

EFIEES' Feedback on Energy Sector Integration Roadmap

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EFIEES represents energy service companies (ESCOs) and their national associations in 12 Member States. They represent over 130.000 professionals engaged in the design and implementation of energy-efficiency solutions in buildings and industry. In some countries, they also operate district heating & cooling networks.

EFIEES welcomes the roadmap for the upcoming Strategy on energy sector integration, which aims at creating a smarter, more integrated and optimised energy system, in which all sectors can fully contribute to decarbonisation and help achieve the long-term objectives of the EU Green Deal.

We are convinced that an effective energy sector integration should rely on the following elements:

1. As a **necessary precondition**, a truly integrated energy system should ensure the **proper application of the Energy Efficiency First principle**, as defined by the Governance Regulation. This requires the **prioritisation of energy efficiency actions along the whole energy chain, from supply to demand**, to ensure that energy is produced, distributed and then consumed in an efficient and intelligent way across the different systems.
2. A really integrated energy system should go **beyond the binary concept of 'sector coupling'** (referring exclusively to the integration of the electricity and gas sectors) **and fully comprise the heating & cooling sector**. This can indeed play a major role in facilitating the decarbonisation of our energy systems by **supporting overall system flexibility and security**. Existing thermal solutions, based on **hot water systems**, offer storage and backup options at building and district level, together with the use of decarbonised sources. By providing for **efficient and increasingly green energy supply, efficient district heating & cooling (DHC) networks** also allow for **energy recovery at local level**. Finally, **cogeneration is intrinsically an energy integration example**, especially when highly-efficient and combined with DHC, providing for additional support to energy system stability and balancing.
3. A smart and integrated energy system is facilitated by the process of **digitalisation**, where efficient ICT technologies enable communication between various parts of the system, sectors and infrastructures, and help manage synergies, creating opportunities for energy savings and reduced emissions. **To fully exploit the benefits deriving from increasing digitalisation, it is in any case essential to recognise the enhanced value of the combination of ICT technologies and proactive energy management, provided by energy efficiency services (EES).**

4. **EES play a key role and have a huge cost-effectiveness potential across different sectors, including the building sector**, which will be central in the dynamic of future energy system integration. The optimisation of buildings' energy consumption, thanks to renovations and effective energy management, can indeed support the **further uptake of renewable and recovered energies both at building and district levels**. The same can be said for the **optimisation of energy consumption in industrial sites and platforms**, where EES can enable energy efficiency gains and enhance circularity.
5. As stated in the Roadmap, **improve the circularity of our energy systems is an essential factor for a successful and efficient energy sector integration**. In particular, this implies making the best use of the energy which is available in our systems - especially at local level - and allowing for the **identification and effective reuse of energies which would otherwise be wasted, such as waste heat and cold**. **Waste heat and, more generally, 'waste energy' potential should indeed be better considered, assessed and integrated into local energy planning**. This should be addressed through a **district approach**, which is essential to ensure that all systems' synergies and local opportunities are duly assessed and fully exploited, in a way to effectively contribute to a successful, resilient and integrated energy system.