

EQUIGY

—
**crowd
balancing
platform**

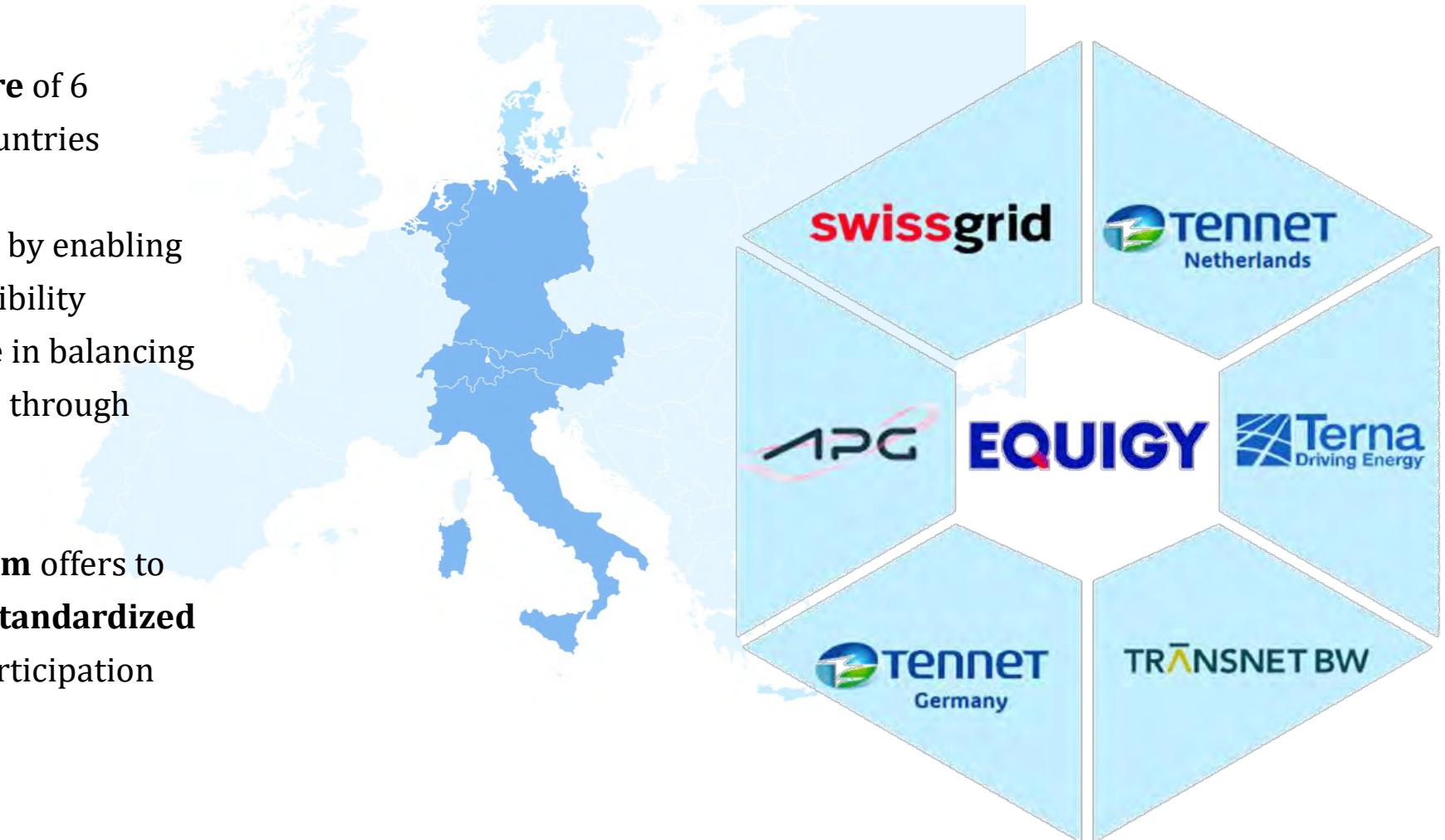
Unlocking Demand Response with Plug & Play Market Access

Martin van 't Verlaat

What is Equigy?

