



17 JANUARY 2020

# Digital as key for a low carbon circular economy



## DIGITALEUROPE reaction to circular economy roadmap

DIGITALEUROPE is convinced that digital technologies are key enablers for attaining the sustainability goals of the European Green Deal and contributing to the United Nations Sustainable Development Goals (SDGs)<sup>1</sup>. In order to leverage this enabling potential and to make the big transformation to a circular economy happen, we believe that digital and sustainability should work hand in hand.

Industry's digital transformation is offering new prospects to unlock innovation, provide new opportunities to workers, decarbonise and generally do more with less. Digital technologies have the potential to enable a 20% reduction of global CO2 emissions by 2030.<sup>2</sup>

At the same time, it is essential to ensure a sustainable digitalisation. For numerous years, the carbon footprint of ICT products has increasingly improved due to a combination of regulatory initiatives and industry efforts. Typically, the industry has heavily invested to improve the efficiency and increase the use of green fuel alternatives within data centres. That explains partly why the total energy consumption of ICTs remains close to 3% despite the ever-increasing digitalisation of the economy.

Europe is known for its extensive regulatory framework of product policies, which has expanded significantly over the years. Especially in our sector, we have a significant amount of legislation in place, which is often also adopted (in-part) by

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<sup>1</sup> DIGITALEUROPE outlined key principles and recommendations on green growth and digital transformation in its "Call to action for a Stronger Digital Europe"  
<https://www.digitaleurope.org/policies/strongerdigitaleurope/>

<sup>2</sup> See DIGITALEUROPE call to action for digital and sustainability  
<https://www.digitaleurope.org/resources/digitalisation-as-key-for-a-sustainable-europe-our-call-to-action-for-the-eus-strategic-agenda-2019-2020/>. Various studies have been conducted that come to similar conclusions, e.g. <https://www.semanticscholar.org/paper/Exploring-the-effect-of-ICT-solutions-on-GHG-in-Malmodin-Bergmark/fc3d1fb8e9eaa461224197bc47e86ee3d2099d0e>

jurisdictions outside the EU. This years-long knowledge and experience, together with the EU institutional change, puts us now in an excellent position to reflect and ensure the framework remains fit for purpose to deliver and is tailored to accelerating Europe's circular economy transition.

Harmonised and incentive-based policy instruments leveraged by digital technologies will send a strong and positive message to the market for companies to do the right thing. We need to find the right balance and make sure the pieces of the puzzle fit better together.

We need to think about innovative ways of regulating and we should focus on the key goals we want to achieve. We should look at the full toolbox available in terms of legislation, non-legislative policies, education, funding etc.

When we think about new initiatives and how they can make a difference and create the necessary scale, we should also think about how they are going to be implemented and enforced. As DIGITALEUROPE we support greater harmonisation, avoid fragmentation and work towards a stronger single market. We understand that in the area of environmental legislation, some Member States want to go beyond EU rules. As industry, we would prefer EU rules to be a bit stricter but harmonised and justified to avoid a fragmented market. Fragmentation impacts the ultimate effectiveness of environmental regulation.

The transition to a circular economy requires a thorough approach that must be jointly addressed by the EU and industry. It is essential to find sustainable and innovative ways for both society and business to move towards a low carbon circular economy and ensure sustainable growth.



## Benefits of digital for a low carbon circular economy

In addition to decarbonisation, big data analytics will drive digitalisation and create digital solutions that can contribute to the transition towards a more sustainable and circular economy.<sup>3</sup> Digital manufacturing enables decarbonisation and material efficiency in key sectors of the EU economy, thereby enabling the European manufacturing sector to reinforce its leadership position. Digital solutions contribute to a lower carbon footprint, reduced use of natural resources and materials, sustainability of the manufacturing life cycle (including in the supply chain), extension of product life cycle etc.

The European manufacturing sector can strengthen its leading role by combining digital technologies and circular economy. For example, digital twins in manufacturing and production planning in the B2B space can ensure process & product sustainability, by tracking the lifecycle of the product through all phases, from design to end-of-life.

To align sustainability goals with industrial policy strategy<sup>4</sup> and to drive industrial leadership, we need policymakers to focus on the right framework recognising the full potential that digitalisation and the fourth industrial revolution have in delivering a low carbon circular economy. We therefore recommend that as part of the new circular economy action plan:

- » Digital technologies are considered, and digital policies further integrated.
- » European performance indicators will be developed to measure the decarbonisation and sustainable achievement enabled by digital technologies.
- » Dedicated Multi-Financial Framework (MFF) funding is ensured for the implementation of digital technologies aimed at decarbonisation and circular economy, including funding for the development of ground-breaking scalable Green Tech innovations in all sectors.

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<sup>3</sup> See our DIGITALEUROPE case studies on digital sustainability  
<https://www.digitaleurope.org/news/case-studies-on-digital-sustainability/>

<sup>4</sup> DIGITALEUROPE intends to present its industrial policy recommendations in February 2020



## Ensuring a sustainable digitalisation

At the same time, Europe needs a digital sector that puts sustainability at its heart. The European framework of product policies plays an important role to ensure sustainable digitalisation<sup>5</sup>.

As the report on the evaluation of the product policy framework also concluded, the lifecycle of Electrical and Electronic Equipment (EEE) is subject to a comprehensive set of different pieces of EU legislation that has expanded over the years<sup>6</sup>. DIGITALEUROPE members are committed to complying with each of them and in many instances have initiatives or programmes in place that go beyond compliance. In fact, significant elements of the circular economy are already a reality in the ICT sector<sup>7</sup>.

