Interoperability for Flexibility

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The challenges to foster clean energy transition, resilience and energy security in Europe

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Decarbonization: the road to clean energy transition

Decarbonize the electric system

Systematic and long-term commitment
- Sustainable change
- Environmental, economical and political

Ambitious goals set by the EC
- 30% until 2030
- 50%+ until 2050

Increase resiliency and efficiency of connected systems

Check  Act
Plan  Do
Paradigm change: articulating energy grids and consumers

Increase integration of renewable sources
- Deal with variability
- Tackle geographic distribution
- Ensure energy sufficiency

Demand side flexibility
- Engaging end-users, tech and service providers
- Make technology available to all
- Enablers for effective services
Services: novelty or newer applications?

Combine data and energy
- Characterize better
- Predictive strategies

Foster competitive offering
- New application
- Novel market approaches

Cross-sector cooperation
- Buildings to grids
- Mobility from private to public
- Energy management to conveniency

Democratize access to data
- Interoperability – Several layers
- Protection and cybersecurity
Semantic Interoperability Framework

Secure and Trusted Semantic Interoperability Framework

SAREF-centric
Knowledge Dissemination
Semantic Interoperability

InterConnection point

Registry of interoperable services
Configurable security framework
Supporting services for system administration

InterConnection point

Semantic Reasoning
Knowledge-base Interactions
Decentralized and Scalable

Semantically interoperable service coordination

Digital platform A
Service 1
Service 2

Digital platform B
Service 3
Service 4

Digital platforms and services become semantically interoperable

Services use the interoperable tools to publish & discover capabilities and are joint together to enable use case demonstration
Open Calls

Recruiting the best innovators

Activate SMEs & startups

Strategy & internal alignment

Offer Support

Validate project approach

Expand ecosystem of players

Know more at:
- interconnectproject.eu
- Project Booth