EQUIGY

- ✓ Non-profit **joint venture** of 6 European TSO's in 5 countries
- ✓ **Facilitates the market** by enabling smaller distributed flexibility resources to participate in balancing and redispatch markets through aggregation
- ✓ **Data exchange platform** offers to aggregators **easy and standardized access**, encouraging participation



Flexibility challenges for TSO's

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Rapid growth of renewable generation

- Higher volatility (ramping and switching)
- Less plannable capacity
- Loss of system inertia

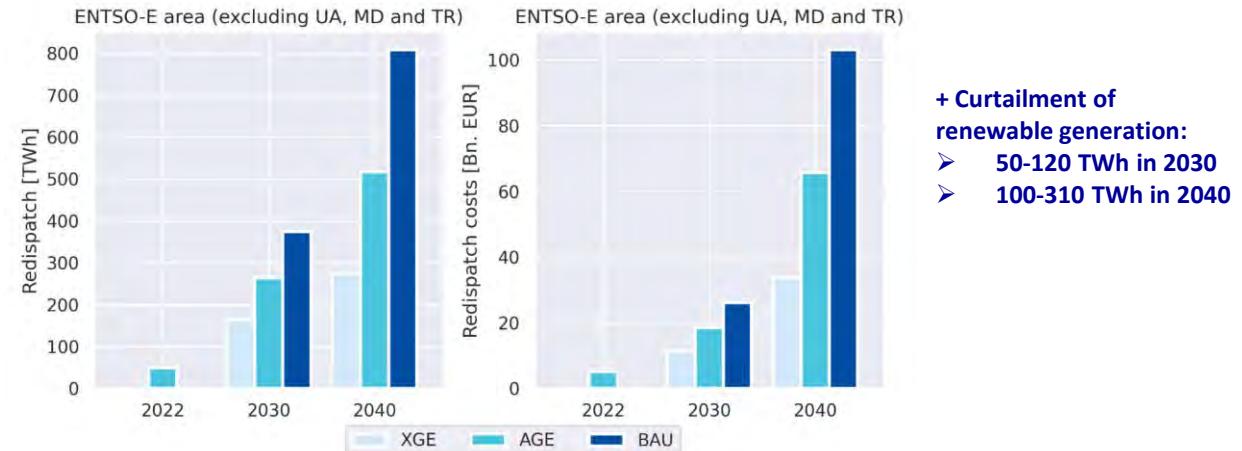
Increasing electrification

- Massive uptake of electric mobility + heating
- New peaks and valleys in demand

Physical grid limits

- Generation outside demand centers
- Grid reinforcement takes > 10 years
- Growing redispatch and curtailment

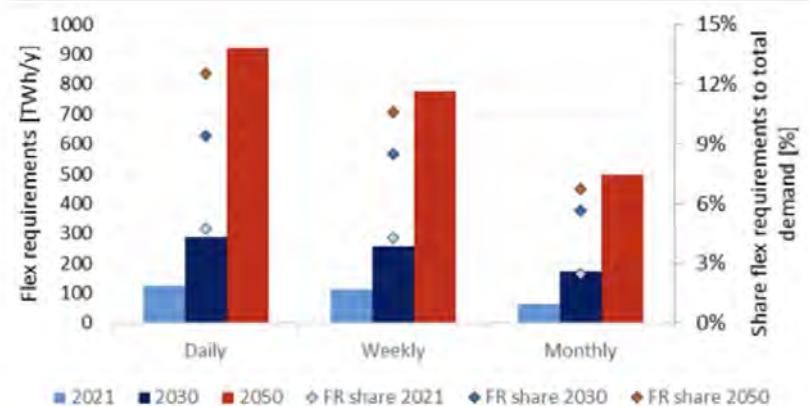
Evolution of redispatch volumes and costs (source: JRC European Commission)



+ Curtailment of renewable generation:

