

Regional Cooperation as key element of the EU Market Design Proposal

Dr. Oliver Koch

EU Commission
DG Energy

This presentation reflects solely the views of the author
and does not bind the EU Commission



European
Commission

THE CLEAN ENERGY FOR ALL EUROPEANS Package

Consolidation and prioritisation

Putting energy
efficiency first



Delivering a fair deal
for consumers



Global leadership
in renewables



Energy Union
Governance



Energy Efficiency
(Energy Efficiency
Directive, European
Performance of
Buildings Directive)



Renewables
(Revised Renewable
Energy Directive)



New Electricity
Market Design



Energy prices
and costs
report



Intro:

-

Flexibilisation & increased need for cooperation

Old world...



...new world

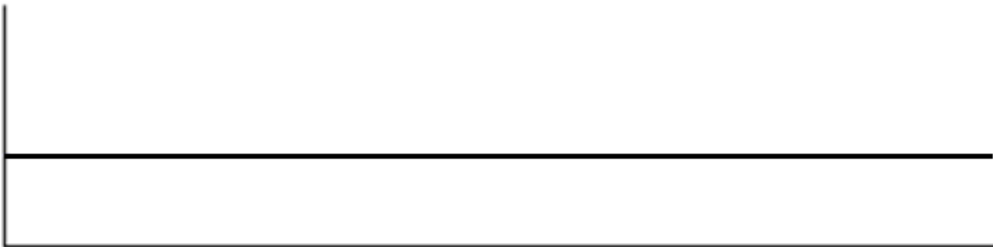


Disruptive change:

