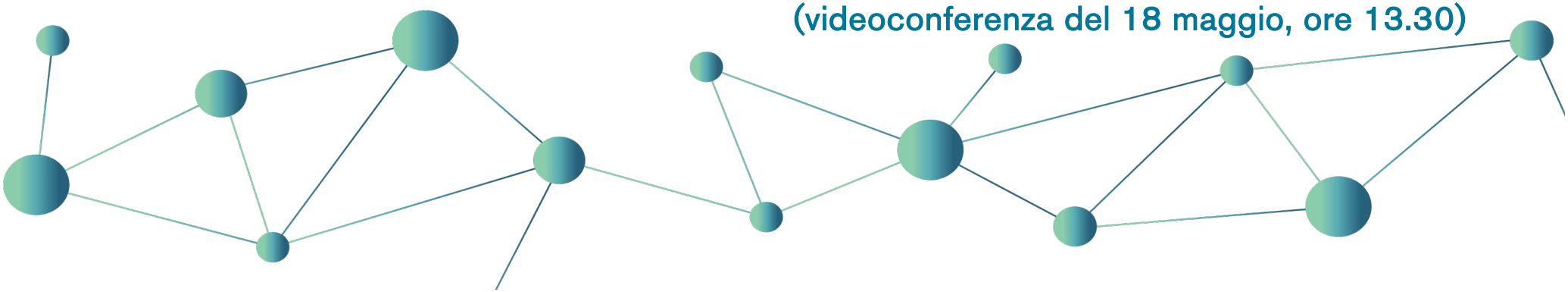
“Proposta di regolamento UE sugli orientamenti per le infrastrutture energetiche transeuropee“

COM(2020) 824 def.

Roberto Zangrandi, Segretario Generale, E.DSO

Audizione della 10ª Commissione Senato

(videoconferenza del 18 maggio, ore 13.30)



In generale

- **E.DSO has taken the opportunity to propose some amendments on how the Regulation could be improved further. Those proposals are based on the reflections of E.DSO experts and we remain at policy makers' disposal to discuss further in detail on the development of the infrastructure necessary for the evolution of the EU** Grids and to deliver the Energy Transition.
- E.DSO welcomes the Commission's proposal for revising the Regulation (EU) No 347/2013 ("TEN-E Regulation"). We consider the revision of the TEN-E regulation as a key opportunity for Europe to make the regulatory framework fit for purpose.
- **Representing leading distribution system operators in Europe, E.DSO and its members are committed to rolling-out and maintaining a high-class infrastructure to European citizens.**
- Italian members of E.DSO, Areti (ACEA), Unareti (A2A) and e-distribuzione (ENEL) represent 34,109 mln connecting points un a total for Italy of 36,792 mln, achieving 92,7%of the customership
- By guaranteeing reliability and quality of electricity supply in an interconnected Europe while substantially contributing to the EUs climate agenda and decarbonisation objectives (90% of RES generation is connected to the distribution grid), DSOs have a key role to play in the future Trans-European energy networks.

