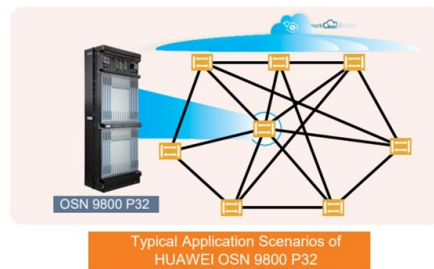


Energy Internet Roadmap



Article Overview

The Energy Internet Roadmap outlines the strategic, technological, and policy pathways to integrate distributed energy resources, smart grids, and digital technologies for a sustainable, decentralized energy system.

Overview of the Energy Internet

The Energy Internet is a vision for a highly interconnected, ICT-enabled energy system that integrates distributed energy resources, renewable generation, and intelligent energy management. It combines smart grid technologies, peer-to-peer energy trading, and automation to optimize energy flows across households, enterprises, and utilities. The roadmap emphasizes a hierarchical model where energy generation, storage, and consumption are coordinated through advanced ICT infrastructure, enabling real-time monitoring, control, and decision-making.

Key Technologies

Several technologies are central to the Energy Internet roadmap:

- **Distributed Energy Storage:** Enables flexible energy management and supports intermittent renewable sources.
- **Energy Router Technology:** Facilitates energy flow between different network nodes, similar to data routing in the Internet.
- **Big Data and AI:** Optimizes grid operations, predicts demand, and enhances energy efficiency in buildings and industry.
- **Blockchain:** Supports secure, transparent peer-to-peer energy trading and decentral...

Article Content

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