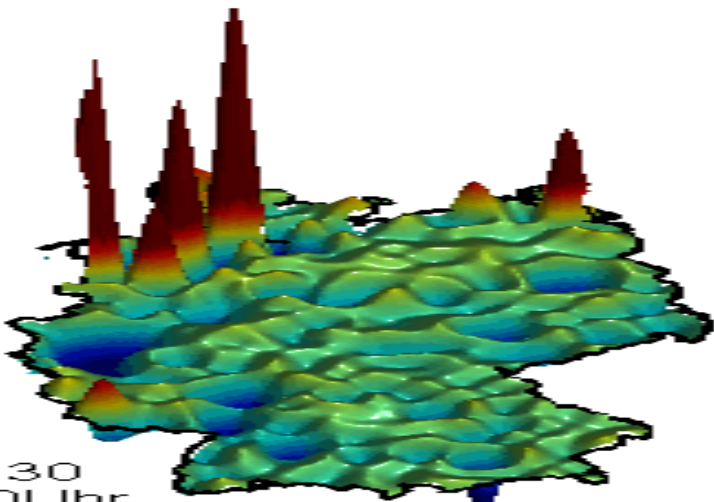


From central / baseload
to decentral / volatile

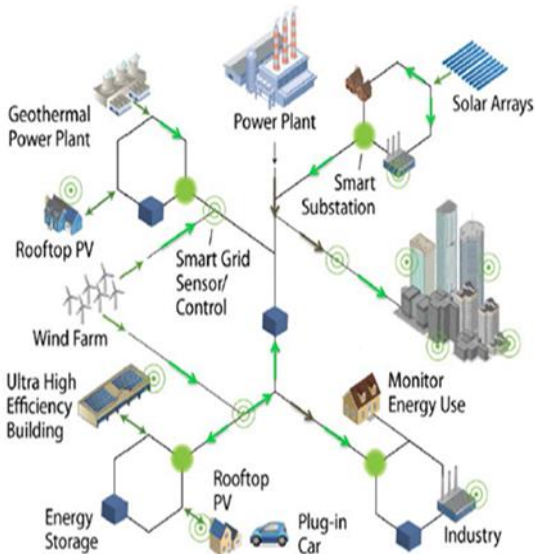
Old Electricity World



New Electricity World



Tag 130
00:00Uhr



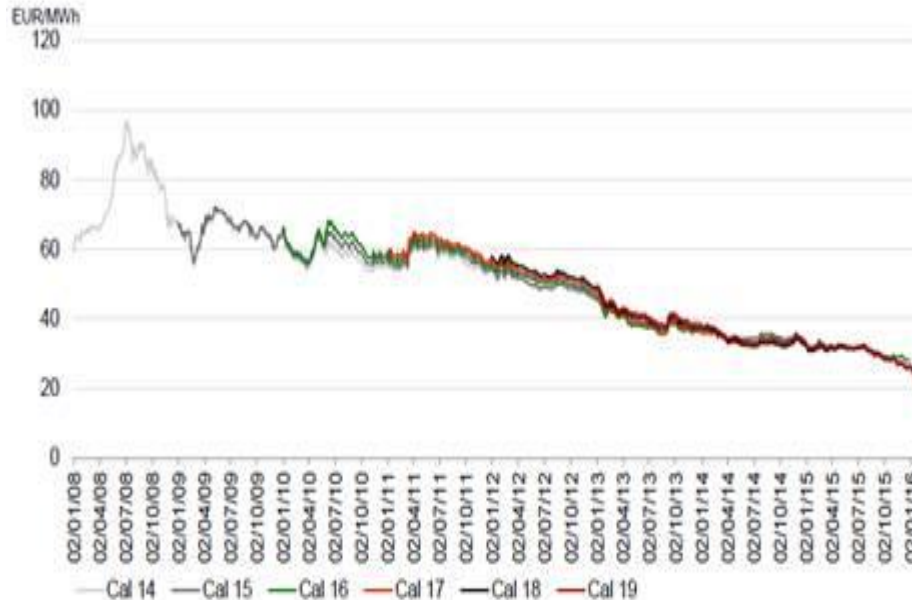
‘Missing Money’ –

Baseload vs Flexibility Business Case?

Thinking in average pricing... ...or earning €90 in a €40 market?

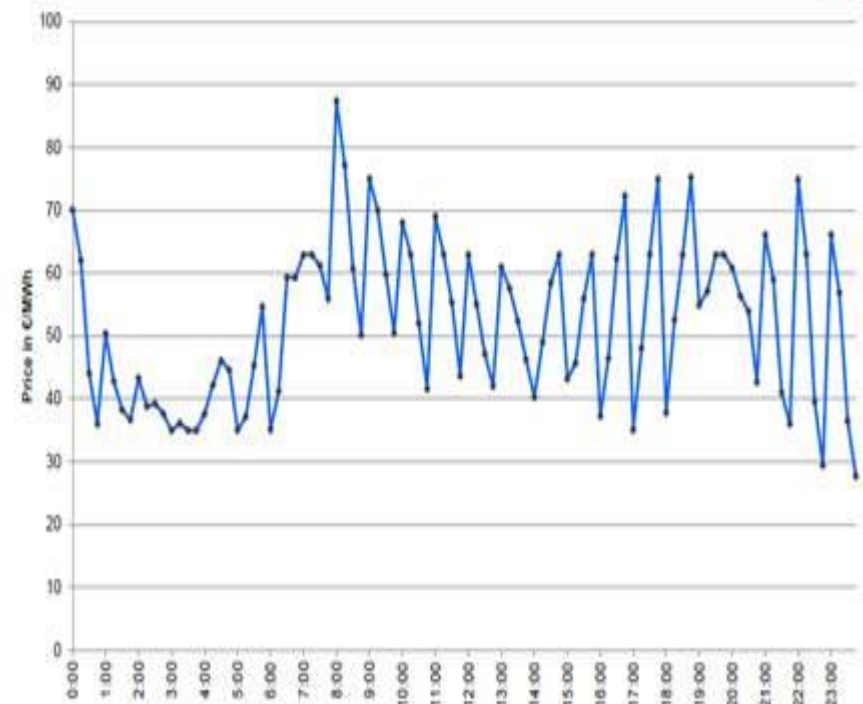
Ever Decreasing Power Prices

eeX



Intraday-Auction on 7 July 2015

eeX



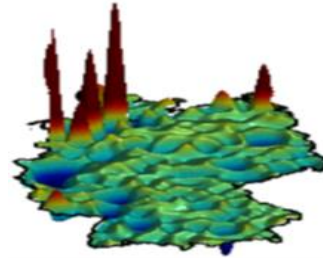
Market Design Reform

—

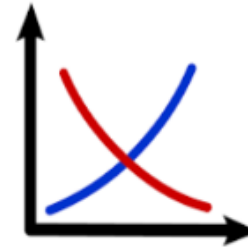
Key elements

What do we propose?

