



Alliance for
Internet of Things
Innovation

January, 29 2020

“Data Driven Energy Services – how to engage consumers”

Brussels January 21, European Commission (DG ENERGY and DG CONNECT), AIOTI, ENTSOE and INOENERGY

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“ADVANCED AND INTEROPERABLE DIGITAL
BUSINESS-TO-BUSINESS PLATFORMS FOR SMART
FACTORIES AND ENERGY”, 16 October 2018

“OPEN MARKETPLACES TO SPUR INNOVATIVE
ENERGY SERVICES”, 22 October 2018

“OPEN ENERGY MARKETPLACES AND THE
ENABLING TECHNOLOGIES”, 8 March 2019

“DIGITAL ENERGY MARKETPLACES”, 17 September
2019



Open Energy Marketplaces evolution

Beyond Enabling Technologies

March 5, 2019

V1, containing chapters 1-5

Chapter 6-7 to be released after the workshop March 8, 2019

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Disclaimers: Draft version containing chapters 1-5, for discussion at the March 8th, 2019 workshop.

Where we are now/ where we have been

Where we want to be

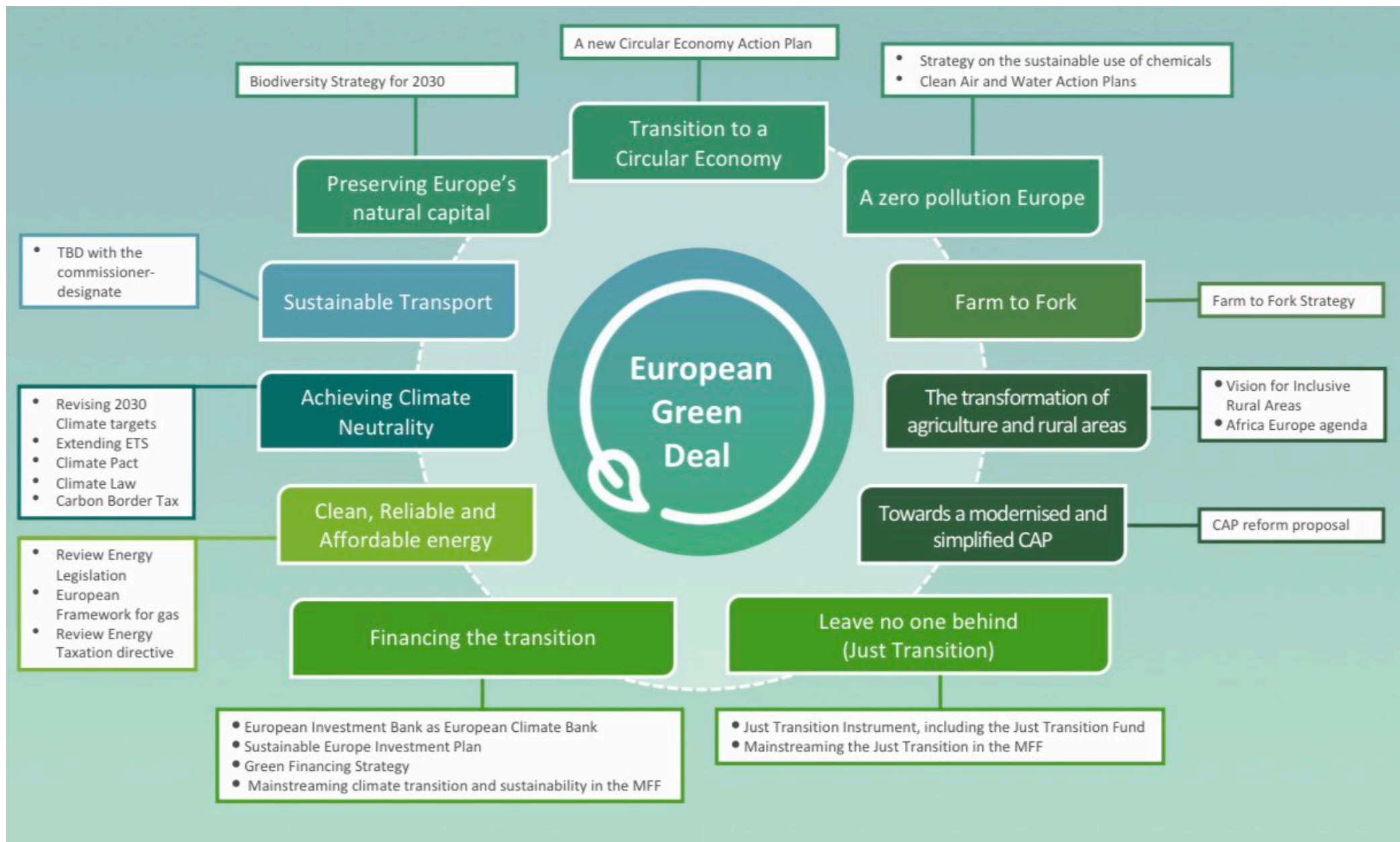
What do we need to work on

GREEN DEAL

