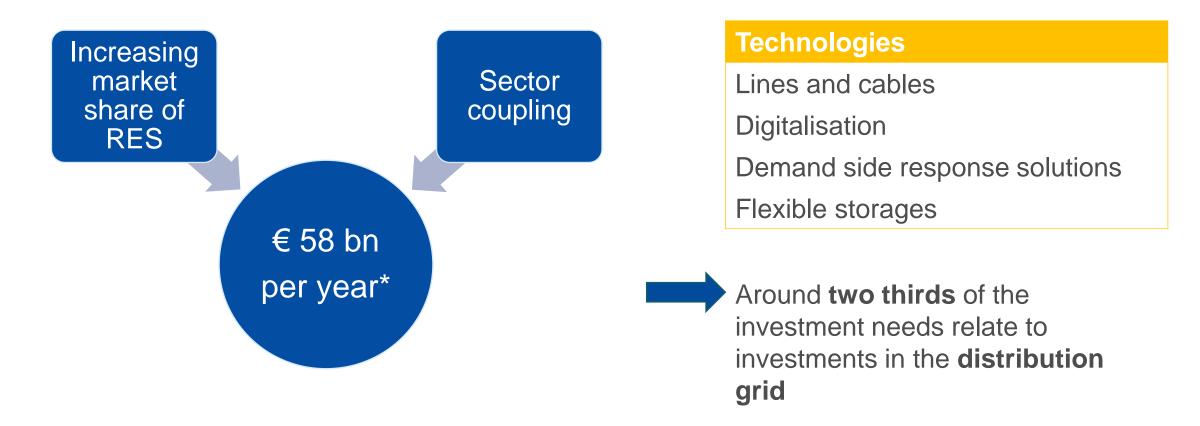


Investment needs and financing for grids

Future-proofing electricity systems – Key Aspects of grid operation

Julian Dieler – Chief Economist Team, DG ENER

Investment needs





Enabling factors and challenges for investments in grids

Political and regulatory



- Stability and certainty of regulation
- Administrative requirements
 (permitting)
- Accessibility of support programmes
- Network planning
- Remuneration scheme

Technical

- Investments in less mature technologies
- Advance capacity risk

Financial

Access to capital (equity and debt)



Resources to prepare bankable projects

Market



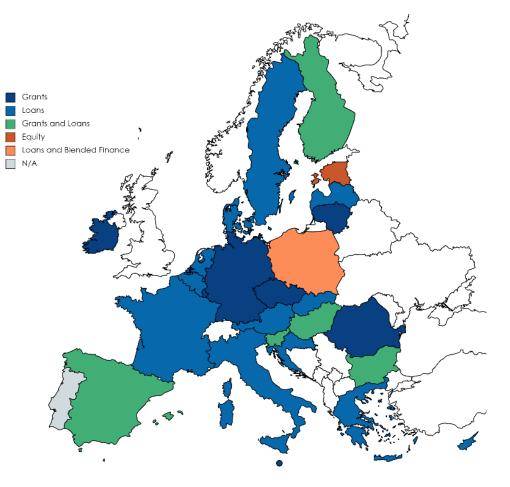
- Security of the supply chain (equipment and raw materials)
- Availability of skilled labour



Public support (national level)

Financial support schemes from public authorities and NPBs for grids in the EU

- 50% of energy support schemes support (also) grids (280 schemes)¹
- These schemes provide more than EUR 114 billion of financing
- Grants and loans are the most popular instruments but also 60 equity type instruments have been mapped as well