- Adapt market rules to new realities



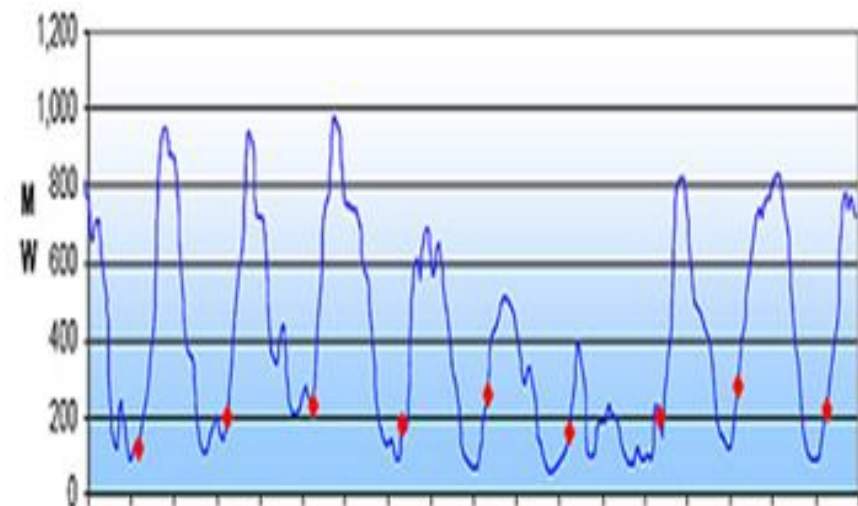
- Reduce state interventions – use markets



