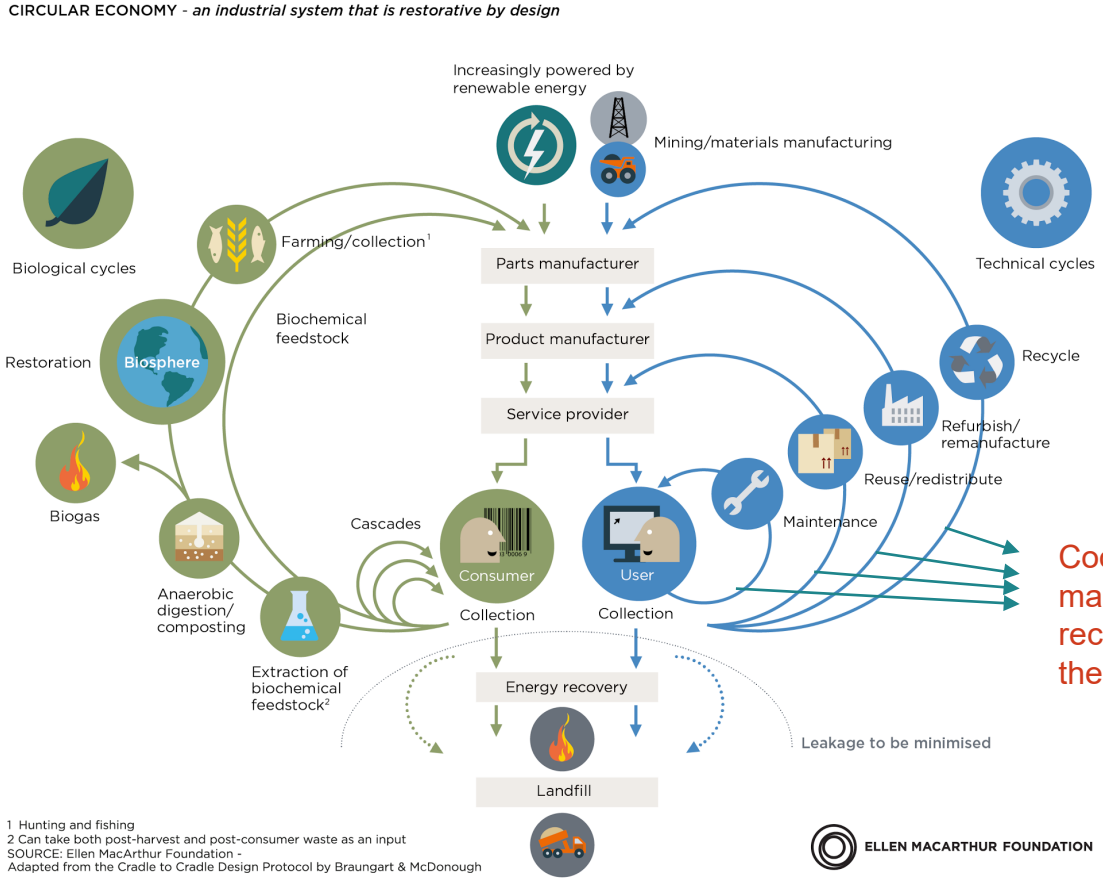
Key for Sustainability - Circular economy



Cooperation among manufacturers, retailers, repairers, recyclers, is essential to enable these ‘circles’

European Commission

Transition to Circular economy

Sustainable products – durable, re-usable, reparable, refurbishable, …recyclable

Sustainable Business models – e.g. Product as a service,

Key enabler: Digital Product Passport

Recent EU legislations:

- Ecodesign for sustainable products - European Commission – product requirements, information requirements across who supply chain, **Digital Product passport** (30.3.2022)
- Empowering consumers for the green transition - European Commission (30.3.2022)
- Initiative on substantiating green claims - European Commission (coming soon)

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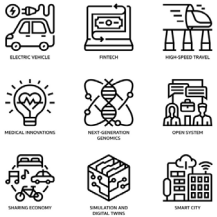
ESPR
Digital Product Passport (DPP) – expected benefits

Tracking of **raw materials extraction/production**, supporting due dili



Enable **manufacturers** to create products **digital twins**, embedding all the information required

Tracking the life story of a product, enabling services related to its **remanufacturing**, **reparability, re-use/re-sale/second-life, recycl** nodels

Benefit **market surveillance authorities and customs authorities**, by making available information they would need to carry out their

Make available to **public authorities and policy makers** reliable information. Enable to link **incentives** to **sustainability performance**

Allow **citizens** to have access to **relevant and verified information** related to the characteristics of the products they own or are considering to buy/rent (e.g. using apps a to read the identifier