

30_09_25

_FACULDADE
DE MEDICINA
_DENTÁRIA

GET
READY

Energia. Segurança. Competitividade.

LIGAMOS
OS CAMINHOS
DO FUTURO

The EU energy transition - challenges ahead

Prof dr Leigh Hancher

- Professor of Energy Law FSR/RSCAS/EUI, Florence, IT.
- Professor of European Law, Tilburg, NL.
- Special Counsel, BakerBotts PLC, Brussels, BE.



Aim

To consider recent EU market reform legislation (EMD) from the perspective of system stability and security of supply (resilience) and the goals of strategic energy autonomy along the electricity value chain.

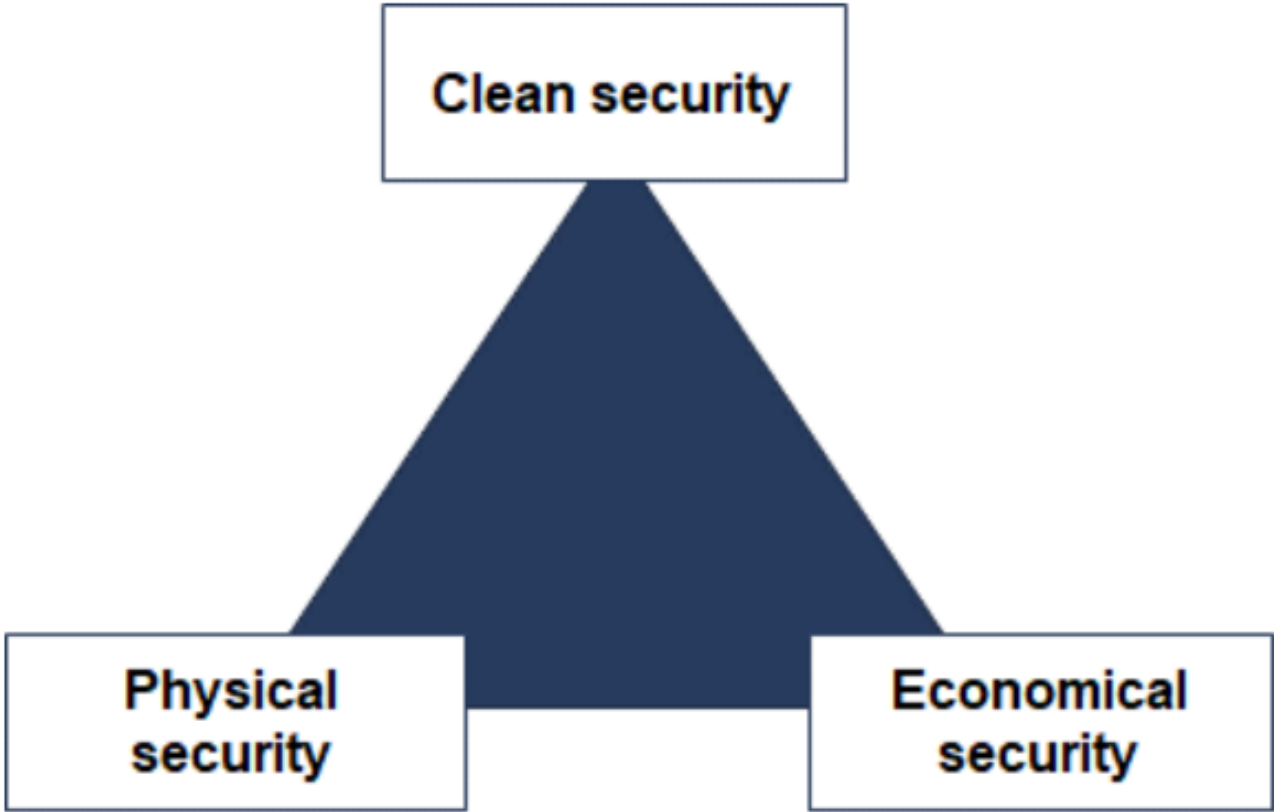
What are the challenges?