- Cooperate across borders



Adapt rules to new market realities



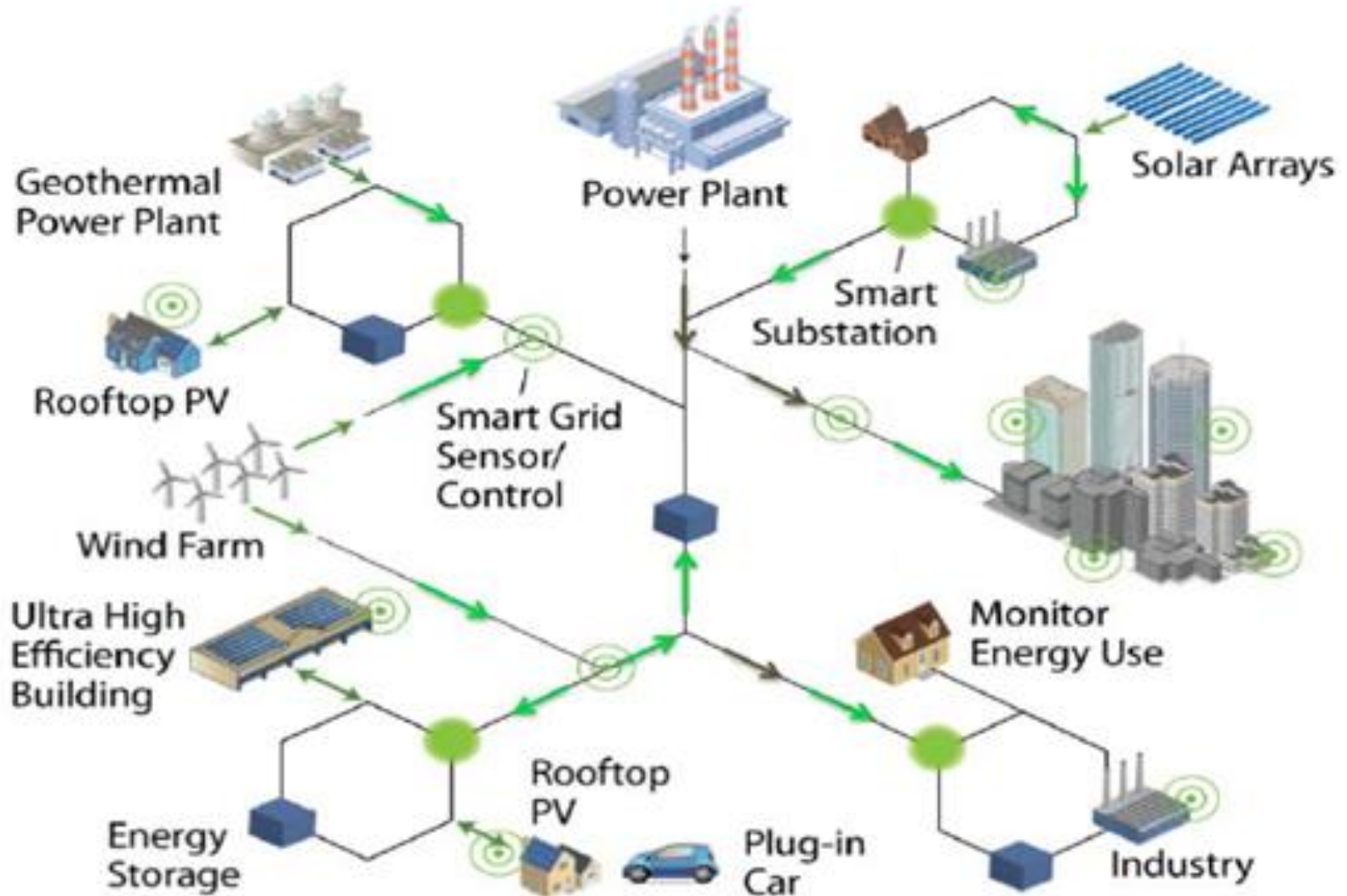
EU short-term markets

Integrate demand side

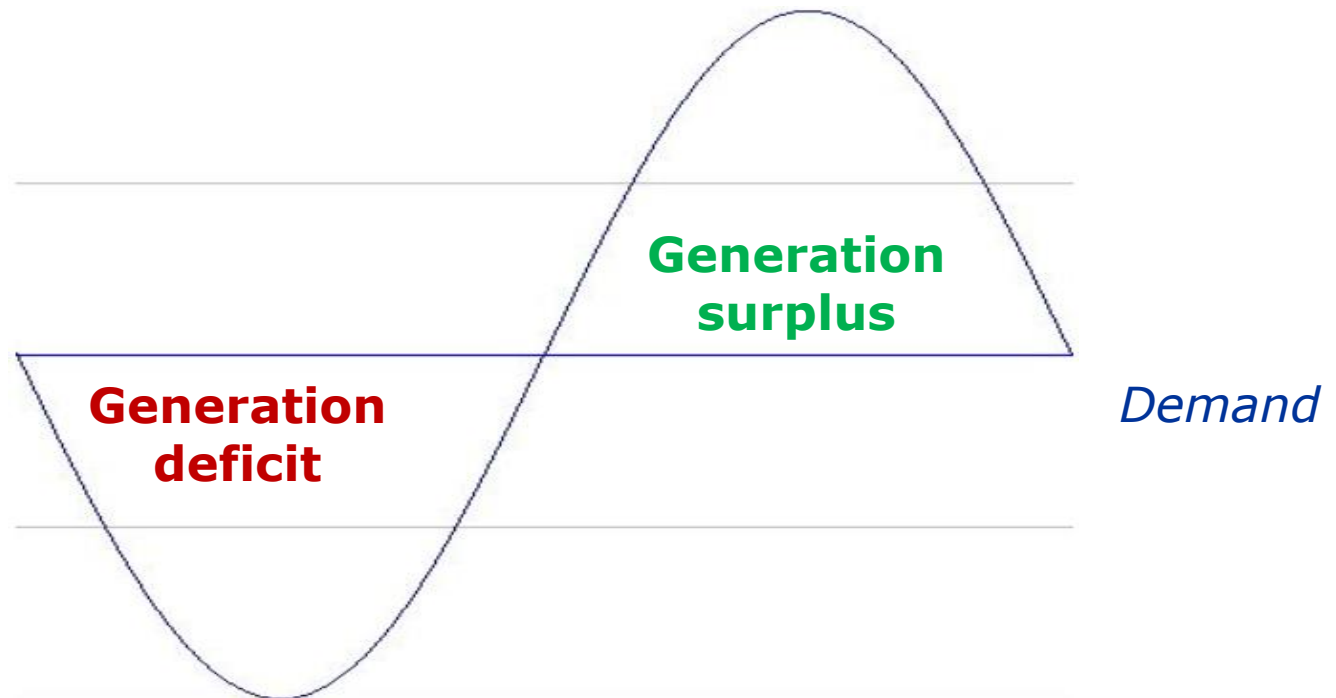
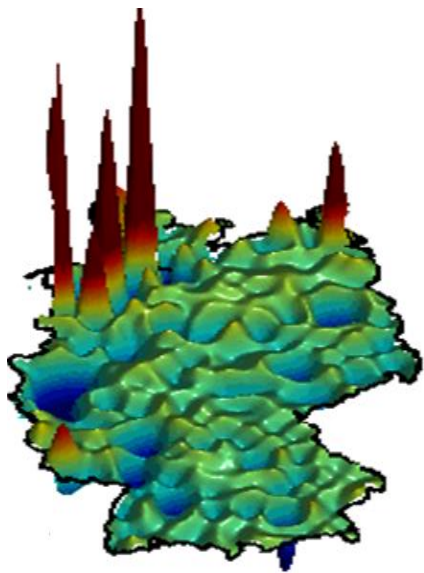
**Allow price peaks – end
of regulated prices**

