**European Parliament - Public Hearing on the Future of the EU Electricity Market** 

# Empowering Consumers: Demand-Side Flexibility in the New Market Design



Frauke Thies Brussels, 10 July 2017



## Who We Are

#### **Executive Members**





































#### **Associate Members**

































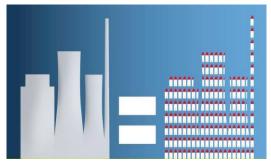








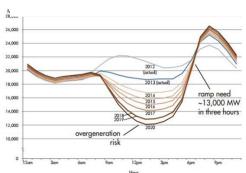




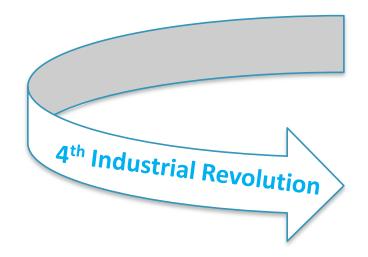




**Electrification** 



**Variability** 





**Empowerment** 



**Flexibility** 



**Digitalisation** 

**The New Realities** 



Credits: Lichtblick, CAISO, Teiet, Visioncritical, EIT

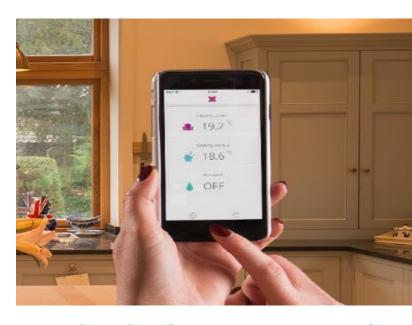
# **Examples Today**



Sainsbury's – HVAC in Supermarkets



**ArcelorMittal – Steel Production** 



Individual Consumer with Automation



## Will Europe Embrace the Potentials...?

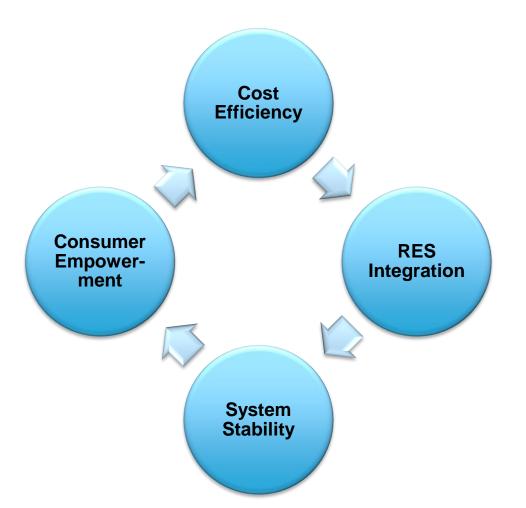


Table 15: Cost of supply in the wholesale market in the year 2030<sup>310</sup>

Load Payments (billion EUR)				
	Day- ahead Market	Intra Day Market	Reserves and balancing	Total
Current Market Arrangements (in context of low price caps, systematic congestion)	326.2	22.1	7.7	356.0
Level playing field + removal of low price caps	327.5	17.1	6.8	351.4
Strengthening short-term markets + removal of low price caps, locational price signals	317.6	11.6	1.9	331.2
Demand response / distributed resources into the market + removal of low price caps, locational price signals, demand response in day-ahead	300.4	4.0	1.0	305.4

Source: NTUA modelling (PRIMES/IEM)



# **Enabling Access**

## Commission Proposal/ Karins Report

Implicit DSF

DSF

#### Dynamic pricing

- Choice for all consumers
- Removal of regulated prices (-> targeted support)
- Access to Smart Meter
  - Relevant data access







#### Access for DR and DER to all markets

- Opening of all markets
- Adequate product definitions, durations and pre-qualifications



- Possibility for simple 'uncorrected approach'
- Detailed models with perimeter correction where proportionate
- Adequate contractual conditions with consumer (aggregator switching ≠ supplier switching)
- Relevant data access and protection







# **Monetising DSF**

### Commission Proposal/ Karins Report

Effective Price Signals

- Remove price caps
- Allow scarcity pricing
- Reduce blunting effect of taxes/charges/levies









- Enable/encourage DSO procurement of flexibility
  - Market-based approach
  - Market-based ownership
- Ensure streamlined approach with wholesale level
  - With balancing mechanism/ products
  - With electricity markets











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