‘Climate neutral’ Europe and overarching objective of the European Green Deal. The EU will aim to reach net-zero greenhouse gas emissions by 2050, a goal that will be enshrined in a ‘climate law’ to be presented in March 2020.

EU’s climate ambition for 2030, with a 50-55% cut in greenhouse gas emissions to replace the current 40% objective.

The 55% figure will be subject to a cost-benefit analysis.



EU lays out 1 trillion-euro plan to support Green Deal

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President of the European Commission Ursula von der Leyen gives a speech during the presentation of the priorities of the rotating Presidency of the Council for the next six months at the European Parliament on Jan. 14, 2020 in Strasbourg. (AFP Photo)

The European Union plans to dedicate a quarter of its budget to tackling climate change and to help shift 1 trillion euros (\$1.1 trillion) in investment towards making the economy more environmentally friendly over the next 10 years.

In 2050 the Customer is fully engaged

VISION 2050

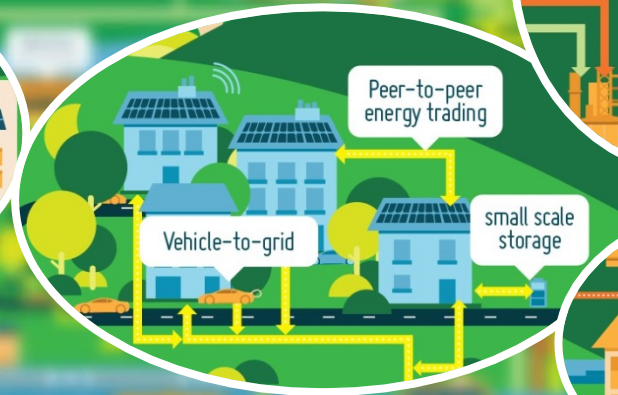
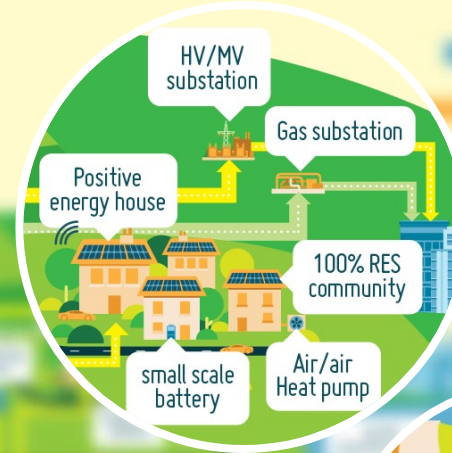
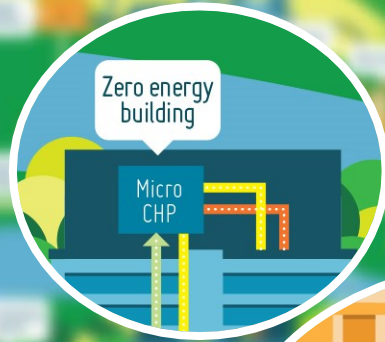
A SYSTEM OF SYSTEMS



