



PUBLIC
UTILITIES
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OF LATVIA

VIEWS FROM THE REGULATOR ON NEW ELECTRICITY MARKET DESIGN

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SESSION: Electricity market design “deep dive”.
Contracts for difference (CfD), disparities in financing
and new instruments to accelerate transition.

NB8, TALLINN, 11.-12.12.2023

ELECTRICITY MARKET DESIGN OBJECTIVES

Reinforcement of internal energy market

Acceleration of investments for energy transition

Consumers' protection

DEVELOPMENTS OF EU ENERGY SECTOR BY 2030



- Electricity demand is set to grow by 60% by 2030.



- EU's binding renewable target for 2030 a minimum of 42.5%
- Share of electricity produced by RES is expected to grow from 37% in 2020 to more than 60%.
- RES generation capacity increase from 400 GW in 2022 to 1000 GW, incl. large offshore renewables up to 317 GW.
- Investments in EU power grid by 2030 - **EUR 584 billion**

IMPACT OF EU OBJECTIVES ON THE DISTRIBUTION GRID

EU OBJECTIVES

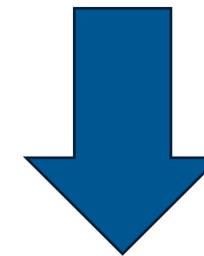
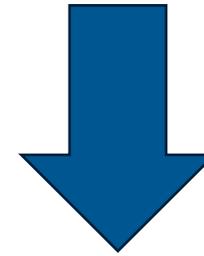
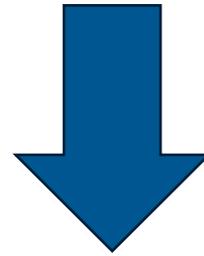
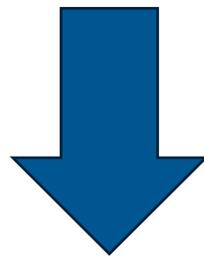
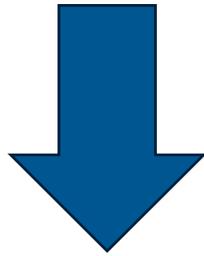
+ 42,5%
RES by 2030