What has been achieved?

What is missing?

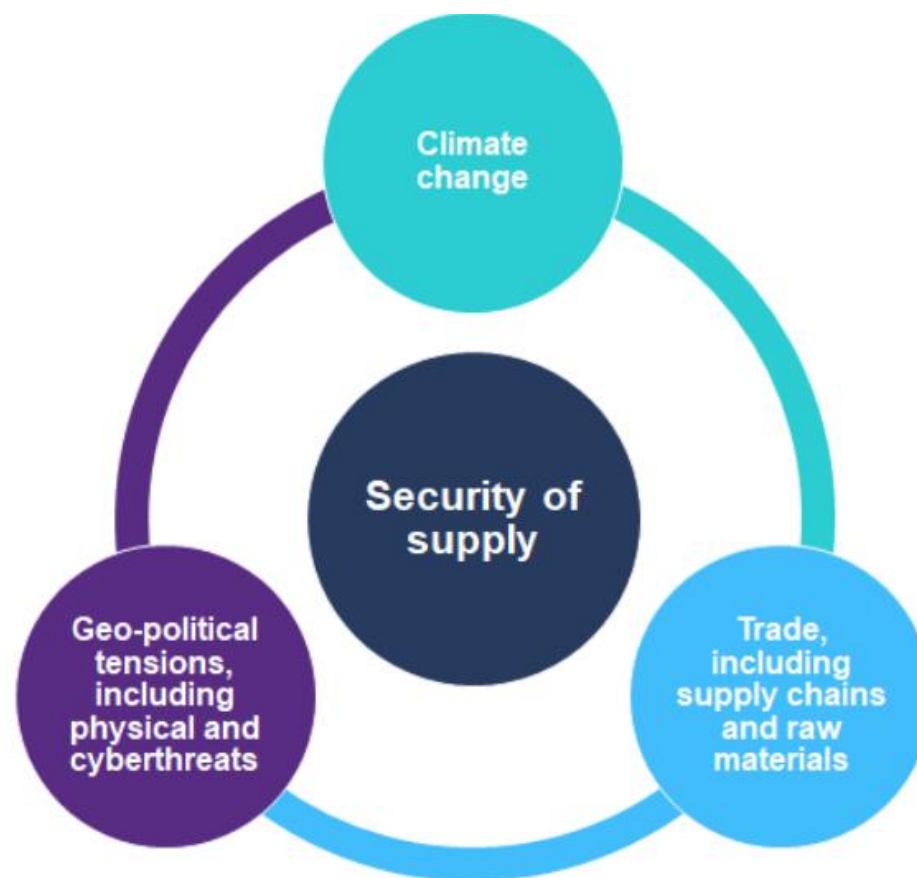


2025: A broadened concept of security of supply



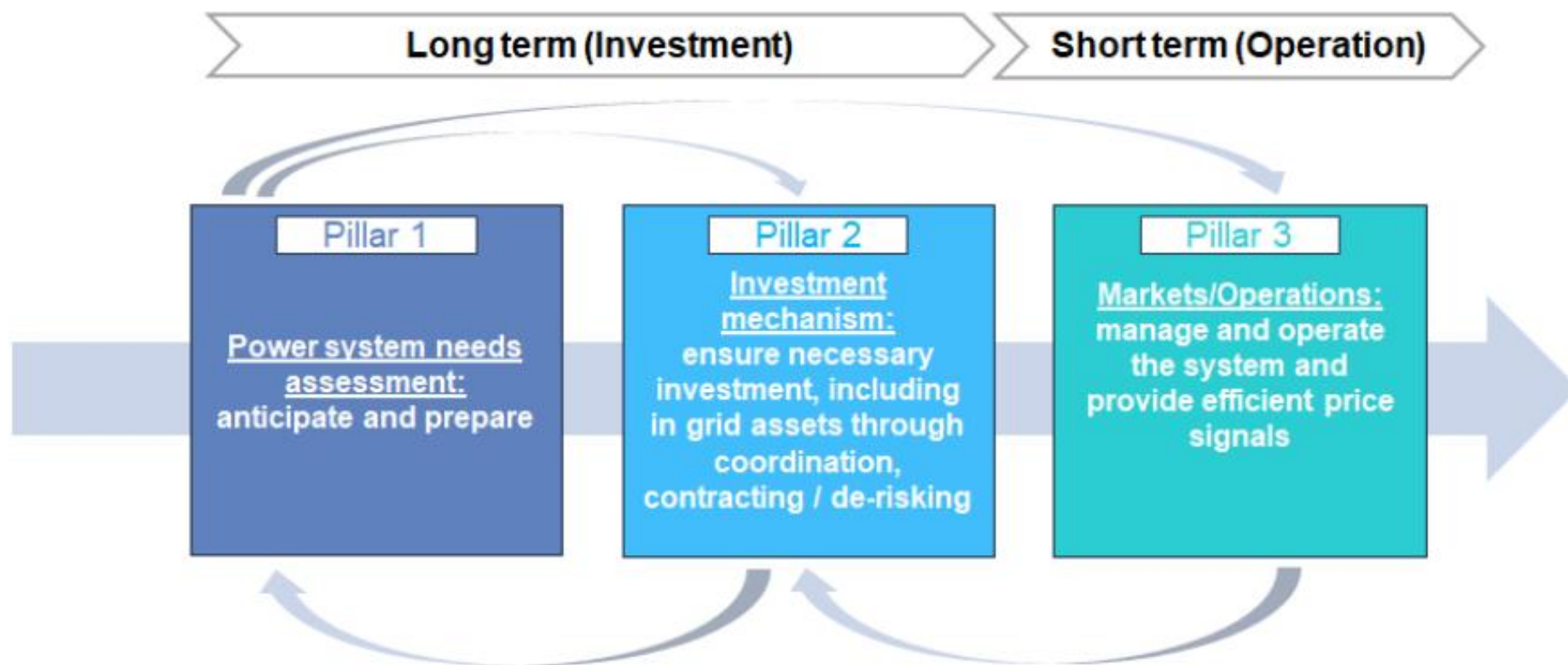


The different macro dimensions of the broader concept of SoS





The three key pillars to ensure security of supply in the electricity sector



Pillar 1

Impact of rising RES shares -> dramatic surge in solar and wind across the EU

(solar – 56 GW; wind 19 GW added in 2023; cf US 19.6 GW solar)

Displacing most conventional (fossil and nuclear) assets

Problems of intermittency, immense price volatility ‘dunkelflauten’

Impact on capacity adequacy – system security and reliability

Pillar 1

Capacity mechanisms are now permanent feature of the EU electricity system

Templates to speed up approval process – based on CfDs

New ‘flexibility’ products (see Art 19 EMD) are expected to co-exist?

Problems with CfDs: impact on hedging and forward markets?

Pillar 2

Grid investment - transmission, distribution and cross border involve huge investments

Who will make this investment and can it be made on time?

EMD stimulates greater co-ordination between TSOs/DSOs and the ENTSOs

New state aid framework adopted June 2025 (CISAF)

De-risking - 'crowd in' private investment BUT can TSOs/DSOs encourage private investment?

Draghi's idea of a '28th Member State' to speed up permitting – 'pie in the sky'?