In generale

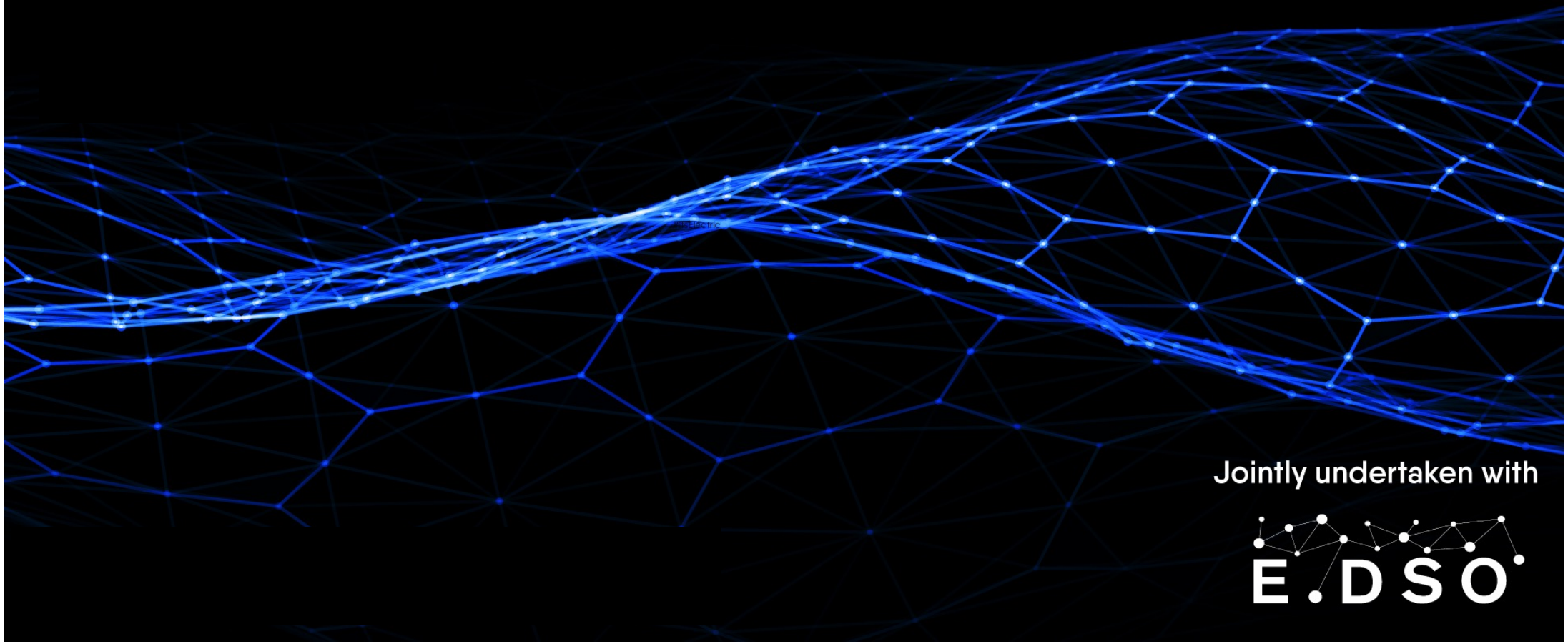
- **Accelerated electrification of end-uses and higher loads of RES will require grid reinforcements mainly at distribution level.** Grid will have to get smarter to better integrate these new evolutions. Strengthening smart grids development in Europe is key, including through legislative frameworks such as the TEN-E Regulation and dedicated funds such as the Connecting Europe Facility (CEF). Indeed, a recent study carried out by E.DSO, Eurelectric and Deloitte, highlights that approximately €400 billion investments are required in the distribution networks to fully achieve the energy transition in 2030.
- We consider that, in the future, projects benefitting from a Projects of Common Interest (PCIs) status should contribute to meeting the EU's decarbonisation objectives. Therefore, only those projects that are fully in line with the climate neutrality goal should receive funding from the Connecting Europe Facility (CEF). To make the regulatory framework fit for purpose we focus a particular attention to Article 16 and 17 of the TEN-E Regulation.
- In the current Council's proposal, Article 16 has been adapted to include Smart grids projects. This provision lays down the basis of who should be eligible to the incentives, while Article 17 constitutes the basis of applicable incentives. The decision by the Council to completely remove Article 17 is therefore very regrettable.

Concludendo

- The removal of Article 17 finds its origin on the ACER justification that this provision has been used only four times since the introduction of the PCI list.
- ACER considers the incentives to be already sufficient on the national level.
- We as E.DSO have a different view: The very little use of Article 17 is due to the fact that the criteria enshrined in there lack clarity for both project promotors and regulators.
- Having this in mind, we still opt to further develop the criteria rather than remove its substance. This would truly contribute to increase the number of PCI Smart Grid projects on the PCI list.
- A proposed drafting will be supplied.

Connecting the dots

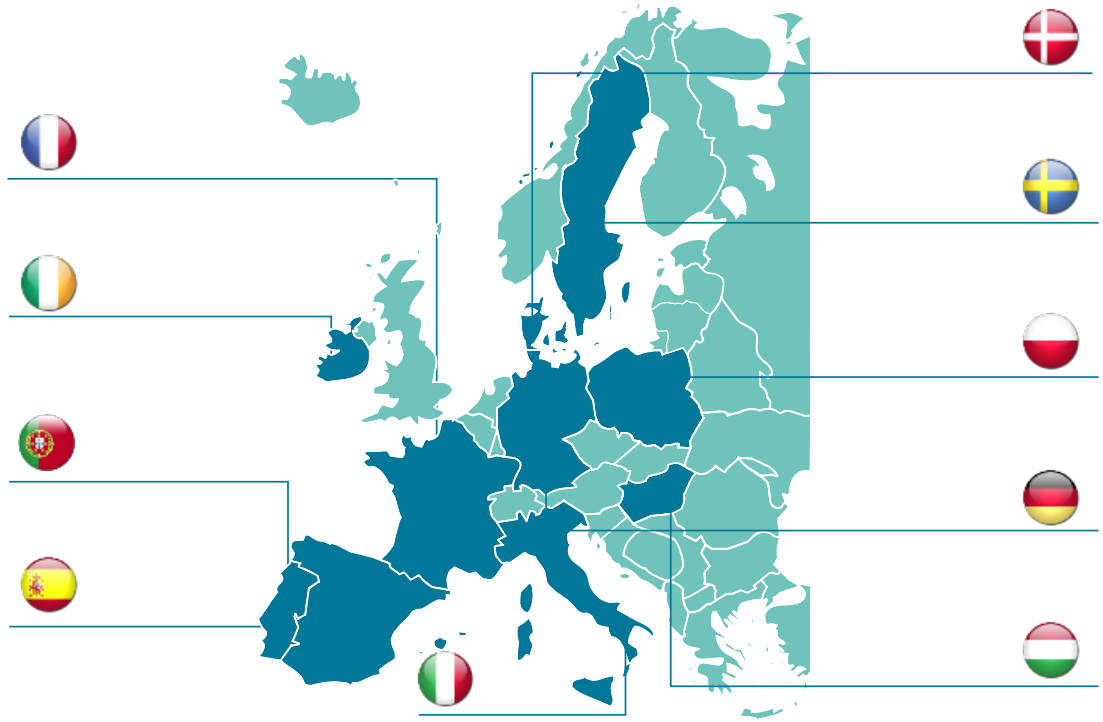
Distribution grid investment to power the energy transition



