



#CE4EUislands - Workshop

Smart electricity systems for facilitating the decarbonisation of islands: demand-side management and flexibility

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Energy Pool Core Business – What We Do?

4 business lines delivering world-class services and solutions



Flexibility programs design, deployment and operations

Design of DSM programs

Deployment, customer engagement

Technical enablement, contracting & 24/7 operations of aggregated portfolios

2 Software Solutions & Microgrids

Industrialized and scalable software solutions for management of distributed energy systems Addressing all types of assets: Generation, Consumption, Storage In all contexts: Grid connected, Off-grid, with or without power and flexibility markets

3 Consulting

High level advisory on market design and regulatory Technology and economic feasibility expertise Operations design

Process Transformation

Advising electricity end-users on strategies to reduce CO2 emissions. Design of hybridization & electrification plans, including flexibly monetization Projects deployment and operations

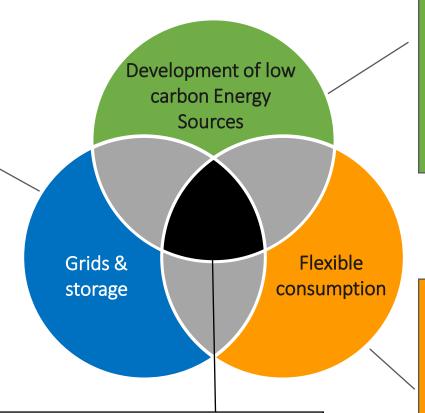


The other sides of the coin of the Energy Transition

Reaching the right balance for a sustainable transition pathway

- Grid congestions
- Reliability and resilience

Plan infrastructure in a holistic manner and challenge costs against alternatives



- Competitive but intermittent
- Fixed cost based

Optimise energy value of GEN capacities for a competitive system

- Electrification (to reduce CO2)
- Incentives for demand to become more «elastic »

Support « Flex-proof » electrification and make the transition affordable for end-users

BETWEEN THE 3 COMPONENTS



Demand Side Management

Key characteristics and capabilities of the main categories of consumers

	Industry [M]	Commercial / Buildings	Residential (a)
Individual flexibility potential	Large	Small	Very small
Speed of implementation	Fast	Medium	Slow to medium
MW acquisition cost	Low	Medium	High
Annual availability	3000-8000 h/year	1000-8000 h/year	1000-3000 h/year
Customer's priority	Production	Customer service	Comfort
Flex operations complexity	High	Low	Low



Typical approach for DR / DSM deployement

Phase 1: Study and Design

Phase 2: Customer Engagement

Phase 3: Customer Enablement

Phase 4: Operations



Assess current system dynamics and needs for flexibility, considering existing grid code.

Assess and qualify DR resources: Volumes (MW) and capabilities

Consider what works, and what does NOT work elsewhere

Determine the technical, operational and economical characteristics of the DR programs, including consumers' incentives



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