In 2050 the Customer is fully engaged

VISION 2050

A SYSTEM OF SYSTEMS



From Physical to Digital Grids

DSO's are implementing the use of new technology and communication infrastructures to advance management and operation of the distribution network in order to assure full smart metering potential, especially with regards to grid-relevant information collected by the meter that can be exploited in order to optimize consumer performance:

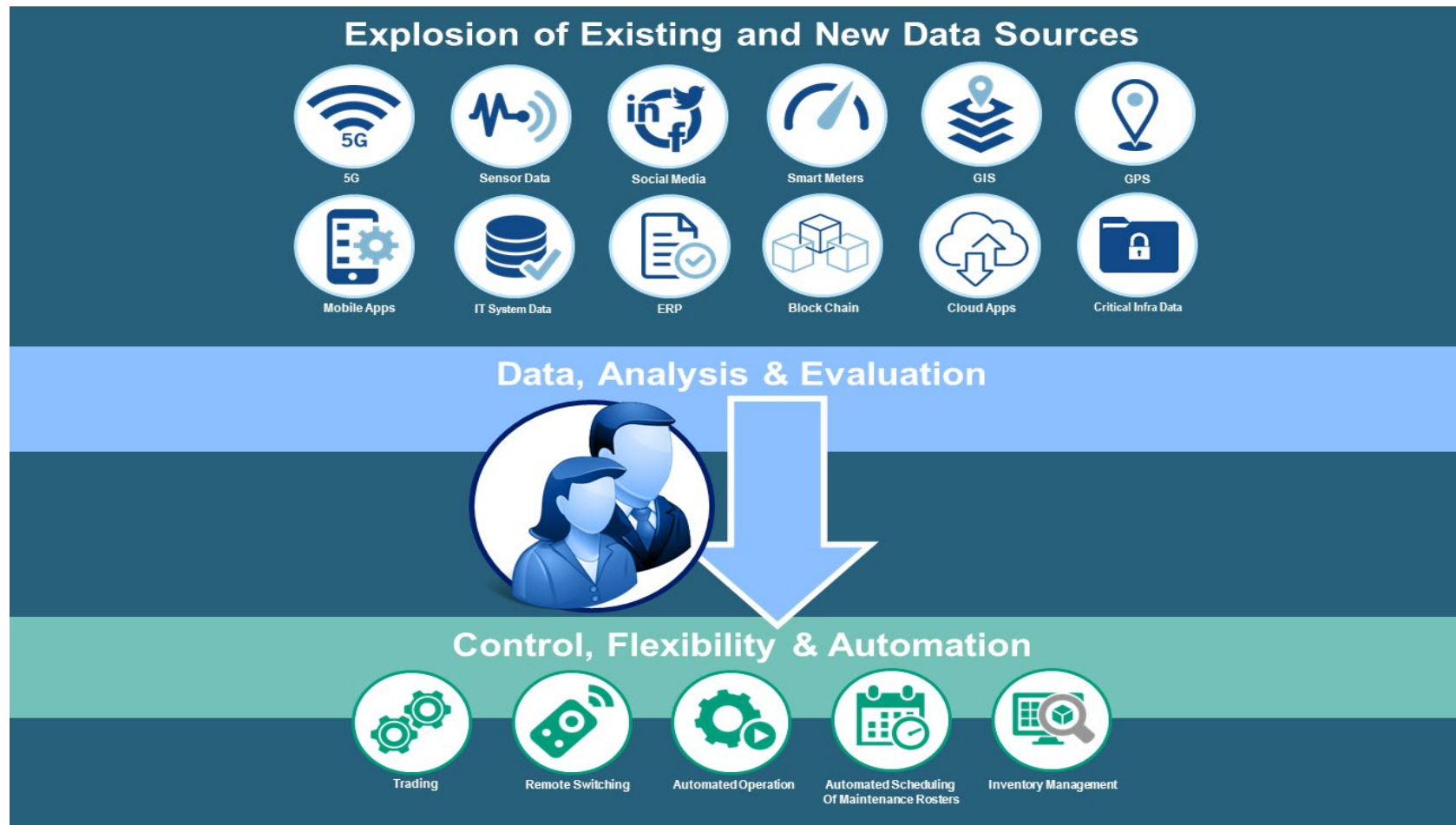


Smart Metering allows to:

