DIGITALEUROPE

DIGITALEUROPE is the leading trade association representing digitally transforming industries 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. Together with our members, we shape the industry policy positions on all relevant legislative matters and contribute to the development and implementation of relevant EU policies.

Our membership represents over 45,000 businesses that operate and invest in Europe. It includes 108 corporations that are global leaders in their field of activity, as well as 41 national trade associations from across Europe.

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THE EXECUTIVE BRIEF:

BOOSTING EU COMPETITIVENESS WITH DIGITALISATION OF ENERGY

The EU faces the same energy trilemma it did three years ago: affordability, security, and sustainability. The momentum on the green and digital transition as the accelerator to address these challenges - and EU's competitiveness - must remain, in particular as we face the third year of Russia's full-scale invasion of Ukraine.

Now more than ever, digitalisation is essential to derisk, decarbonise, optimise and secure Europe's energy system. Achieving these goals requires electrification, modernised energy infrastructure that can withstand cyberattacks and greater integration of renewable energy.

Three key objectives of the twin transition

Cut energy security risks and increase resilience

Europe's energy security remains at risk due to geopolitical instability and historical dependence on Russian energy imports. To mitigate these risks, Europe must accelerate the shift away from fossil fuels by investing in, and supporting, clean electricity, energy efficiency and decentralised systems like microgrids. Beyond securing supply, modern threats demand a focus on system resilience. Strengthening digital security and modernising infrastructure with resilient, smart grids will keep the lights on and our industries running. In addition, cyberattacks pose a growing threat to the energy sector as they risk triggering blackouts and disruptions. In 2023 alone, over 200 cyberattacks targeted the energy sector, with more than half being directed at Europe specifically.[1]

Cut energy prices and strengthen EU's competitiveness

Europeans pay 2.5x more for energy than Americans. Russia's invasion of Ukraine caused a historic spike in energy prices and we saw the EU scramble to replace Russian gas with imports from alternative sources. Affordable energy is crucial for Europe's economic competitiveness. Energy and supply costs, network tariffs and consumption taxes and levies further strain businesses, limiting opportunities for AI deployment and data centres. To drive down prices and enhance competitiveness, Europe must invest in smart electrification, clean energy technologies, grid expansion and modernisation, renewables, energy-efficient buildings and AI-driven energy management.

Cut emissions and bolster climate mitigation

2024 was the hottest year on record globally and the second hottest in Europe.[2] Extreme heatwaves, wildfires, and floods caused billions in damages[3] and devasted communities. The digital and energy sectors play a key role in reducing emissions and fighting climate change. By providing and investing in smart grids, clean energy, and digital solutions[4] - to track, audit and report on air pollutants, greenhouse gas emissions including carbon, and wastewater emissions with the same precision as financial data – the EU can help improve efficiency and accelerate renewable energy deployment to fundamentally reduce greenhouse gas emissions.

Success Indicators

85%

By 2030, 85% of EU companies use ICT to reduce their environmental footprint (Currently 66%).[5]

x3

By 2030, triple annual investments in smartening the distribution grids.

2030

By 2030, implementation of the smart grid indicator in Member States, to keep track of the digitisation of electricity grids.

€38bn

By 2030, increase European annual grid infrastructure investments to reach at least €38bn/year[6] and achieve 35% electrification of final energy use across the EU[7] (Currently €23 billion[8] and 21.3%[9]).

2,000

By 2030, EU-wide academic programs in energy optimisation and energy cybersecurity are training 2,000 people per year across 5 universities.[10]

80%

By 2030, 80% of investors investing in energy efficiency technologies and 70% in renewable energy (Currently 64% and 56%).[11]

5 Policy recommendations

1. Accelerate electrification and digitalisation of the EU energy system

The competitiveness of European industry depends on its ability to break away from the high costs and dependencies of imported fossil fuels, by supporting direct electrification of end uses powered by clean energy. **The Commission must support the industrial twin transition by helping build a fully integrated digital energy ecosystem**. This requires **targeted support for innovative technologies** such as AI-driven energy management – through capital investment subsidies and awareness campaigns.

Rapidly scaling renewables, modernising and digitalising grids, and enabling sector integration will allow industries to leverage freely available energy sources such as excess heat. At the same time, decarbonising the digital sector – such as data centres – must be a priority. **This requires a rapid scaling of carbon-free energy and grid infrastructure** and market measures to support digitally enabled solutions like smart grids, demand-side flexibility and AI-driven energy management.

2. Promote investment in advanced clean energy technologies

The Draghi report highlights an **€800 billion annual investment gap in the EU, much of which will be needed for advanced clean energy technologies** as well as grid enhancement and expansion – which require streamlined and digitalised permitting. The European Commission should allocate **25% of the EU budget to energy and digital innovation while modernising procurement rules to better prioritise security and sustainability**. Member States must coordinate tax incentives using a TotEx approach (covering both CapEx and OpEx for digital investments like SaaS solutions) to accelerate investment in electricity grids and protect critical infrastructure.

3. Harmonise data standards and interoperability

To accelerate Europe's clean energy transition, **the EU should support harmonised data standards and interoperability across electricity-using sectors**, from grids and markets to buildings, industries and electric vehicles. **Fragmented data markets hinder efficiency, innovation, and AI-driven optimisation**. The Commission should foster investment and industry collaboration across sectors, align: interoperability standards across key legislation, as well as continue to leverage and support common energy data spaces projects.

4. Streamline and simplify cybersecurity policies and standards

The rapid digitalisation of Europe's energy grid will inevitably increase cyber risks. **While companies are working hard to increase resilience, the current legal framework for cybersecurity must be streamlined and simplified to reduce regulatory complexity**. To support industry compliance, the EU should provide longer transition periods for implementing new legislation—such as the Cyber Resilience Act—ensuring alignment across entire supply chain (suppliers, integrators, and customers).

To enhance coherence and competitiveness, the EU must harmonise cybersecurity definitions, taxonomies, requirements, reporting obligations across key legislation (such as the Cyber Resilience Act, Radio Equipment Directive Delegated Act, and NIS2). **Additionally, aligning European and global security standards will facilitate market access** and a common playing field. A public-private threat-sharing mechanism under ENISA like the existing EU ISACs (Information Sharing and Analysis Centres) – modelled after the US ISAC system – will enable **real-time intelligence exchange to better prevent and respond to cyber threats**.

5. Close the green and digital skills gap with continued public-private partnerships and extra investment

To drive the energy transition, **we need a workforce equipped with the right skills. Digital and sustainability skills are interconnected**, requiring a common approach to closing the skills gap. **Technology partners, educational institutions, and industry leaders must collaborate** to develop specialised training programs for green and digital technologies. **A European framework for digital sustainability role profiles, along with a certification framework, can help align industry demand with education and training supply**. Investment should focus on scaling up existing initiatives, ensuring synergies, and supporting European skills strategies (e.g. Sector Skills Alliances and European Data Space for Skills). **Public-private partnerships and targeted investment will be key to closing this gap** and ensuring a competitive, future-proof workforce.

[1] Enisa, 2024: https://www.enisa.europa.eu/news/cyber-europe-tests-the-eu-cyber-preparedness-in-the-energy-sector
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