- 55% CO₂
by 2030

130M EVs by
2035

Active
Customers
energy
sharing

New
business
models



70% of RES
connected to
DSO grid

General
enabler RES
integration,
flexibility

Capacity,
flexibility,
smart grids,
smart
charging

Technical
realisation

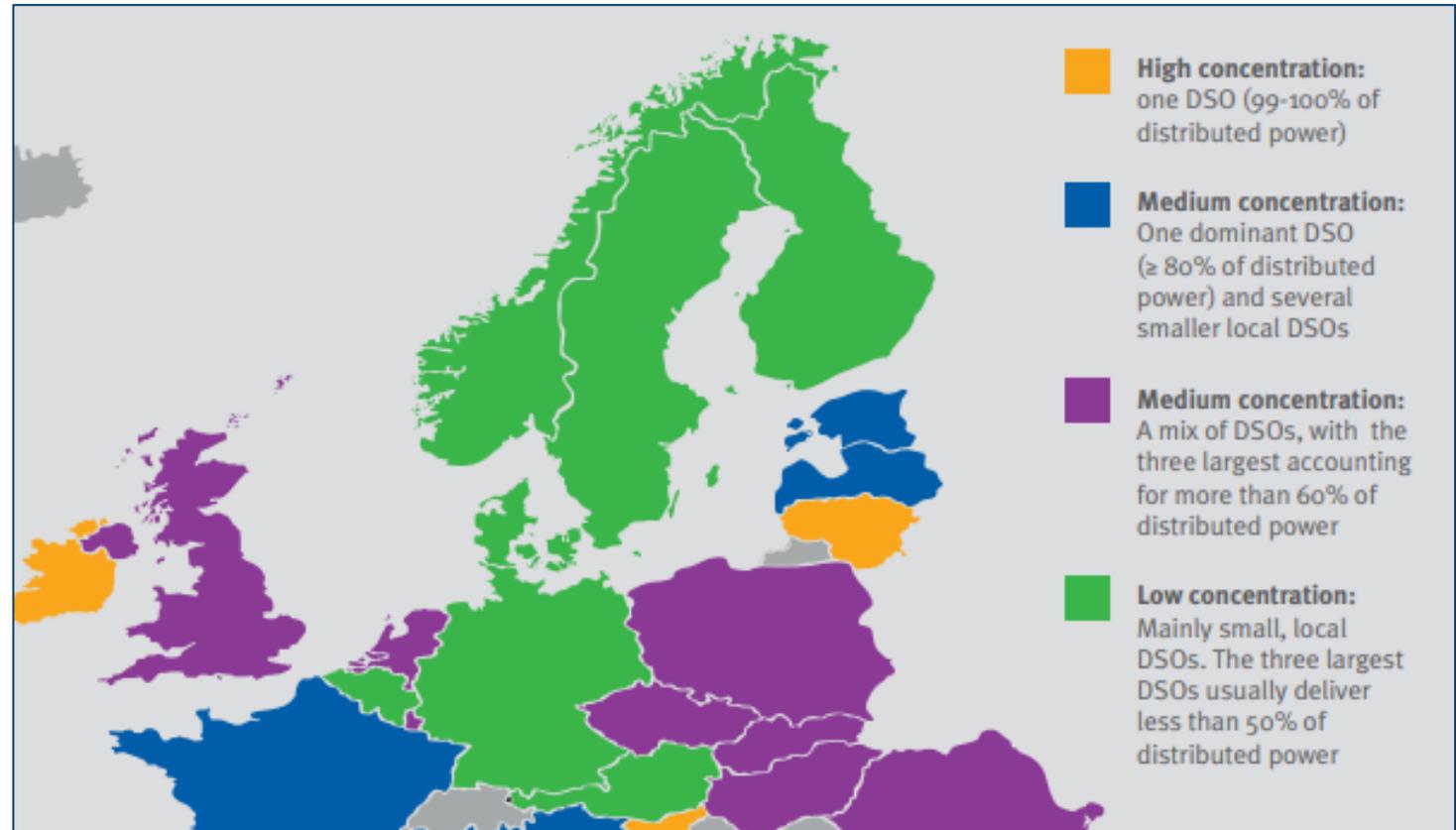
Market
facilitator,
secure
data
manager

DSO REALITY

DSO LANDSCAPE IN EUROPE

- 2400 DSO
- 260 million connected customers
- supplying around 2700 TWh of electricity per year
- by operating 10 millions km of power lines (13 times to the moon and back)

