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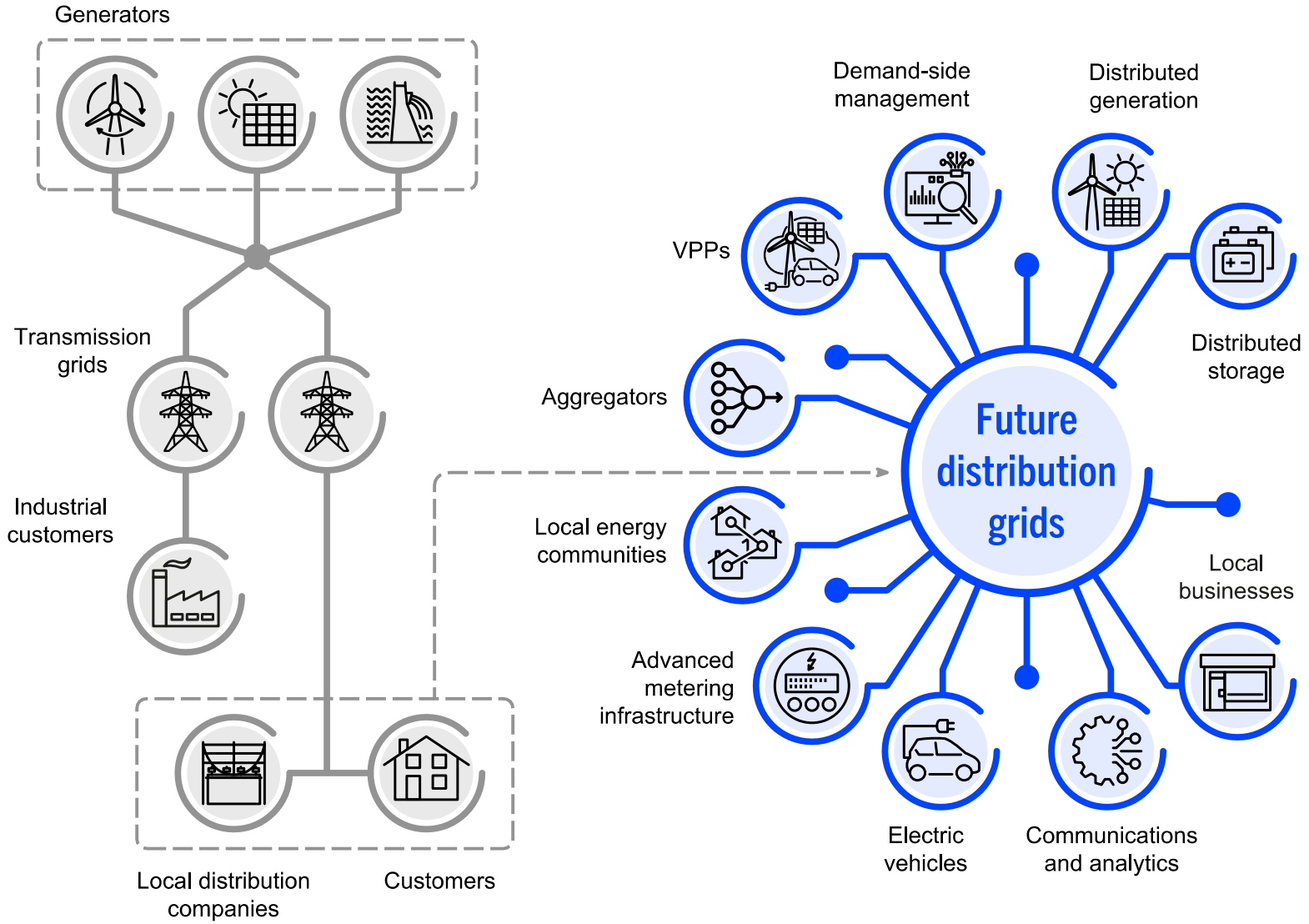
Session : UNIFIED ENERGY INTERFACE (UEI) AND THE EVOLVING ERA OF ENERGY INTERNET