**Increase C/B-trade &
use of interconnectors**

Update Retail Markets



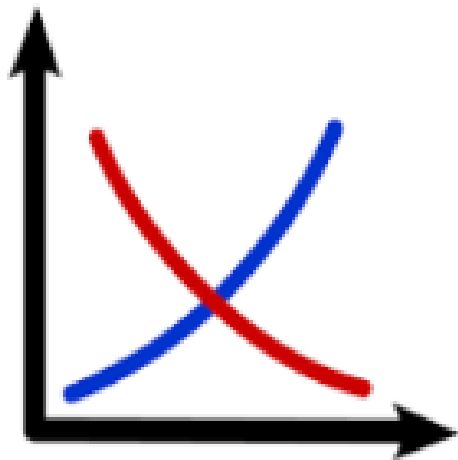
Earning money with electricity demand: Coping more effectively with deficits and peaks



- Classic: Pay backup generation
- **Alternative: Postpone consumption...**
(...and earn money...)

- Classic: Curtail generation
- **Or: Activate consumption**
(and save money...)

Make state interventions market compatible



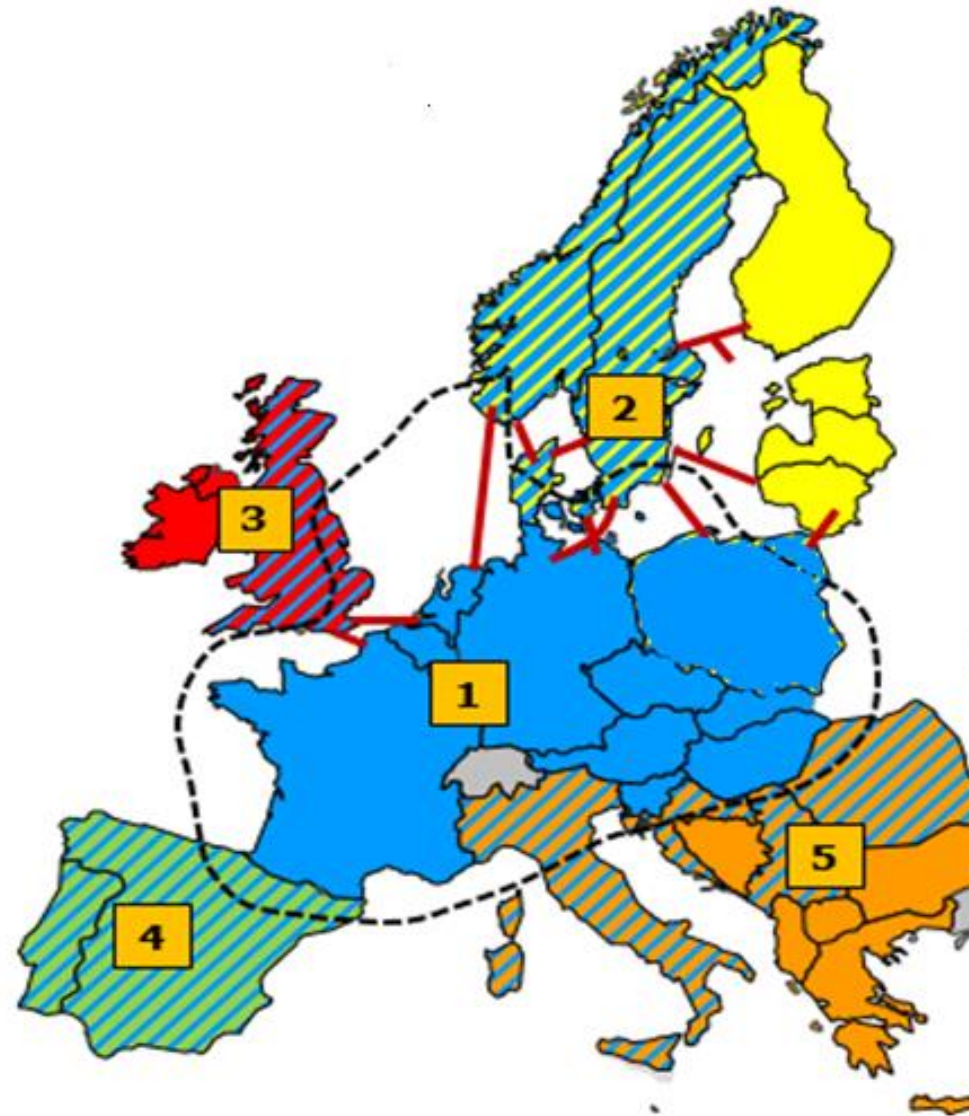
**RES support schemes –
end "produce & forget"**

