

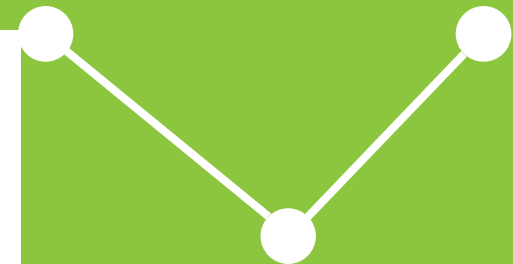


Renewable penetration levered by Efficient Low
Voltage Distribution grids



The future of smart electrical demand management seen today

Estabanell y Pahisa Energía, S.A.U.
Ramon Gallart
June 10th



Cover



Estabanell & Pahisa, S. A.

- Generation (hydro + PV)
- Electricity Markets
- Innovation
- Functional Management

 **estabanell**
distribució

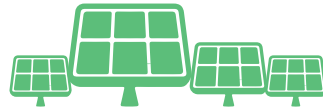
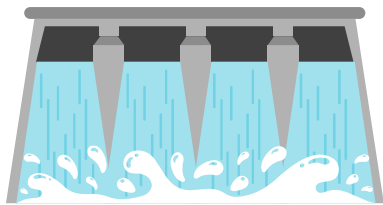
- Electricity Distribution
- Grid Services and Maintenance

 **estabanell**
energia

- Electricity retailing
- Energy Services (solar PV, electric vehicle...)

 **emagina**
fibra, mòbil, tv

- Internet Services Provider



Role

Leading the validation activities in our distribution grid

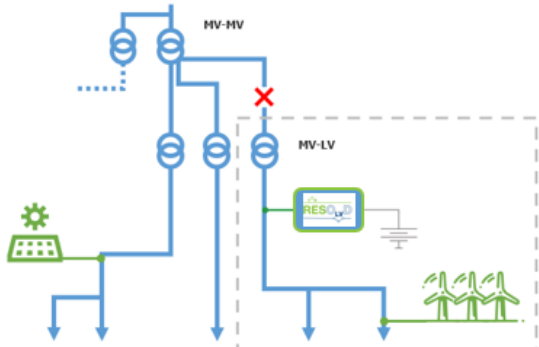


Gains

- ✓ Technology that **maximize** traditional assets.
- ✓ **Get closer to all users** of the distribution network.
- ✓ **Get more visibility and smart controllability** at last mile network to **maximize DER** integration.

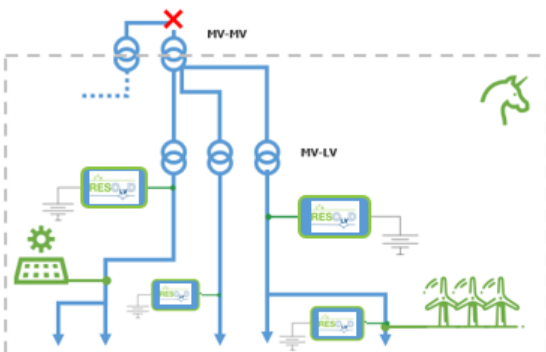
Solution

QuasiGrid Concept

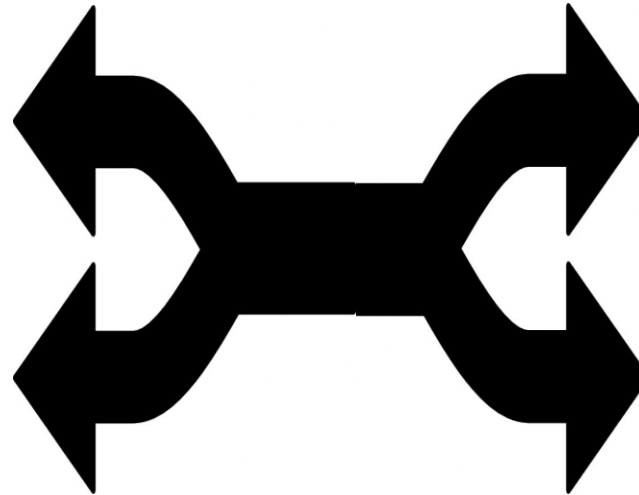


It continues to serve the isolated network without loss of service and maximum use of DER

Dynamic micro-grid concept



It acts as a smart grid by jointly managing all sources and uploads connected to a larger area