EU legislation will be most effective when it requires and incentivises the same design and business changes across all its policy instruments. Setting conflicting policy requirements would miss the opportunity to incentivise companies to do the right thing.

**We therefore recommend that as part of the circular economy action plan, and in particular the foreseen sustainable products policy:**

- » The Ecodesign Directive is considered the principle means to determine product design requirements for environmental aspects that are not covered by other regulations<sup>8</sup>.
- » The RoHS Directive is further leveraged as the global reference point for evaluating and restricting the use of substances in EEE.
- » The WEEE Directive continues to be the main tool to drive circularity at the end-of-life of EEE. To enhance implementation of the WEEE Directive and, in particular, to boost collection rates, there is a need for shared responsibility of all relevant actors involved (i.e. consumers, local, national and European authorities, waste managers and producers).

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<sup>5</sup> See DIGITALEUROPE paper on “A Comprehensive EU Product Policy Framework” <https://www.digitaleurope.org/resources/a-comprehensive-eu-product-policy-framework/>

<sup>6</sup> DIGITALEUROPE mapped the existing legislative framework in its call to action for digital and sustainability <https://www.digitaleurope.org/resources/digitalisation-as-key-for-a-sustainable-europe-our-call-to-action-for-the-eus-strategic-agenda-2019-2020/>

<sup>7</sup> See DIGITALEUROPE paper on “The Contribution of the Digital Industry in a Circular Economy” <https://www.digitaleurope.org/resources/the-contribution-of-the-digital-industry-in-a-circular-economy/>

<sup>8</sup> See DIGITALEUROPE paper on “The Future of Ecodesign” <https://www.digitaleurope.org/resources/the-future-of-ecodesign/>

- » Standardisation is promoted as the best tool to create verifiable, enforceable measurement methods and parameters for use across all policy instruments.
- » Product policy discussions in the context of circular economy draw on existing consumer legislation and not be conceived in isolation.
- » Incentives for frontrunners in one policy instrument do not overlap with basic environmental requirements in another.

#### Recommendations to maximise policy effectiveness and promote innovation:

- » Enhance implementation of existing legislation and guarantee market surveillance to safeguard a strong harmonised internal market.
- » Use the EU's leadership position on circular economy to set the global agenda and thereby drive internal regulatory alignment while ensuring careful assessment of global supply chains and close collaboration with authorities in other regions of the world<sup>9</sup>.
- » Develop proposals that boost markets for secondary raw materials.
- » Drive transparency requirements that are useful and actionable for its target audiences, whilst being proportionate, feasible and cost-effective and respect business confidentiality.
- » Leverage the potential of professional reuse, repair, refurbishment, remanufacturing and recycling, depending on the best environmental option based on life cycle thinking.
- » Facilitate the flows of the innermost loops of the circular economy with free movement of goods to promote reuse, repair and recycling. To that effect, the Waste Shipments Regulation shall be aligned with the circular economy ambitions<sup>10</sup>.
- » Create economic and financial incentives for example through enhancing sustainable public procurement.

Product policy should be embedded in a system approach and flanked with other, supporting, measures. Use market access regulation to establish an

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<sup>9</sup> DIGITALEUROPE further elaborated on global convergence in its paper on the “Future of Ecodesign” (see footnote 8)

<sup>10</sup> See DIGITALEUROPE paper “Towards a circular vision for the revision of the Waste Shipment Regulation” <https://www.digitaleurope.org/resources/towards-a-circular-vision-for-the-revision-of-the-waste-shipment-regulation/> and the paper on “A circular economy card for the Waste Shipment Regulation” <https://www.digitaleurope.org/resources/a-circular-economy-card-for-the-waste-shipment-regulation/>

environmental baseline and leverage incentive-based policy instruments as well as successful industry initiatives.

Beyond the extensive legislative framework, industry has implemented several successful initiatives. For example, the I4R platform<sup>11</sup> provides treatment and recycling facilities and preparation for re-use operators with access to WEEE recycling information in line with the requirements of the WEEE Directive. The platform is welcomed by recyclers as a valuable source of information enabling efficient recycling of EEE, providing significant added value to the industry-supported collection schemes for end of life EEE. Manufacturers of EEE are also among the frontrunners of plastic recycling, committed to paving the way for a fully-grown circular market for high quality plastics<sup>12</sup>. Various manufacturers submitted voluntary pledges in the context of the EU Plastics Strategy or similar initiatives. Besides those that pledged, many companies are already using recycled plastics in their product portfolio. To encourage more manufacturers to uptake recycled plastics, DIGITALEUROPE has become a committed member of the Circular Plastics Alliance.

DIGITALEUROPE looks forward to continuing the collaboration with the European Commission and other relevant stakeholders and contribute constructively to further discussions and implementation of circular economy actions.

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<sup>11</sup> The I4R platform provides treatment and recycling facilities with access to WEEE recycling information: <https://i4r-platform.eu/>

<sup>12</sup> See DIGITALEUROPE paper on “Best practices for Recycled Plastics” <https://www.digitaleurope.org/resources/best-practices-recycled-plastics-paper/>

## About DIGITALEUROPE

DIGITALEUROPE represents the digital technology industry in Europe. Our members include some of the world's largest IT, telecoms and consumer electronics companies and national associations from every part of Europe. DIGITALEUROPE wants European businesses and citizens to benefit fully from digital technologies and for Europe to grow, attract and sustain the world's best digital technology companies. DIGITALEUROPE ensures industry participation in the development and implementation of EU policies.

# DIGITALEUROPE Membership

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**Spain:** AMETIC

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**Switzerland:** SWICO

**Turkey:** Digital Turkey Platform, ECID

**Ukraine:** IT UKRAINE

**United Kingdom:** techUK