**Limit distortive privileges
(eg priority dispatch)**

**EU-wide
adequacy assessment**

**Cross-border open
capacity mechanisms**

Increased use of regional cooperation



TSO – cooperation
(Regional Coordination Centres)

Regulatory Cooperation
- strengthen ACER

**Coordinated
Crisis coordination**

*Regional Political
Coordination?*

Increased use of regional cooperation

- Nordic tradition of regional cooperation as blueprint
- *Status quo 2017*: Regional cooperation & regional decision-making = **Key pillar** of network codes & guidelines (1000 pages of EU legislation on grid operation and electricity trade)

Reason: some issues cannot be solved by individual action of TSOs and NRAs, but require **coordinated action** and **joint decision making** (e.g. Market coupling; capacity calculation)

Example: unilateral capacity reductions at DE/DK border

- Different **regions already established** (e.g. Capacity calculation regions, ...)
 - => Joint regional decisions (with majority voting, if more than 4 countries)
 - => NRAs need to agree jointly whether to approve or not
(if disagreement => NRAs decide within ACER)



Increased use of regional cooperation

Regional cooperation in market design initiative (2020-2030)

- **Regional Coordination Centres**
 - =>Enhanced TSO-cooperation, gradually phasing in:
 - =>Responsible for existing coordinated actions (e.g. joint capacity calculation)
 - =>Recommendations on other relevant topics (CORESO-model)
- Enhanced role for ACER
 - =>Streamlined development of network codes
 - =>involvement in new methods (e.g. joint EU-adequacy assessment)

Regional cooperation with non-EU countries

Different groups of countries

- **Agreement with EU, Application of EU acquis, judicial enforcement**
(e.g. EFTA, EnC)
=> Close integration possible, limited problems
- **No agreement with EU, different or missing rules**
Problem: Issues with level playing field
=> Market distortions (e.g. unequal market access, see e.g. CH)
=> No market supervision – REMIT (risk of trade havens)
=> Legal obligations for all EU players, but not for 3rd countries
(e.g. cost compensation, liabilities for blackouts, state aid rules|etc.).

Example: capacity calculation- who decides in case of conflict?
(See EnC – missing ACER-mandate as a problem)

Thank you

Outlook: Digitalisation *a "Uber moment" for utilities & TSOs?*



 BrooklynMicrogrid Retweeted



Marty Rosenberg @martyrosenberg

A microgrid grows in Brooklyn. bit.ly/2vHtdUj
Bringing blockchain to Brooklyn @LO3energy