- 50-120 TWh in 2030
- 100-310 TWh in 2040

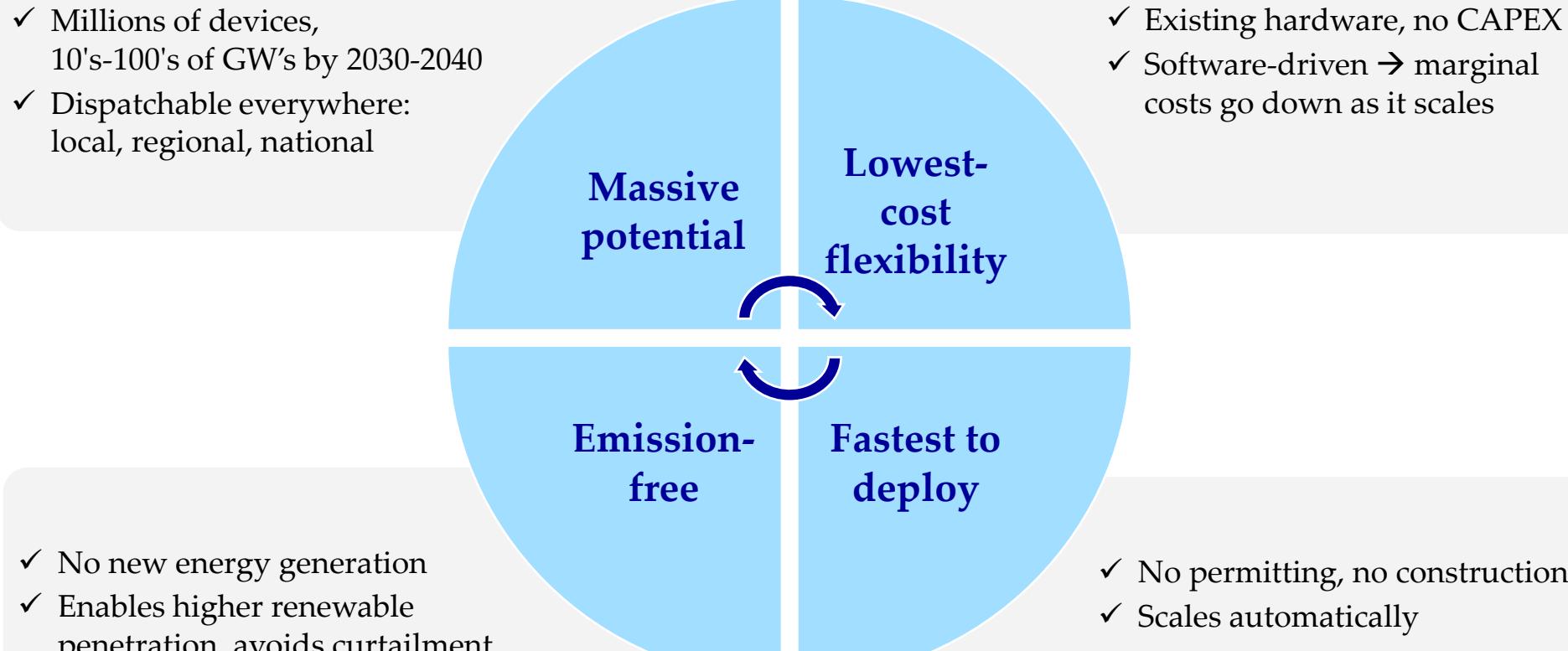
Evolution of flexibility requirements (source: JRC European Commission)



TSO's need more flexibility to keep the grid safe. Demand response will play a significant role in the total flex mix.

