

DIGITALEUROPE



Green and digital opportunities for EU-Japan Industrial Cooperation

A perspective from EU-based digital and digitally-enabled industries

Green and Digital go hand in hand

- The EU plans to lead in both areas: Green Deal and Digital Decade (see State of the Union address 2020) – First climate-neutral region by 2050, CO2 emission reduction of at least 55% by 2030; committed to whole gamut of data economy, AI, e-ID, infrastructures.
- Green and Digital seen as the twin engine of Europe's digital transformation: respectively 37 % and 20% of Next Generation EU's massive investment programme.
- DIGITALEUROPE has spearheaded this move even before it started formally. A quick glance at who we are.

Recommendation 1 – Twin transition-specific KPIs

- A prerequisite to any meaningful action to address this steep challenge.
- Process should involve industry as key player: Industrial Forum, European Green Digital Coalition, etc.
- Process should start with gap analysis of missing stats.
- Meaningful, actionable KPIs suite includes both horizontal and sector-specific yardsticks.

Recommendation 2 – Data cooperation on sustainability

- The Big Data paradox: Data drives progress all over the place. While ubiquitous, there is precious little high-quality relevant data available.
- Why? Holders unaware of potential benefit from sharing; not all accessible data will prove usable.
- Solutions: sandboxing (TOKKU?) to fine-tune propitious regulation; common, interoperable data spaces to promote data pooling via contractual negotiations; trusted methodology to get rid of personal data-induced inhibition; voluntary, industry-led standards; DFFT.

Recommendation 3 – Properly calibrated infrastructures and seamless connectivity

- 40% of people in rural areas out of reach of broadband, hence deprived of IoT empowerment: no platform- or cloud-based solution to collect, transfer, analyze data.
- Breton: 80% data stored & processed on cloud, 20% on devices; the other way around by 2025.
- IoT will cut emissions by 15% via better synchronized devices and optimized energy flows.
- 5G + fiber cut emissions by 85% per unit of data transmitted, compared to 2G. Instrumental to smart factories, automated driving, precision farming. Competitiveness-enablers, together with virtualization, edge computing and AI.

Recommendation 4 – Measuring digital enablement and carbon footprint

- No agreed methodology to measure positive indirect environmental impact (including rebound effect) of digital solutions.
- Lack of relevant international standards impedes figuring out the decarbonization and sustainability potential enabled by digital technology. EU Taxonomy can only prove more valuable if it comes with reliable comparative assessment tools.
- European Green Digital Coalition busy developing proper instruments and methods. Worth noting: Climate and Clean Tech WG within EU-US TTC; CBAM future hinges on reliable tracking and accounting tools.

Recommendation 5 - Funding

- The EU's Recovery and Resilience Facility, aka Next Generation EU, set ambitious targets : 37% spending on Green, 20% on Digital, as if they were separate areas.
- We posit that there will be no Green transition without Digital transformation. Consider this: 25% of all patents filed by ICT sector concern green and energy fields. Not nearly enough!
- More funding, more financial incentives needed.

Recommendation 6 – Needed: continent-wide drive for Green tech skills

- Skills has long been identified as the main driver of the ‘digital revolution’, also the chink in the EU’s digital armour (eSkills gap).
- Upskilling, reskilling badly needed to make the Digital Decade a success.
- The EU has been no slouch in this respect: Digital Education Action Plan; Pact for Skills; Digital Skills and Jobs Coalition; Just Transition Fund; mutual validation of micro-credentials; etc.

Recommendation 7 – Making the most of synergies between Green and Digital policies

- Policymakers should take an integrated view of this twin challenge, as each strand reinforces the other.
- Need to embed digital in Renovation Wave, Common Agriculture Policy, Fit for 55 package, including with respect to their social dimension.
- Industry-led initiatives for self-regulation. Ex: Climate neutral data centers package, Data centers energy efficiency code of conduct. These and similar endeavours will ensure that the EU sets the pace for appropriate global response to climate emergency.

Recommendation 8 – Sector-specific as a complement to horizontal approach

- Sector-specific action plans will facilitate digital uptake across Europe's most energy-intensive sectors.
- The same holds true for actions focused on MSMEs or startups.
- Leave no stone unturned to maximize the environmental benefits to be expected from digital technology in the broader context of the EU's industrial strategy, including innovation-friendly regulatory frameworks, public procurement, etc.

Looking through wide-angle lens: CCMI, Ukraine

- CCMI-commissioned study on hydrogen to decarbonize Resources and Energy Intensive Industries: 477 TWh needed by 2030, i.e. 80 X 900 MW pilotable power plants generating 6 TWh each par year. Realistic? Ask European Clean Hydrogen Alliance.
- Ukraine war: at Versailles informal Summit, President Macron emphasized Defence and Energy as top priorities, a slight nuance from Digital and Green flagships, arguably, although digital technology is ubiquitous.

It takes international cooperation to address global challenges

- In September 2019, the EU and Japan signed a Partnership on Sustainable Connectivity and Quality Infrastructure to promote our joint approach to sustainable connectivity.
- In May 2021 the EU and Japan committed to form a Green Alliance to accelerate the transition towards becoming climate-neutral, circular and resource-efficient in the coming decades by way of strengthened cooperation on protecting the environment, conserving biodiversity and fighting climate change.