

EC Consultation on Sector integration strategy roadmap

A Eurelectric response paper

Eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

Markets & Investments Committee
Electrification & Sustainability Committee

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The electricity sector is transforming the energy system to make it more and more responsive, resilient and efficient. **The achievement of EU climate targets will require the decarbonisation of all sectors, with direct electrification and the electricity system as the most efficient drivers.** Moreover, increasing interactions with energy end-users and other sectors will be key to achieve the common objective of climate-neutrality.

The long-term strategy and the European Green Deal are the first steps of a shift from our current highly centralised and mainly fossil fuel-based energy system to a more decentralised, efficient and carbon-neutral energy system. Furthermore, throughout the Covid-19 crisis, the electricity industry continued to provide around-the-clock services, proving its agility and reliability amid restrictive lockdown measures. The power sector is committed to help the EU's recovery with shovel-ready projects that can reignite the economy, deliver immediate jobs and produce long-term environmental benefits.

Electrification, due to its cost competitiveness and high efficiency, will drive the decarbonisation of the economy, as reflected by the various long-term forecasts. In addition, the power sector is committed to provide a carbon-free electricity by 2050. Therefore, the smart sector integration strategy should be built assuming as its first priority the removal of barriers to direct and indirect electrification. To allow for a cost-efficient transition in all sectors while keeping the lights on, such a system-wide shift will see a significant increase of variable generation. This will require firm, dispatchable and flexible carbon-neutral and low-carbon capacity to ensure security of supply. Moreover direct electrification solutions, complemented by indirect electrification ones, will link power and other economy sectors and help to reduce final energy demand and GHG emission as it can deliver equivalent services with less energy input in most cases. In this perspective, the additional direct and indirect electricity demand from transport, heating and industry sectors could help to better match supply and demand when coupled with storage solutions, digitalisation, smart grids, and demand side response strategy.

Reaching carbon neutrality by 2050 requires drastic changes in the way we generate, transport and consume energy. This ongoing shift is based on the massive deployment of renewable energy sources and the phasing-out of fossil fuels. **Eurelectric highlights that the coupling of electricity & gas systems, notably through power-to-gas, is a key link in the transition to a carbon-neutral economy, needed to complement direct electrification in "harder to abate" sectors.** Moreover, different flexibility solutions (Power-to-X, demand-side response including V2G, thermal firm power generation capacity) will compete on a level-playing field. To this end, **Europe needs to maintain leadership and market-based approach in the development of key emerging technologies coming from the energy system.** This can be done by developing market-based economic signals for all the services provided outside natural monopolies by market parties in competition.

Strong grids will be essential to support the integration of decarbonised and renewable energy carriers in all sectors of the economy, whether they are related to power, gas or heat. In addition to the development of a proper investment framework, we call to identify best links between sectors through coordinated, cost-effective and future-proof infrastructure planning tools. In a more decarbonised, decentralised and digitalised energy system, closer cooperation is required among all stakeholders (especially TSOs and DSOs) to anticipate possible evolutions of the electricity, heat and gas networks, supply & demand.

For more details of [Eurelectric views](#) on successful smart sector integration, please find enclosed to this feedback our answers to the questions asked by the EC.

Eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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