Brooklyn Microgrid



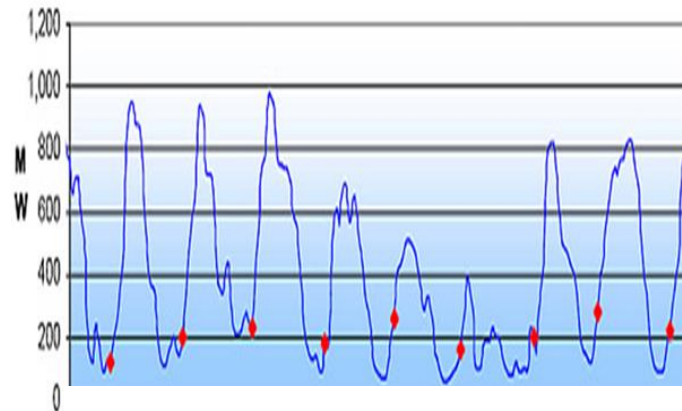
Marty Rosenberg @martyrosenberg

Are today's electric utilities the new walking dead? bit.ly/2wM723X @NARUC @nasucadc
@LO3energy @mitenergy

Adapt Rules to new Realities

(...and save money)

Create ***EU-Short-term Markets***



⇒ 15 minutes trading

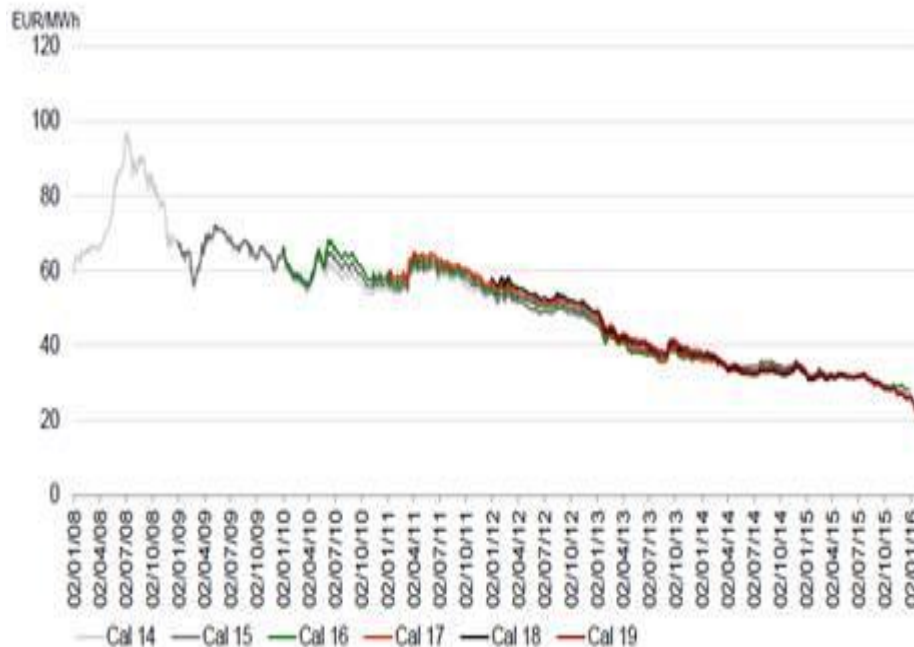


*EU-wide intraday and & Balancing markets
instead forward/day-ahead only*

‘Missing Money’ – or Thinking in Old Baseload World?

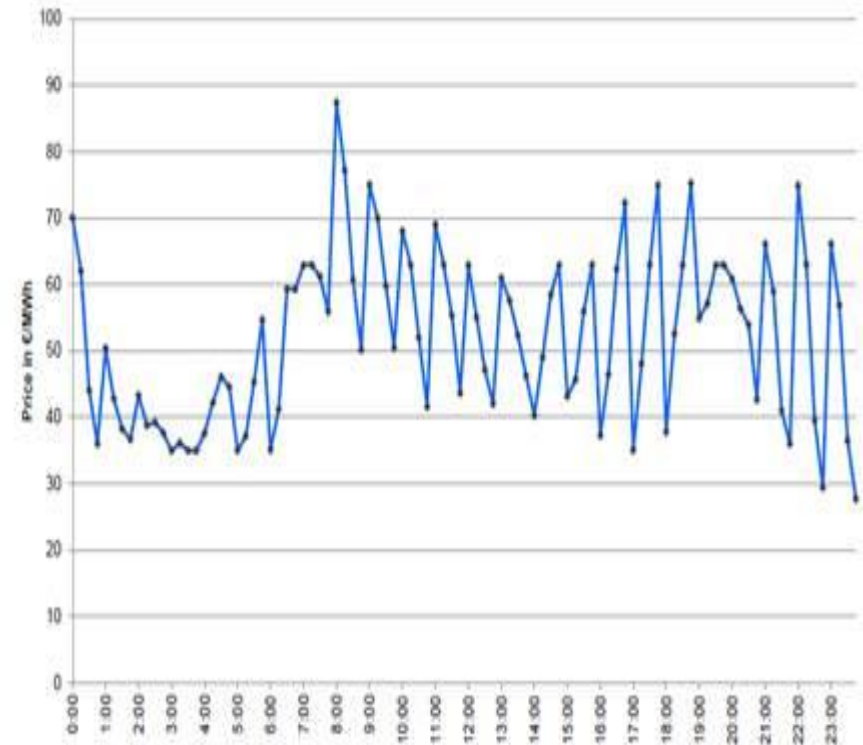
Thinking in average pricing... ...or earning €90 in a €40 market?