- Validate power quality with the energy contract
- Verify reliable equipment operation
- Improve response to power quality-related issues
- Allocate energy costs to departments or processes
- Reduce peak demand surcharges, power factor penalties
- Identify billing discrepancies
- Augment energy rate negotiations and participate in load curtailment programs
- Leverage existing infrastructure
- Integrate with other utility metering systems

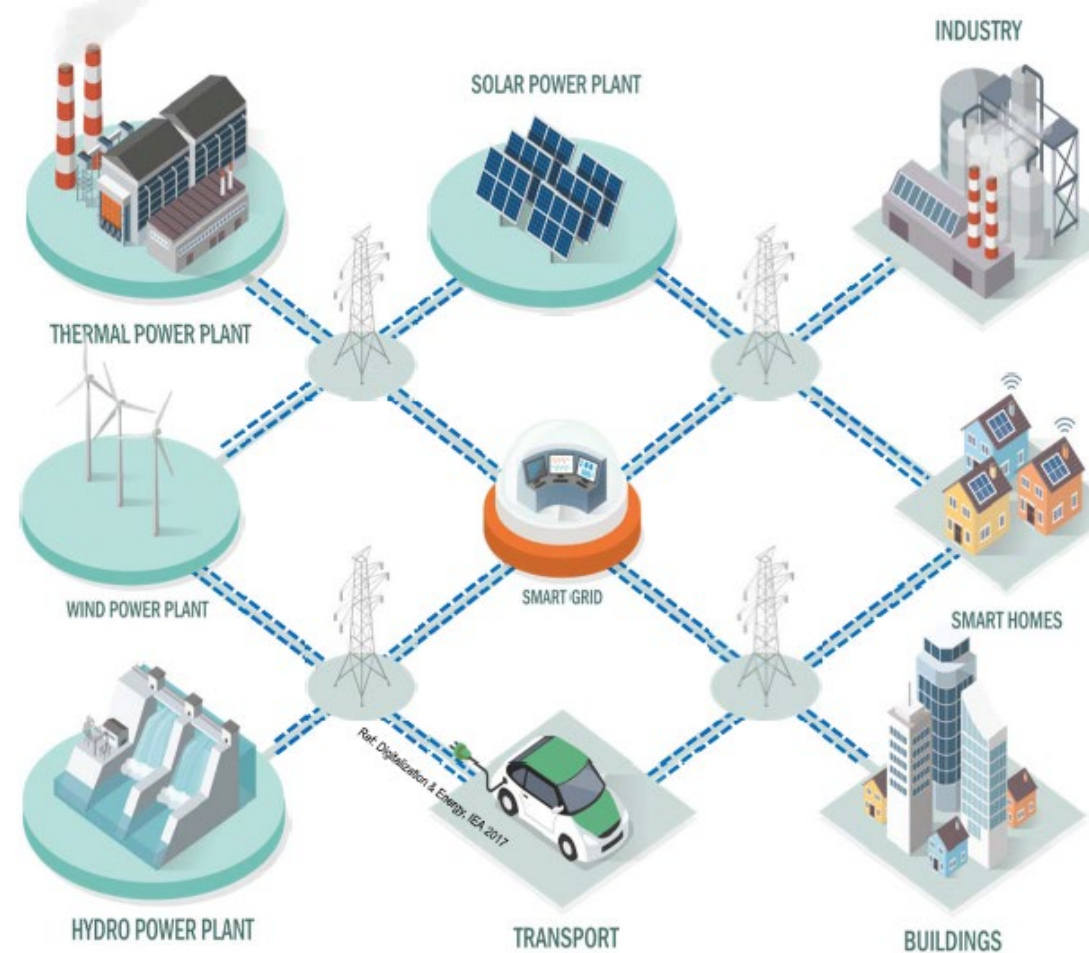
From Passive Consumers to Smart Customers

A renewed customer and new digital rules of engagement are reshaping the utility sector: Consumers want to really benefit from the upcoming opportunities from a grid that offers secure data usage and resilient quality of supply.