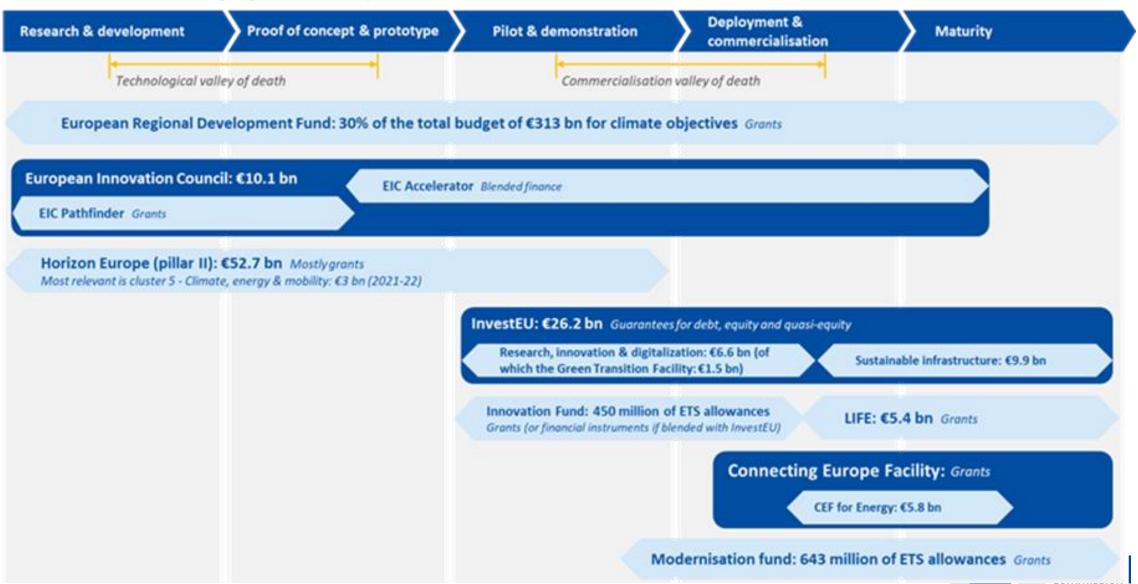
1) The mapping of national energy support schemes includes 559 instruments in total. Source: https://energy.ec.europa.eu/topics/funding-and-financing/investors-dialogue-energy_en

Public support (EU level)

Programme	TRL	Type of support	Funds
CEF Energy	7-9	Grants	EUR 5.8 bn
Horizon Europe Cluster for Climate, Energy & Mobility	2-8	Mostly grants	EUR 15.1 bn
InvestEU SIW and RIDW	4-9	Guarantees	EUR 16.5 bn
ERDF	1-9	Mostly grants	EUR 313 bn
JTF		Mostly grants	EUR 19.3 bn
RRF	1-9	up to MS	EUR 724 bn
Innovation Fund	4-7	Grants and blended finance	EUR 38 bn
Modernisation Fund	6-9	Grants	EUR 48 bn
ELENA	9	Technical assistance	EUR 0.12 bn



Public support (EU level)



Way forward for public support

- Provision of de-risking instruments (concessional loans for SOs, guarantees for financial intermediaries)
- With grants blended financing for investments in less mature technologies
- → Objective: Mobilizing of private financing

- Technical assistance for:
 - SOs \rightarrow access to EU funding and creation of bankable projects
 - Investors \rightarrow creation of awareness for the business model of SOs



EU taxonomy for sustainable finance

What is the EU taxonomy?

- EU-wide classification system for sustainable activities
- The activities must substantially contribute to one or more environmental objectives and do no harm to the others
- Increase transparency in financial markets for private sector sustainable investments, reduce fragmentation in sustainable finance practice and prevent greenwashing.

What is the EU taxonomy **not**?

 An exclusive list of activities in which investments are allowed

What is the objective of the EU taxonomy?

• Steer investments toward sustainable projects

The six environmental objectives:

1. Climate change mitigation

2. Climate change adaptation

3. The sustainable use and protection of water and marine resources

4. The transition to a circular economy

5. Pollution prevention and control

6. The protection and restoration of biodiversity and ecosystems



EU taxonomy for sustainable finance

enabling

Grids under the EU taxonomy

Transmission and distribution of electricity

The six environmental objectives:

1. Climate change mitigation

2. Climate change adaptation

3. The sustainable use and protection of water and marine resources

4. The transition to a circular economy

5. Pollution prevention and control

6. The protection and restoration of biodiversity and ecosystems



Conclusion

- Upgrade and extension of the grids are crucial to achieve our decarbonization targets
- For that, we have to step up investments in the transmission and distribution systems
- Public funding and support is available
- <u>But</u> by far not enough to meet the investment needs:
 - Mobilisation of private financing is crucial



Thank you



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