Ever Decreasing Power Prices



eeX

Intraday-Auction on 7 July 2015

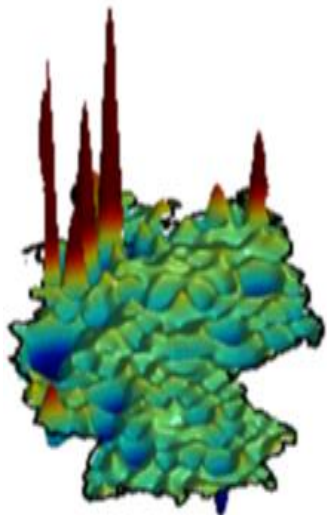


eeX

Adapt Rules to new Realities

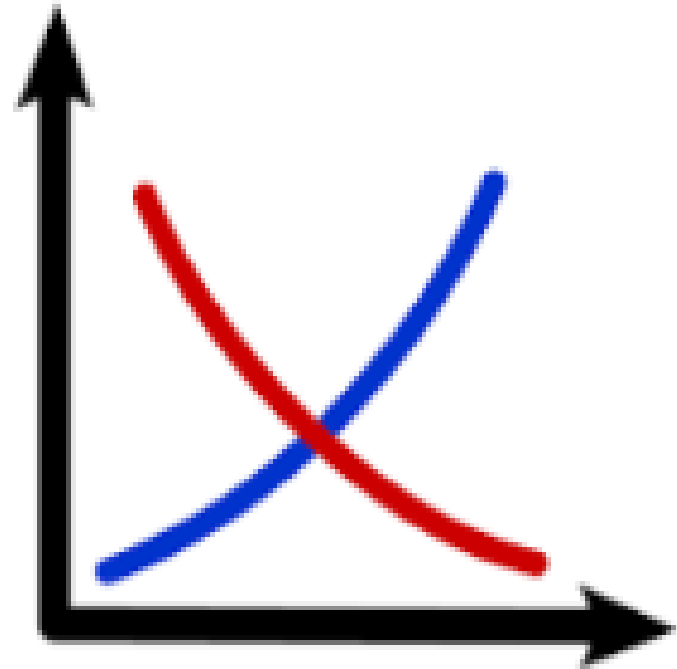
(...and save money)

- ***Demand/supply/grid capacities differ (time/location)***
- ⇒ ***Prices should reflect demand & supply (time/location)***
- ⇒ ***Abolish regulated prices, politically motivated price zones and "price caps" as they...***



- ⚡ ***...prevent effective price formation***
- ⚡ ***...lead to power flows to "wrong" place/at "wrong" time***
- ⚡ ***... prevent investments where needed***
- ⚡ ***...increase costs for consumers – hide variability***

Use Market Forces to Bring Prices down & Reduce Distortions from State Interventions



Use Market Forces to Bring Prices down & Reduce Distortions from State Interventions

- Outdated/fragmented **state aid for renewables (& coal)**

Old: "produce and forget" New: Market Orientation



- Outdated/fragmented **state aid for generators**
("Capacity Mechanisms" and "Strategic Reserves")

Old: Generator-driven

New: Joint needs assessment



More market-compatible design

=> Make state interventions compatible with market