(“A”)

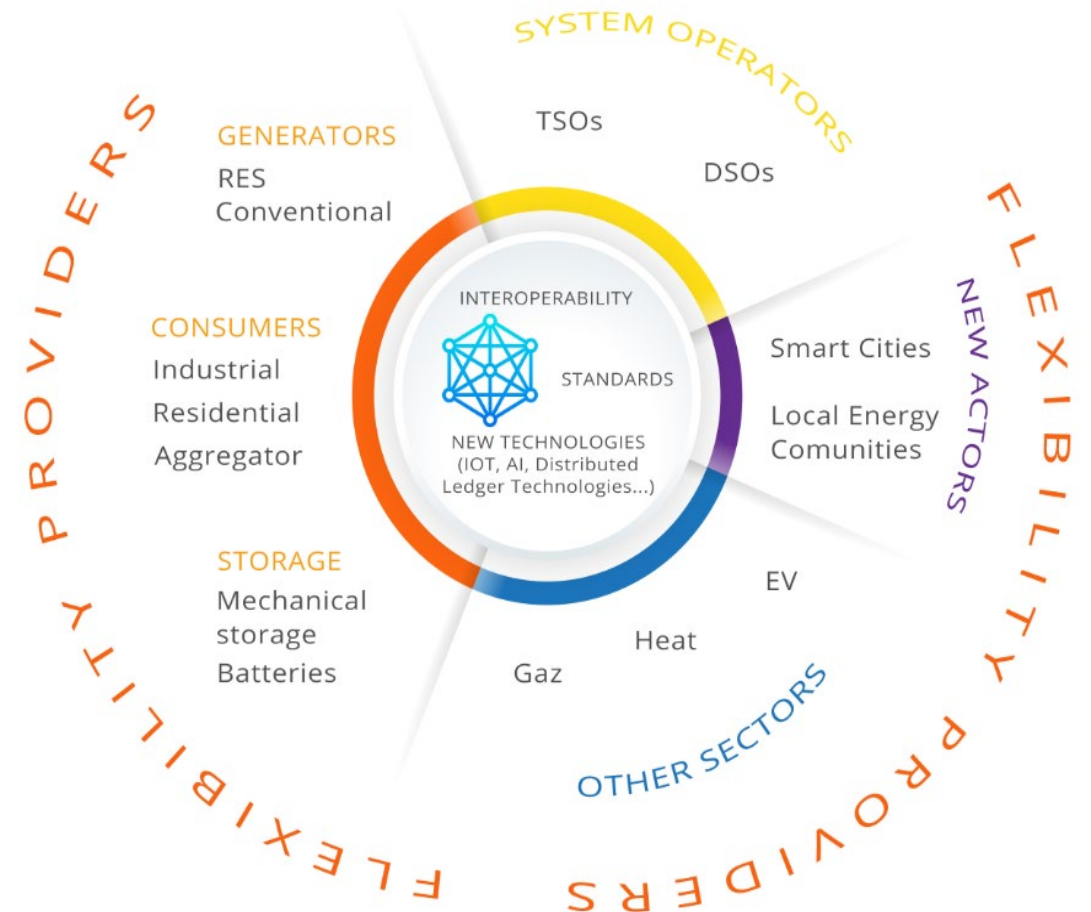
The GOOD, the BAD and the Future Outlook



POWER PLATFORMS – THE DIGITAL CONNECTION BETWEEN ACTORS OF THE ENERGY SYSTEM

- **Connect the dots and enhance flexibility services**
- **Enhance interconnection and interactivity between actors**

SOURCE: ENTSO-E L. Schmitt, May, 2019



The challenges

- Data availability, access and trust
- Securing end-users' take up and acceptability of applications
- Moving into large-scale deployments
- Managing and counteracting the risk of fragmentation
- Leveraging rapid technological developments to anchor long-term competitiveness
- Managing and counteracting the risk of fragmentation
- Performing in the context of international competition /digital sovereignty
- Access to data and incentives to share data, while complying with GDPR



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