Demand Management is a very attractive option

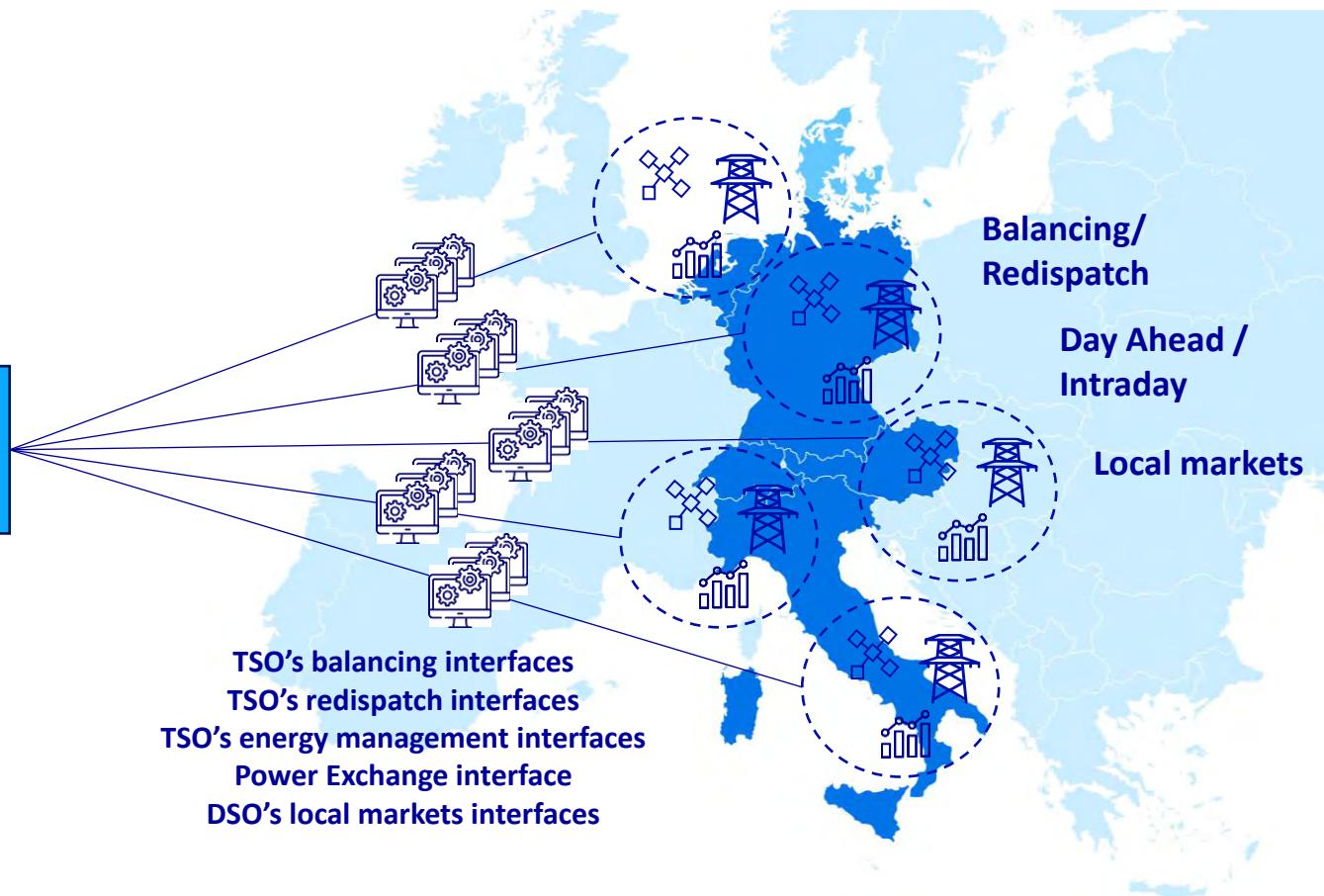
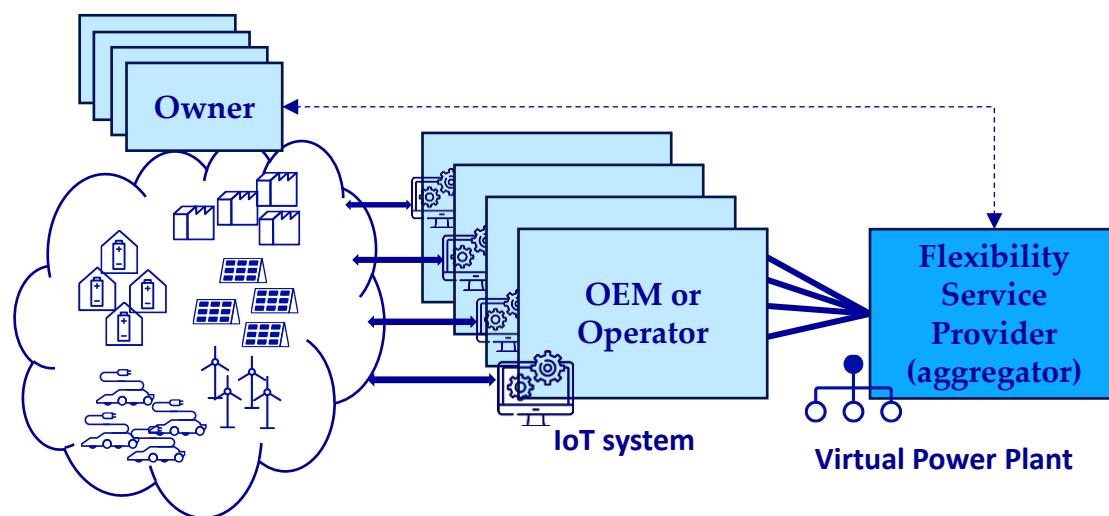
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Fastest, cheapest and largest source of flexibility for a Net-Zero power system. So why is adoption still slow?