Services

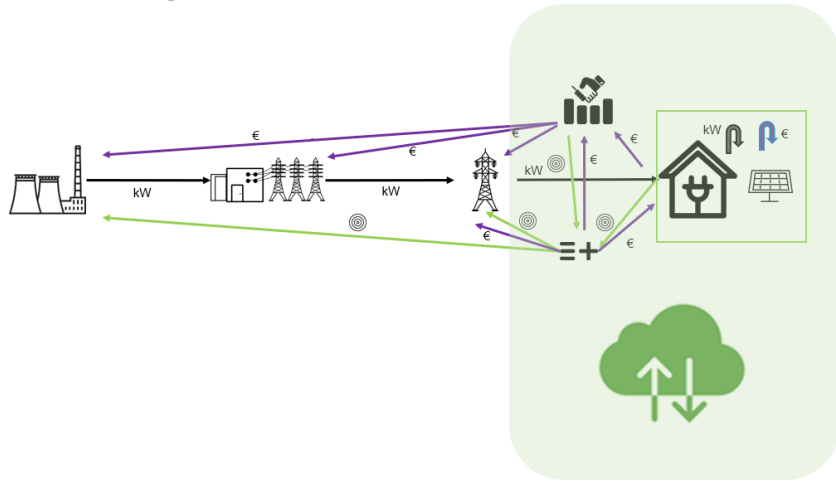


Equipment

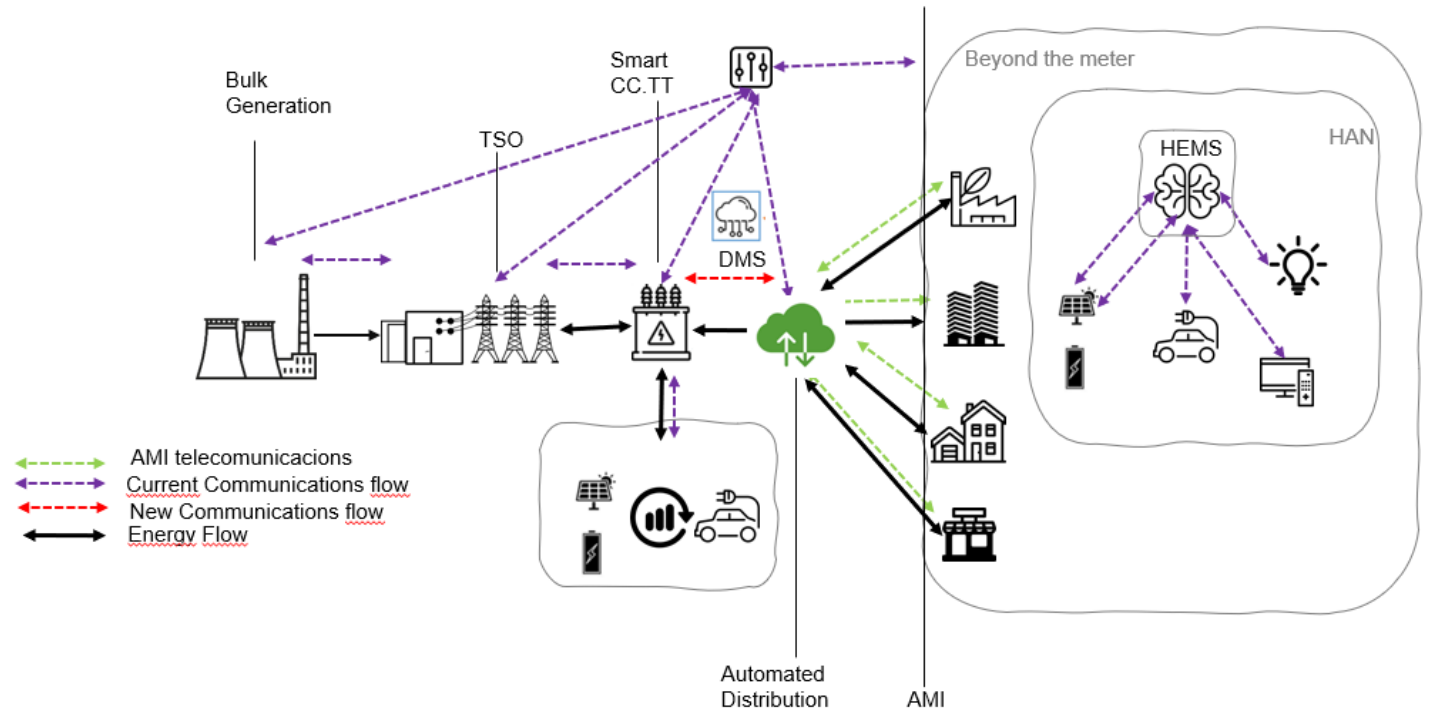


Competitive Advantage

Manage disassociated flows.



Integrated under IoT concept.



Prevent **loss of comfort** for electrical user .
Enhance DSO role as a **neutral actor**.

Exploitation pathway



Energy in the Cloud

SaaS



Solves the technical problem

Overcomes the investment obstacle



DSO → Aggregator → BRP

Thank you!

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