Digital transformation in a fragmented energy landscape

Presented By

Lydia Jayakumar, South Asia Analyst, IEA

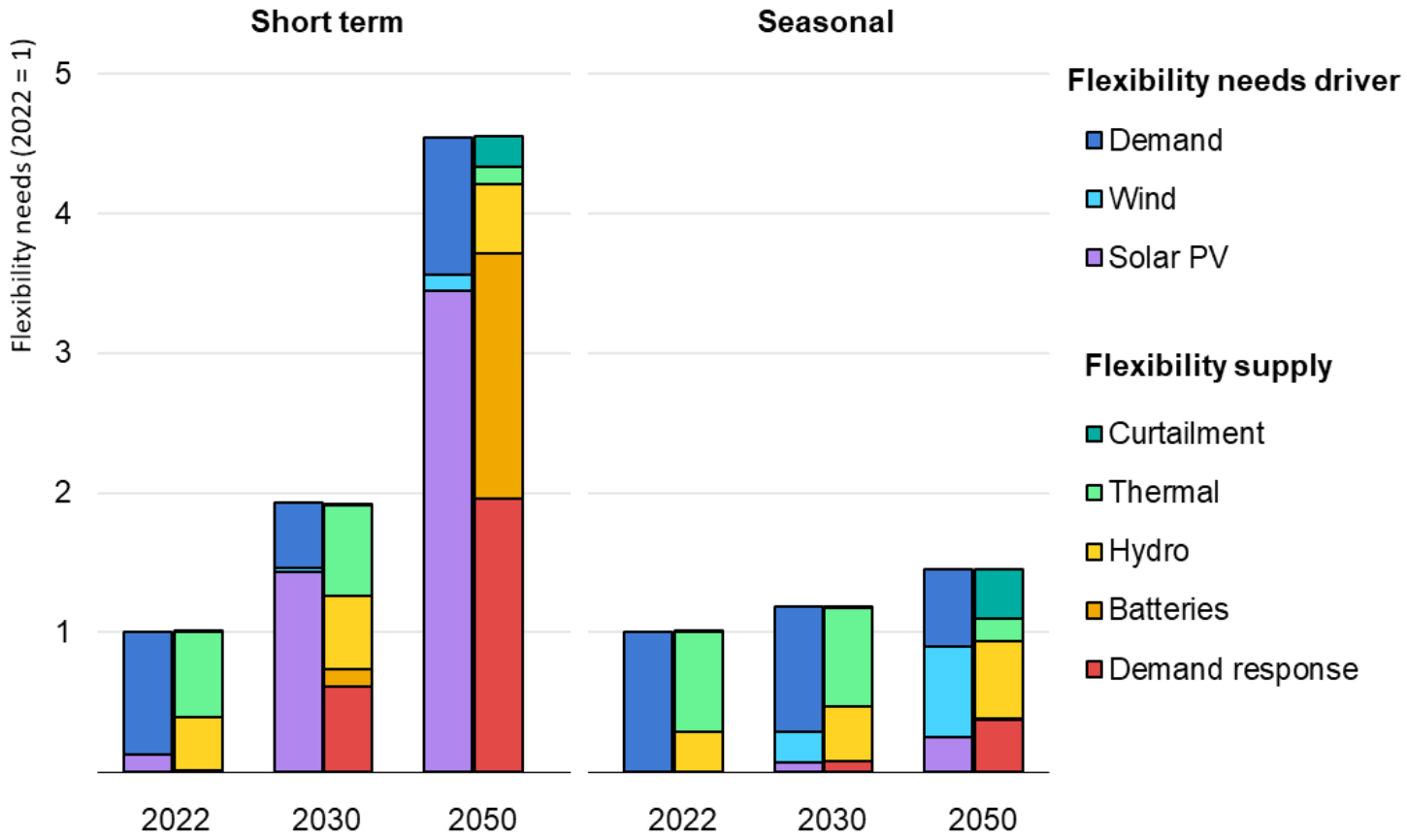
Power systems are changing fast – especially at the local level



Data, analytics, advanced controls – essential for planning, operation, maintenance, markets…orchestration