How demand management delivers flexibility

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Demand-side flexibility requires a complex system with intelligent technology, many interfaces and partnerships.

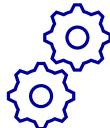
The rules and digital infrastructure were designed when only a few large generating units delivered flexibility

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REGULATORY CHALLENGES



FRAGMENTED PREQUALIFICATION REQUIREMENTS ON UNIT LEVEL



REGULATORY INCOMPATIBILITY
(e.g. double taxation, minimum bid sizes, cost based frameworks)



METERING REQUIREMENTS ON UNIT LEVEL



FEAR OF GAMING

DIGITAL INFRASTRUCTURE CHALLENGES



LACKING INTEROPERABILITY: DIFFERENT INTERFACES AND DATA FORMATS



COMPLEX AND COSTLY TECHNICAL CONNECTION REQUIREMENTS



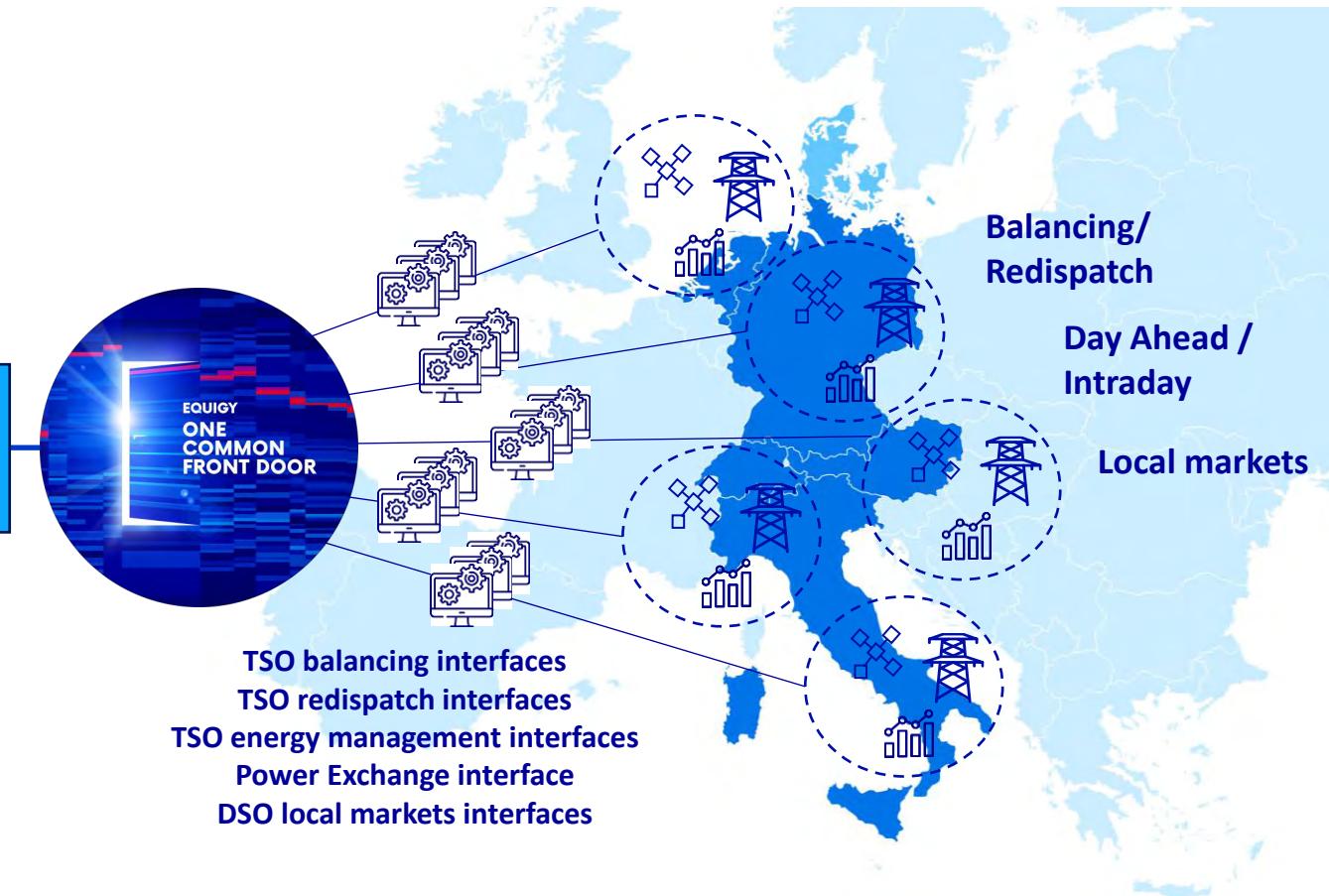
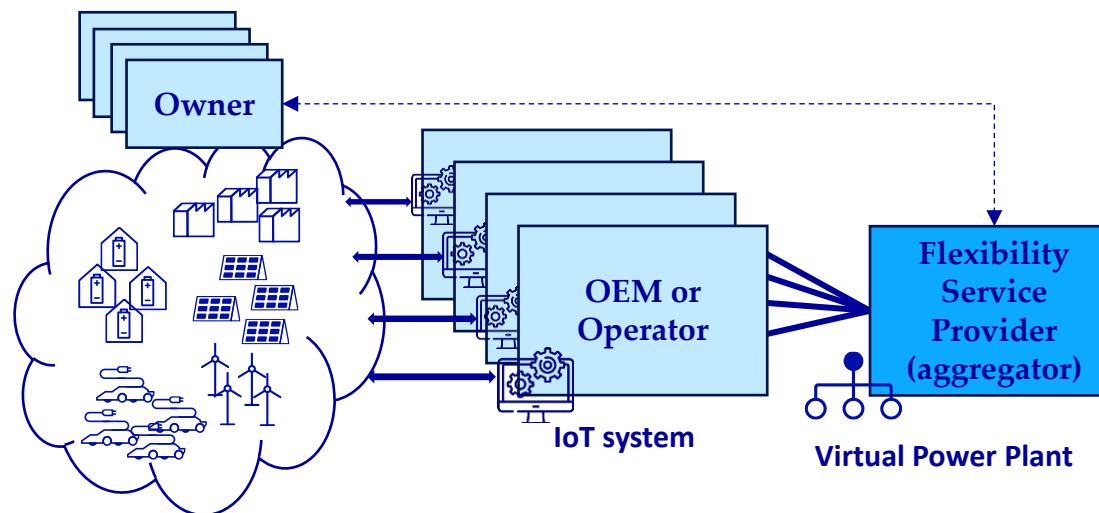
DATA SILEOS: DIFFICULT VERIFICATION AND TSO/DSO COORDINATION

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On digital side, simplified and standardized data exchange is needed, with better visibility for TSOs and DSOs.

Equigy's interoperability solution: one interface to different markets, inside and across countries

