

# DIGITAL ENERGY GRID



The session on the Digital Energy Grid (DEG) was highly informative and engaging, offering a clear vision of how digital public infrastructure can reshape the energy sector. It focused on making energy systems more connected, efficient, and user-centric by leveraging open digital standards and interoperable technologies.

The presentation began with Sujith Nair, CEO & Co-Founder, Foundation for Interoperability In Digital Economy (FIDE) Bengaluru, India who introduced the topic by drawing a parallel with the internet. He explained that the internet is an open infrastructure a network of networks that functions like a road connecting multiple destinations. This analogy helped set the context for understanding how the Digital Energy Grid can similarly connect various components of the energy ecosystem.

The Digital Energy Grid was described as a digital pathway that enables seamless communication across the energy sector. Its primary objective is to make energy services more accessible, transparent, and user-

friendly. By reducing complexity and fragmentation, DEG aims to simplify how users and providers interact within the energy ecosystem.

A key vision of DEG is the creation of a single unified platform that integrates multiple energy related services. Features such as EV charging, battery rental, energy data access, and related financial services can all be accessed through one application. This one-stop solution removes the need for multiple platforms, standards, or norms, making navigation and adoption significantly easier for users.

The session also highlighted eight interoperable standards that form the foundation of the Digital Energy Grid. These include universal and interoperable digital identity, machine-readable data formats, and verifiable and portable data. Standards related to EV charging and energy-linked loans were also included, ensuring seamless service delivery across different providers and regions.

The Digital Energy Grid functions as a common digital infrastructure that connects a wide range of stakeholders. These include households, distribution and transmission operators, EV operators, virtual power plants (VPPs), prosumers, rooftop solar providers, and businesses. This shared infrastructure enables smooth interaction and real-time data exchange among all participants.

Several benefits of the Digital Energy Grid were emphasized during the session. These include a simple and intuitive user experience, a unified real-time view of energy services, secure and user-managed data sharing, and faster regulatory processes. Together, these advantages contribute to a more efficient, inclusive, and future-ready energy sector.

In conclusion, the Digital Energy Grid represents a transformative approach to managing and delivering energy services. Much like the internet revolutionized communication, DEG has the potential to revolutionize the energy sector by creating an open, interoperable, and digitally empowered ecosystem built around user needs.