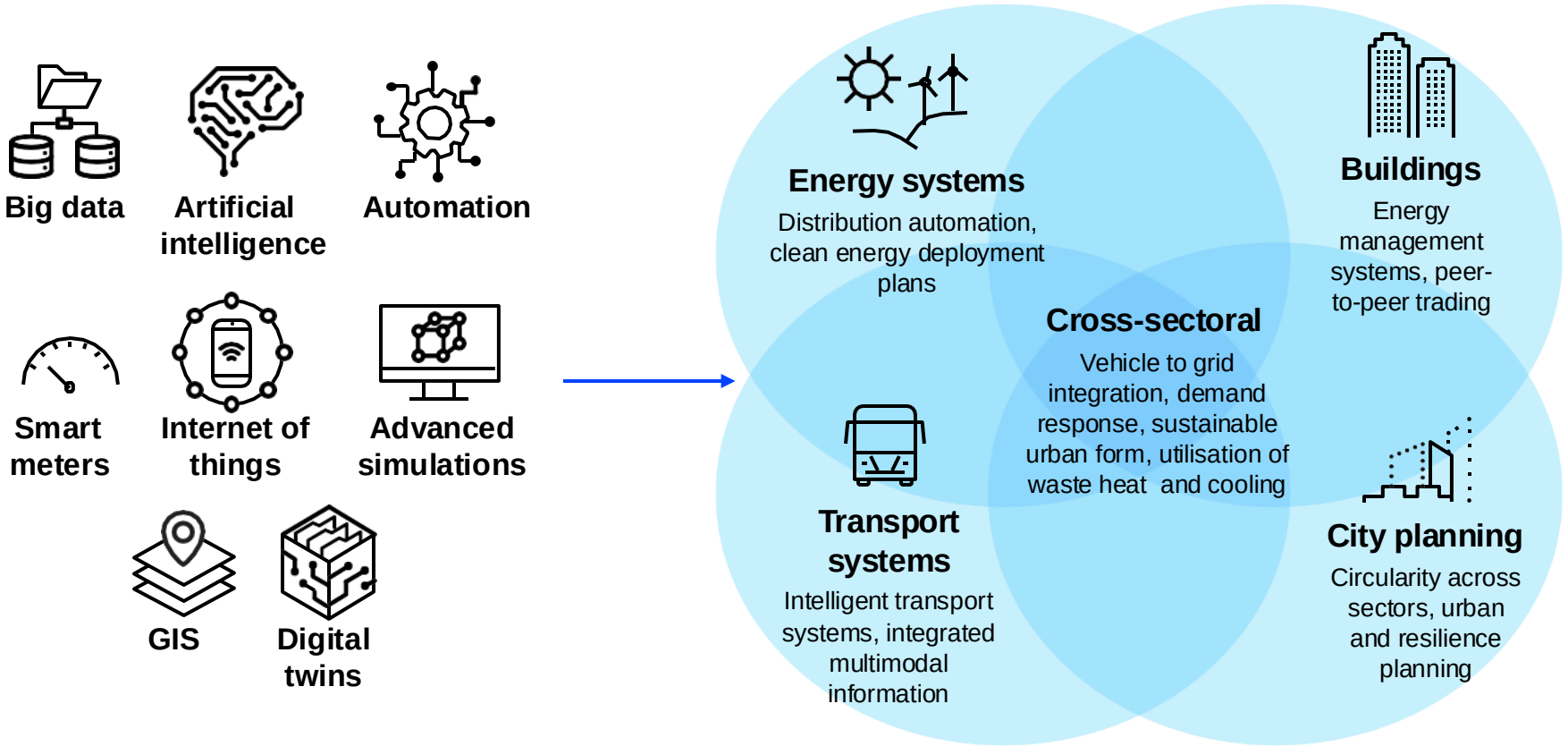
Decarbonisation will not be possible without new flexibility sources

Global power system flexibility needs and supply in the Announced Pledges Scenario



Almost all flexibility today from thermal and hydro, critical to leverage storage and demand response

Digitalisation opens opportunities for system-wide efficiency



By increasing the connectivity across end-uses, digitalisation can leverage data from connected buildings, appliances and transport systems to reduce energy consumption, improve grid stability and better manage services.

