



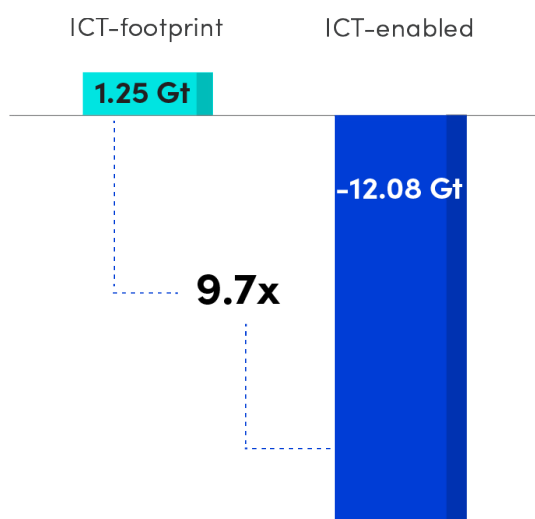
DIGITALISATION AS KEY FOR A SUSTAINABLE EUROPE OUR CALL TO ACTION FOR THE EU'S STRATEGIC AGENDA 2019-2024

For the next EU's Strategic Agenda 2019-2024, DIGITALEUROPE believes digital and sustainability should work hand in hand, by leveraging digital technologies as key enablers for sustainability while ensuring a sustainable digitalisation.

Digital has an enormous enabling potential to facilitate the EU's transition towards a low carbon circular economy. **We consume 1.25 Gt of CO₂** - i.e. 2.3% of global CO₂ emissions - **but we can save 12.08 Gt of CO₂ by 2030 with digital technologies.**

Digital technologies drive increased energy efficiency and an overall greenhouse gas (GHG) emission reduction, and from a material efficiency point of view are increasingly respectful of the environment.

Digital technologies can save 9.7x more emissions than they produce



expected Gt of CO₂ emissions saved by ICT technology by 2030*

At the same time, digitalisation raises manageable challenges such as data security, resource efficiency and increased energy consumption or the broader societal acceptance of the digital transformation. These need to be addressed jointly with the industry to find sustainable and innovative ways for both society and business to transition to a low carbon circular economy. We call for more investments, research and innovation in key European digital capacities as these will be essential success factors.

DIGITALEUROPE is convinced that digital technologies can make the big transformation for Europe happen, based on United Nations Sustainable Development Goals (SDGs), circular economy and decarbonisation objectives, and we believe that the following key aspects should be considered by the incoming EU institutions.

Benefits of digital for sustainability

Digital technologies have the potential to enable a 20% reduction of global CO₂ emissions by 2030, in particular in the following sectors:

↓ **Energy**
1.8 Gt

Digitisation enables “intelligent” electricity networks and leads to more efficient and resilient grids with sustainable integration of renewable generation, and a more reliable power system with reduced operations, maintenance costs and outages. Such a fully modern electricity smart grid takes advantage of advanced digital control and data analytical models and systems.

↓ **Transport**
3.6 Gt

Digitising the logistics sector will significantly reduce CO₂ emissions through optimisation, by enabling driverless and connected cars as well as mobility-as-a-service solutions.

↓ **Agriculture**
2.0 Gt

Advanced monitoring of livestock health and growth enables dedicated administering of fertilizers or food supplements, optimising and conservation of water resources, avoiding spillage and pollution, achieving energy savings.

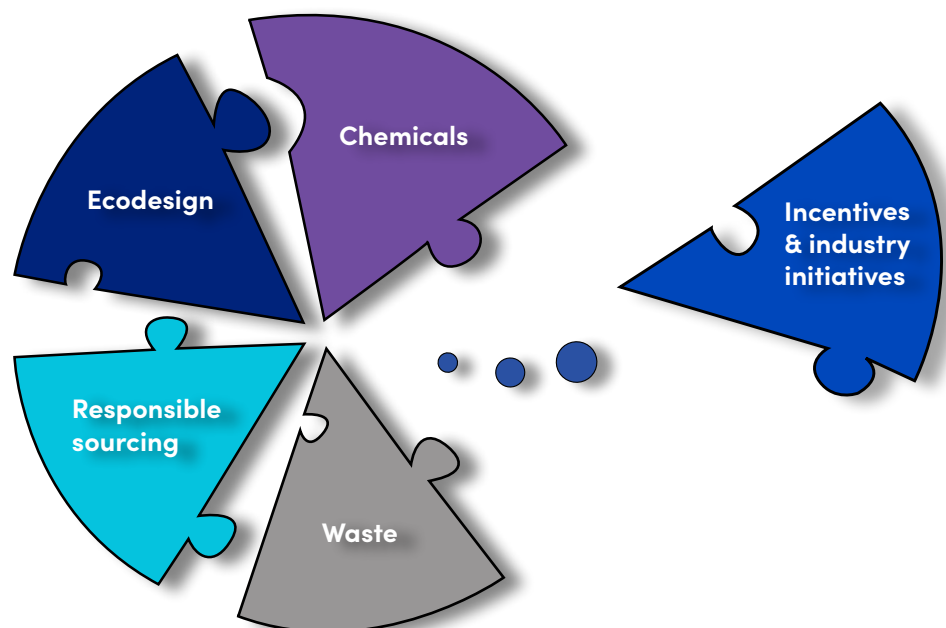
↓ **Manufacturing**
2.7 Gt

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.