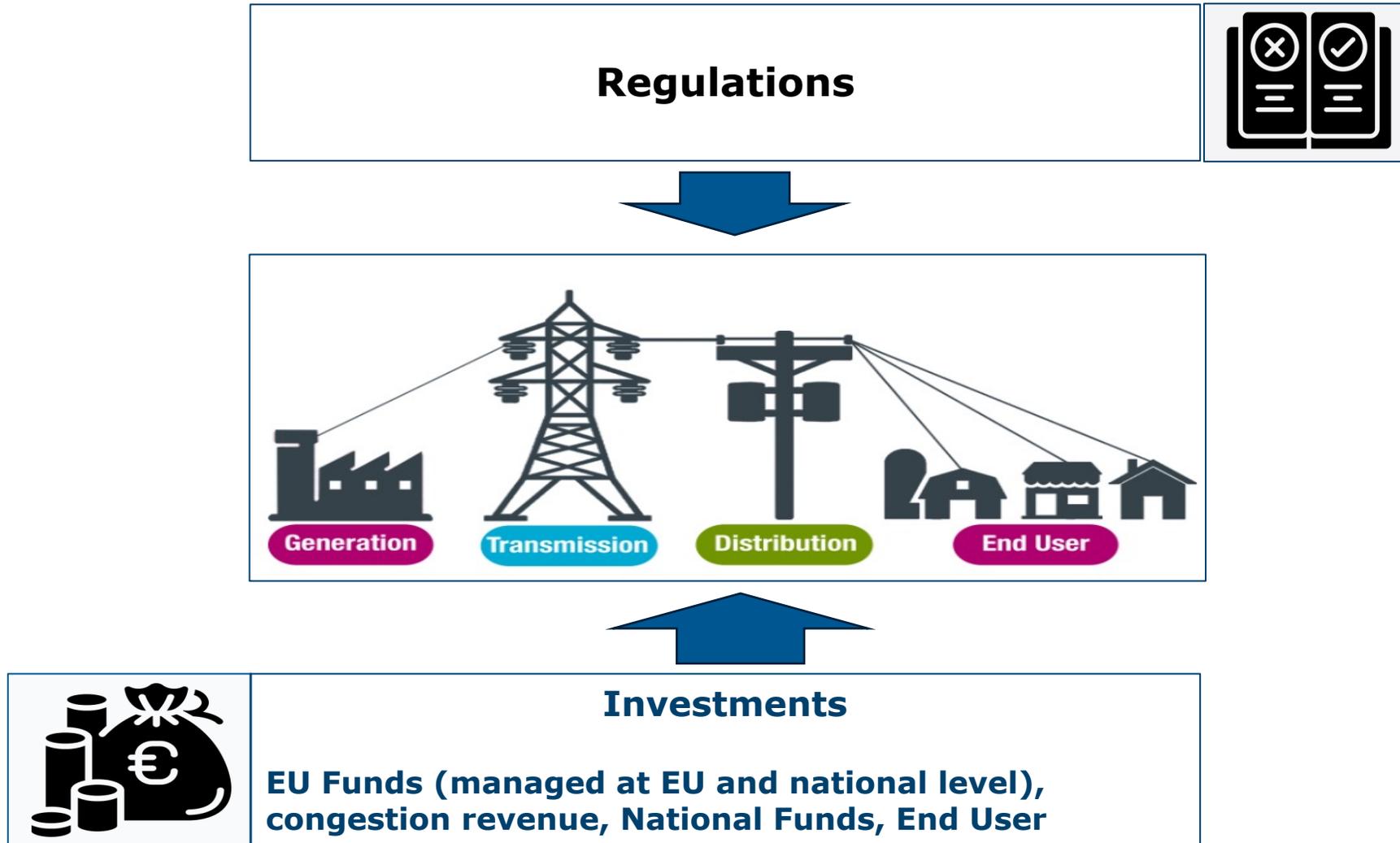
LEVEL OF DSO CONCENTRATION



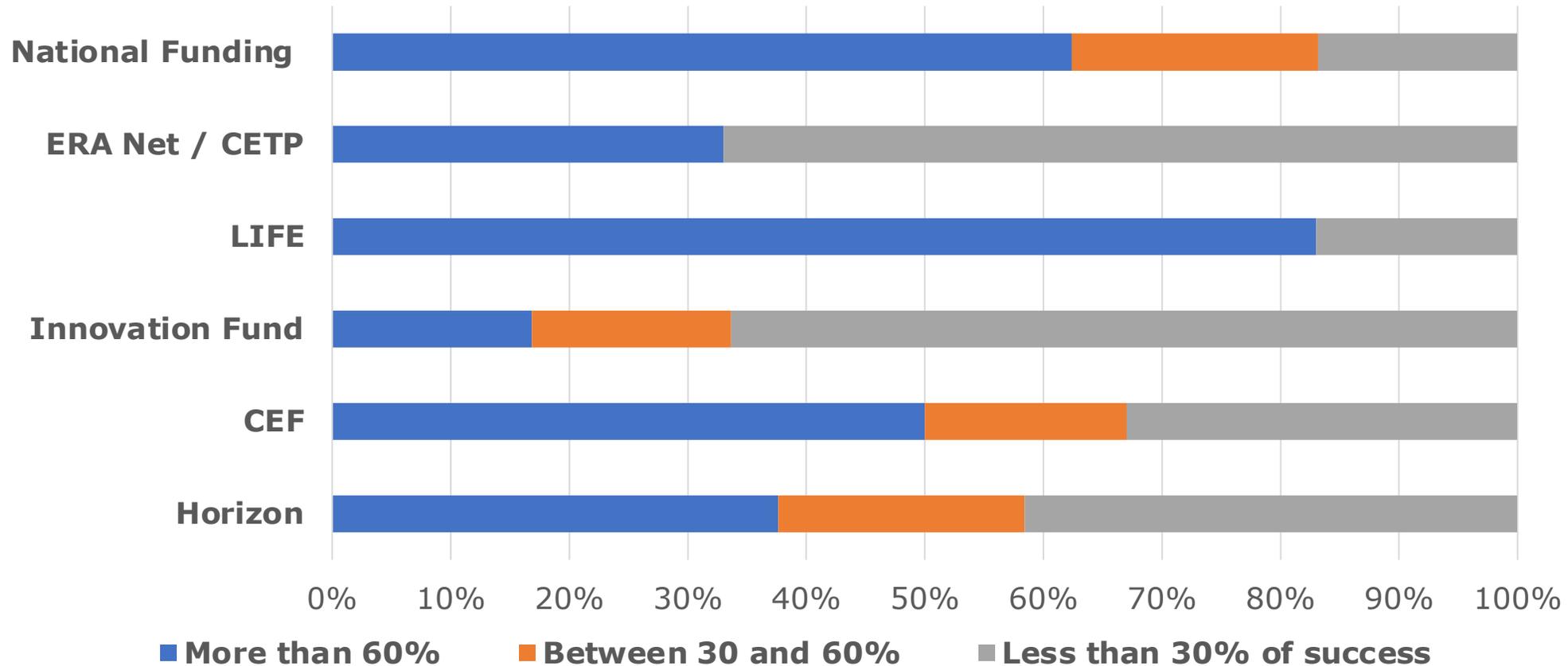
NEW ROLE AND CHALLENGES FOR DSOs

- On the demand side,
 - electrification implies new types of loads such as electric vehicles and heat pumps, which will significantly impact consumption levels and profiles at the distribution level.
- On the supply side,
 - the electricity system will rely on a dominant share of solar PV and wind, which are largely connected at the distribution level.
- Bi-directional operation of those grids that were historically driving electricity from the transmission level to the consumers' level.

SYSTEM OF ENERGY SUPPLY



RANGE OF DSO'S SUCCESS RATES APPLYING FOR FINANCING



Source: *Assessing EU Funding Priorities. Connecting the missing pieces to solve the DSO funding puzzle*

CHALLENGES FOR REGULATORS

- Monitoring energy market integrity and transparency (ACER and NRA)
- A net-zero mandate for regulatory authorities or closer compliance of regulatory decisions with energy policy.
- Develop new regulatory framework to meet current needs of the energy transition:
 - predictable, balanced, and aligned with financial markets to avoid favoring specific types of investments,
 - incentivize the implementation of innovative technologies,
 - clear and coherent incentives for facilitating anticipatory investments,
 - ensuring cost reflectiveness, which is enhanced by a careful consideration of the distribution of costs between producers and consumers,
 - support for the participation of market actors that provide flexibility services (e.g., battery storage).

CONCLUSION

- Grid operators are key players in achieving EU goals being responsible for grid development and maintaining the reliable and secure operation.
- There is a mismatch between the growing, identified needs and the resources available for grid development.
- The increasing role of regulators in the implementation of energy policy and new regulatory framework developing which meets current needs of the energy transition.



SABIEDRISKO
PAKALPOJUMU
REGULĒŠANAS
KOMISIJA

THANK YOU!

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PUBLIC UTILITIES COMMISSION, LATVIA

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Fiscal costs of Household Support measures in 2022, 2023 (% of GDP)