Key focus areas to bridge the data gap

Data Availability

Creating appropriate data value chains, and ensuring awareness of growing data resources

Data Accessibility

Enhancing balancing data openness with privacy and security risks

Data Usability

Ensuring data usability tailored to specific use cases

Data quality

Improving data quality to unlock business models and value

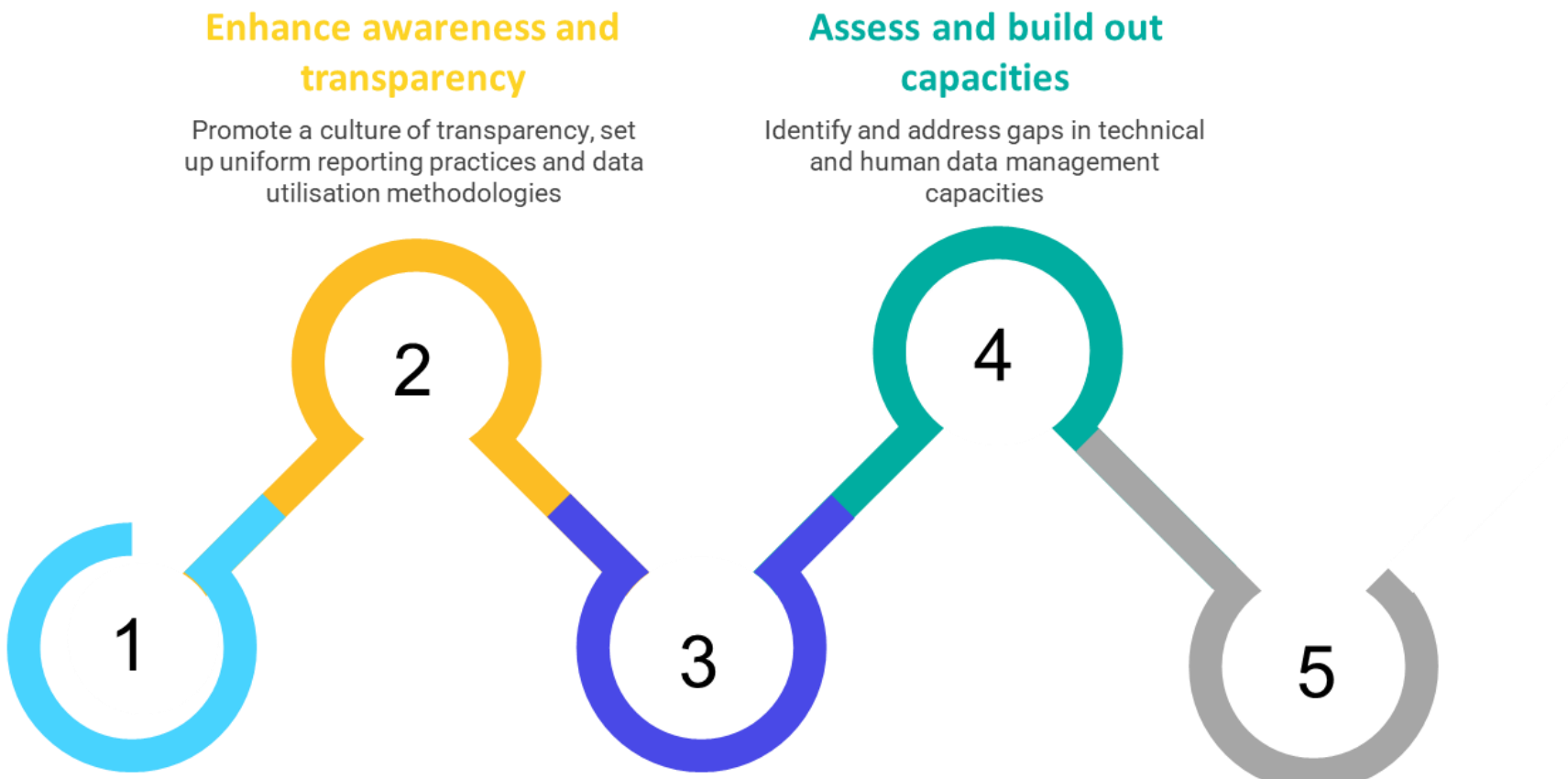
Data standardisation

Accessible, transferable, transparent standards for data exchange

Interoperability

Ensuring data from varying sectors, assets, actors, can be seamlessly exchanged and combined

Embarking on the energy data journey



Without increased international collaboration & sharing – we will:

- ✓ Duplicate efforts
- ✓ Replicate mistakes
- ✓ Take longer
- ✓ Pay more