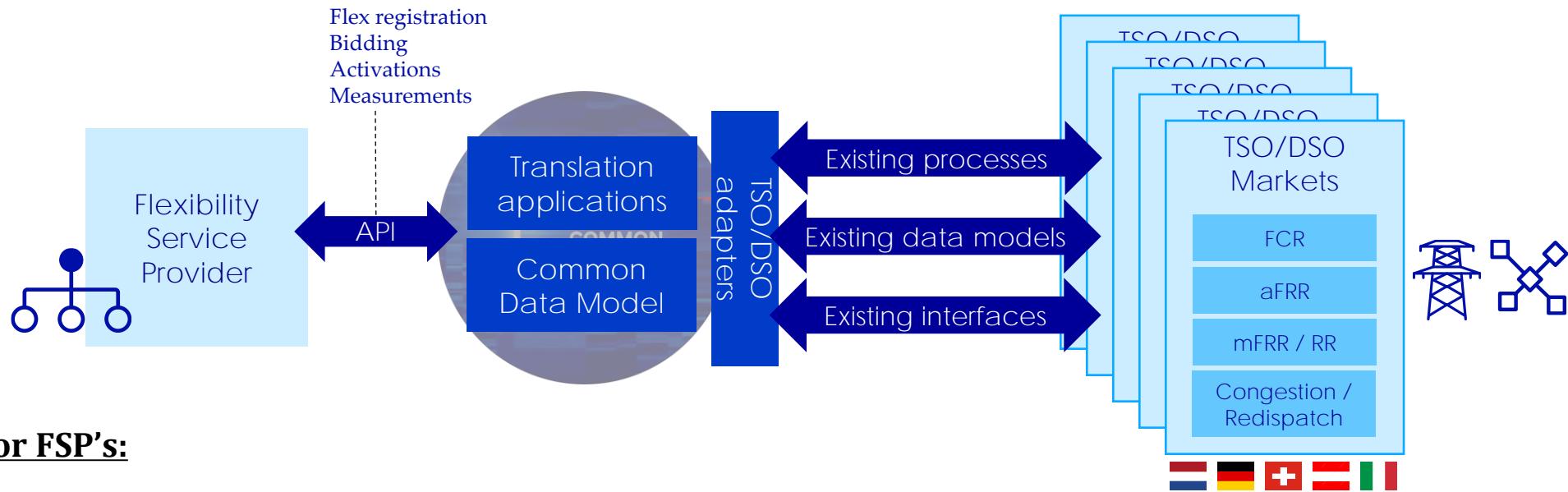
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One interface is easier, faster and cheaper for flex providers, thereby encouraging more market liquidity.

Offering one standard to flex providers, and acting as translation engine to the different markets

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Benefits for FSP's:

- ✓ Easy access and easy expansion across markets and countries
- ✓ Lower costs (single investment, single maintenance)

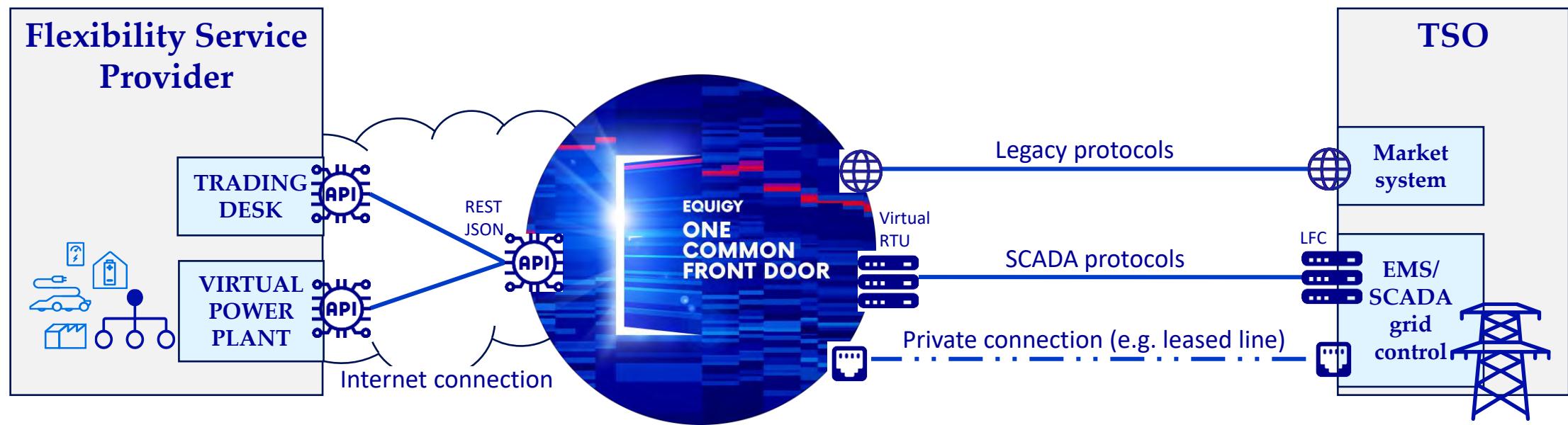
Benefits for TSOs/DSOs:

- ✓ Increased participation and market liquidity
- ✓ Limited impact to existing systems and processes
- ✓ Compliance to upcoming regulation

Pragmatic approach to standardization of market access, also in line with upcoming regulatory requirements