**Source: #SMARTer 2030, GeSI & Accenture 2015*

Ensuring a sustainable digitalisation

To ensure a sustainable digitalisation, 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.



While there are more pieces to the puzzle, examples of most relevant legislation include:



Responsible sourcing

The **European Conflict Minerals Regulation** has been adopted to ensure the responsible sourcing of minerals and metals. Our sector has demonstrated a clear commitment to continue improving due diligence activities. To have a real impact and deliver positive changes on the ground, it is imperative that the Regulation is accompanied by strong supporting measures.



Ecodesign

The **Ecodesign Directive** is one key legislation for our sector that addresses the efficiency of energy related products. **More than 20 product-specific regulations** have been implemented over the years, some complemented by energy labelling requirements. As products start to reach the economic limits of efficiency on their own, using smart controls in systems (“intelligent efficiency”) and a system approach of such products can bring down the aggregate energy consumption even further.



Chemicals

Continuous innovation is enabling the gradual removal of hazardous substances from EEE. Working along the methodology set out in the **RoHS Directive**, the product-specific legislation for substances in EEE, an increasing number of hazardous materials are being replaced by safer alternatives. Chemicals that are used in manufacturing processes are covered by **REACH** and **CLP**.



Waste

End-of-life of products is regulated by an extensive framework, including the **Waste Framework, WEEE** and **Batteries Directives**. At the end of their useful life, digital products present a significant amount of potentially reusable and recyclable content. Therefore, end-of-life products as waste should rather be classified as materials to be made fit for re-use or recycling. Additionally, cross-border shipments of such products need to be enabled, by ensuring the **Basel Convention** and **Waste Shipment Regulation** are in line with circular economy principles, to take advantage of top-class processing facilities and unlock the full potential of electronics recycling.

Successful industry initiatives

Beyond the legislative framework, industry has implemented several successful initiatives which are an important piece to the puzzle of sustainable digitalisation. For example:



The **I4R platform** 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.



The **European Partnership for Responsible Minerals** brought together OEMs, supply chain actors, civil society and other relevant stakeholders to jointly promote responsible mineral sourcing. In addition, the **Responsible Minerals Initiative**, founded in 2008, brings together over 350 companies and has grown into one of the most utilized and respected resources to address responsible mineral sourcing issues in supply chains.



The **code of conduct for Data Centres**, an initiative led by the Joint Research Centre of the European Commission aiming to improve the energy efficiency of data centres. The European Commission shall support a wider business deployment of its initiative including consideration of administering the scheme commercially to increase adoption.



Manufacturers of EEE are among the frontrunners of **plastic recycling**, committed to paving the way for a fully-grown circular market for high quality plastics. 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.

Our recommendations for the incoming European Institutions

To leverage the benefits of digital technologies as key enablers for the transition to a low carbon circular economy, DIGITALEUROPE believes that the following recommendations should be key aspects of any future European legislation or initiative:

How to adopt a system approach?



- Product policy should be embedded in a system approach and flanked with other, supporting, measures. Use market access regulation to establish an environmental baseline and leverage incentive-based policy instruments as well as successful industry initiatives.

How to foster coherence across policy instruments?



- Incentives for frontrunners in one policy instrument should not overlap with basic environmental requirements in another.
- The Ecodesign Directive is the principle means to determine product design requirements for environmental aspects that are not covered by other regulations.
- The RoHS Directive is the global reference point for evaluating and restricting the use of substances in EEE.
- Standardisation is 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 should draw on existing consumer legislation and not be conceived in isolation.

How to encourage and build on industry-led initiatives?



- Beyond legislation, collaboration and industry initiatives are complementary and agile alternatives that can provide solutions to environmental challenges.

How to provide incentives for innovation?



- Develop performance indicators that measure decarbonisation and sustainable achievements enabled by digital technologies, particularly linked to the SDGs.
- Develop proposals that boost markets for secondary raw materials.
- Create economic and financial incentives through Green Public Procurement and to support jobs linked to circular economy.
- 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.

How to ensure better regulation principles are followed?



- Policy decisions should be prepared in an open, transparent manner, informed by the best available evidence and backed by comprehensive involvement of stakeholders
- Requirements should be clear and need to be measurable by market surveillance authorities to monitor implementation and ensure a level playing field.
- Technology-neutral product-specific requirements harness the power of innovation while achieving environmental progress.
- Transparency requirements should be meaningful, proportionate and should consider technological advances made.

About DIGITALEUROPE

DIGITALEUROPE is the leading trade association representing digitally transforming industries in Europe. Our Membership includes **40 national trade associations** from across Europe as well as **67 corporations** – global leaders in their field of activity. In total, we represent over 35,000 businesses who operate and invest in Europe.

We stand for a regulatory environment that enables European businesses and citizens to prosper from digital technologies. We wish Europe to grow, attract and sustain the world's best digital talents and technology companies.

For more information, please visit the [DIGITALEUROPE website](#), [DIGITALEUROPE's Manifesto for a Stronger Digital Europe towards 2025](#), [Case Studies on Digital Sustainability](#)