But what about cross-border infra? Expensive and slow – all EU targets systematically missed for over a decade

Pillar 3

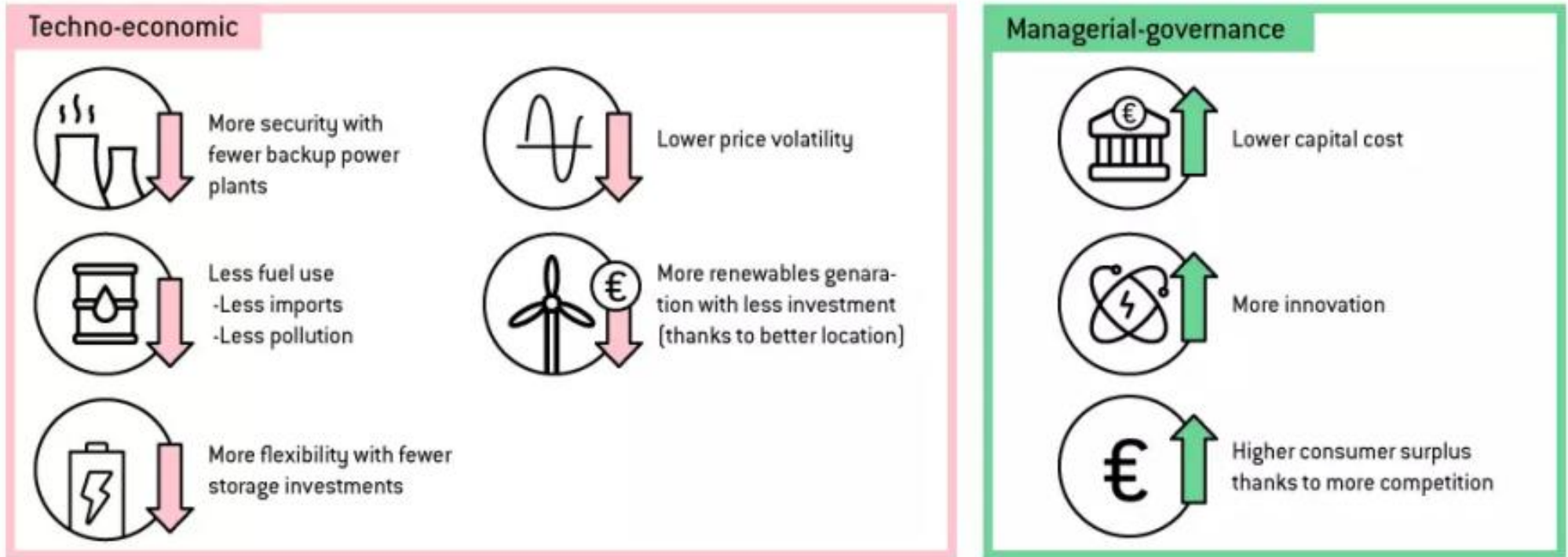
Benefits of market integration – frequently recalled in Letta and Draghi reports

But what market and how? Need to consider multiple product markets and how they interact

Short term ‘energy only market’ - benefits not disputed



Pillar 3 Benefits of market integration



Source: Georg Zachmann, Carlos Battle, Francois Beaudé, Christoph Maurer, Monika Morawiecka, Fabien Roques (2024) Unity in power, power in unity: why the EU needs more integrated electricity markets. [Accessible here.](#)

Pillar 3 Integrating long and short term markets?

- Does EMD facilitate or aggravate this challenge?
- Preference is for CfDs above PPAs (see also Comm state decision on Czech nuclear energy-Dukovany - of 2024)
- But PPAs may be more flexible and can take financial and physical forms – encourage development of forward markets
- Can facilitate cross border trade (cf CfDs)

Physical Security

Greater emphasis on 'resilience' along the value chain

Integrating NZIA, for clean and efficient decarbonisation strategies

See the application of the new CISAF in Comm decision August 2025
On French offshore wind support

Conclusions

Electricity market design in Europe is an ongoing experiment

OR is it

A race against time?

Some recent solutions create new – urgent- problems

GET
READY

Energia. Segurança. Competitividade.

OBRIGADO