And simplifying interface and connection requirements, especially to the TSO EMS systems

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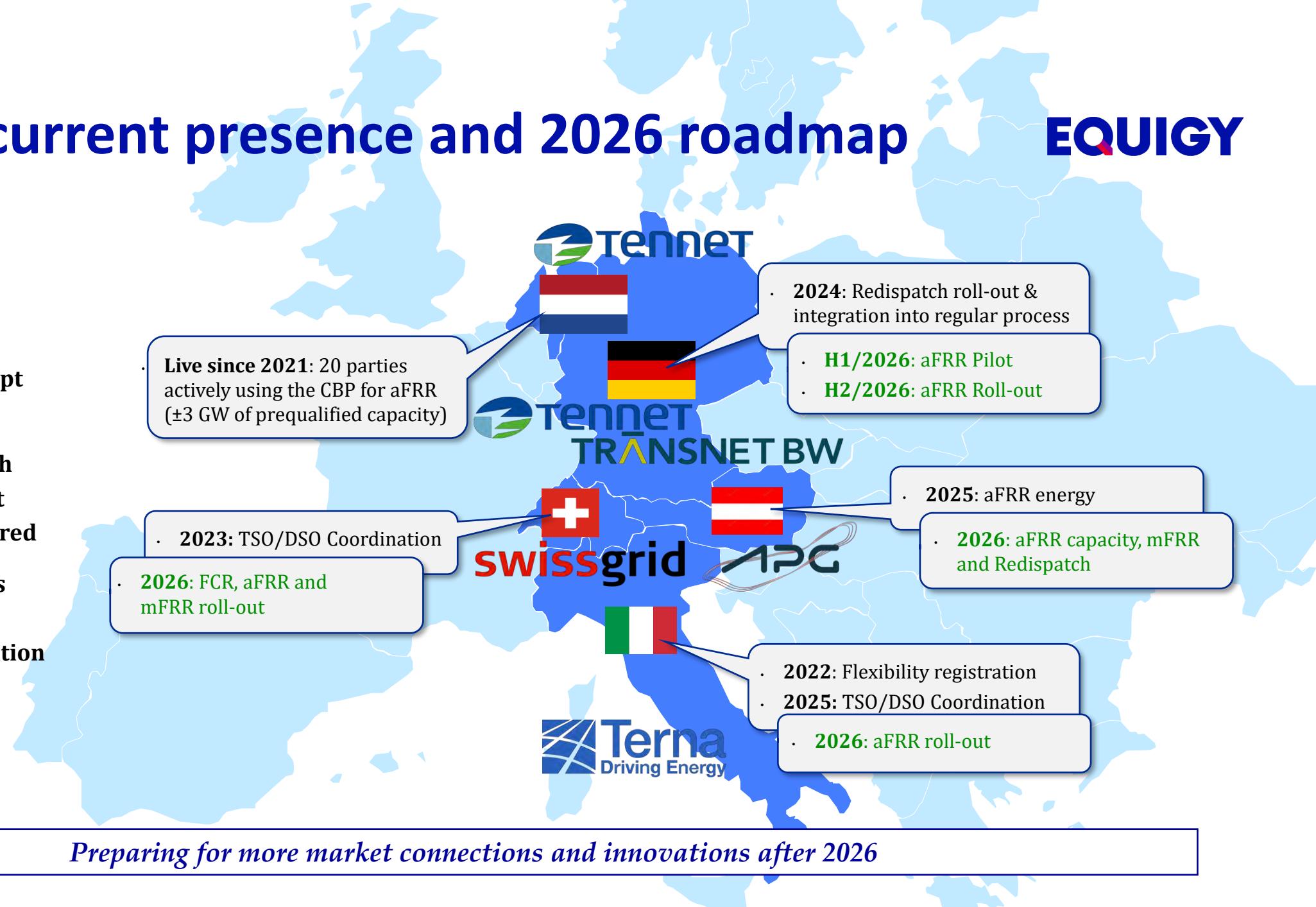


Enabling cloud innovation to connect to TSO backbones

Equigy's current presence and 2026 roadmap

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- Until 2025: Mostly pilot projects, except for Netherlands
- 2026: Key year with many more market connections delivered
- Major step towards European market access standardization





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THANK YOU

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