Jointly undertaken with

E.DSO

First EU wide outlook involving 10 European countries



- **Eurelectric**
- **E.DSO**
- **DSOs and national associations** (representatives from grid planning and/or regulation)

A €400 billion investment challenge

5. Investments rely heavily on enabling regulatory requirements frameworks

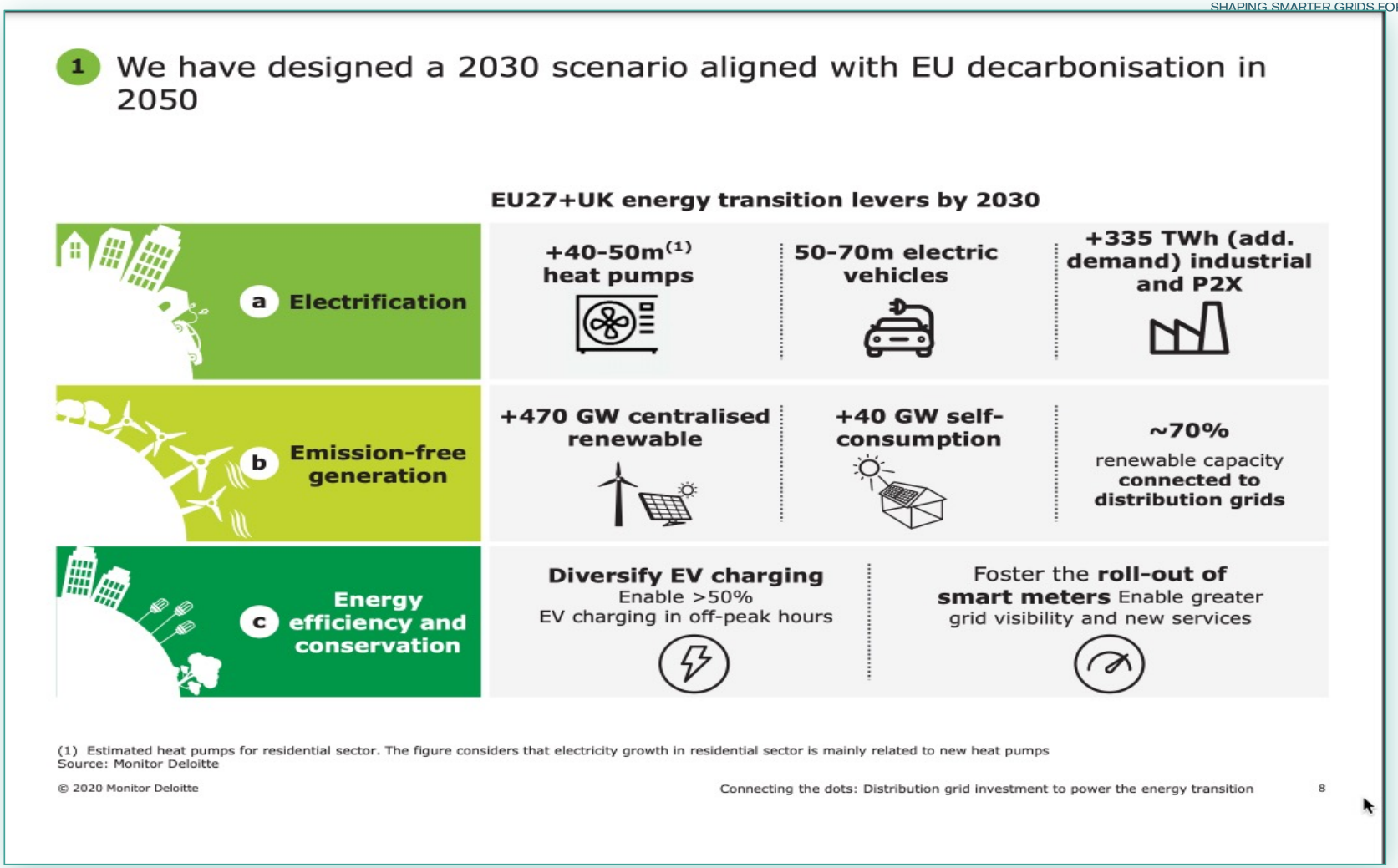
4. This investment increase should not translate into a major additional cost to the KWh

3. Societal benefits outweigh the economic impact on distribution tariffs

2. This is a considerable investment, 50-70% higher than today

1. DSO investment needs: €375-425bn

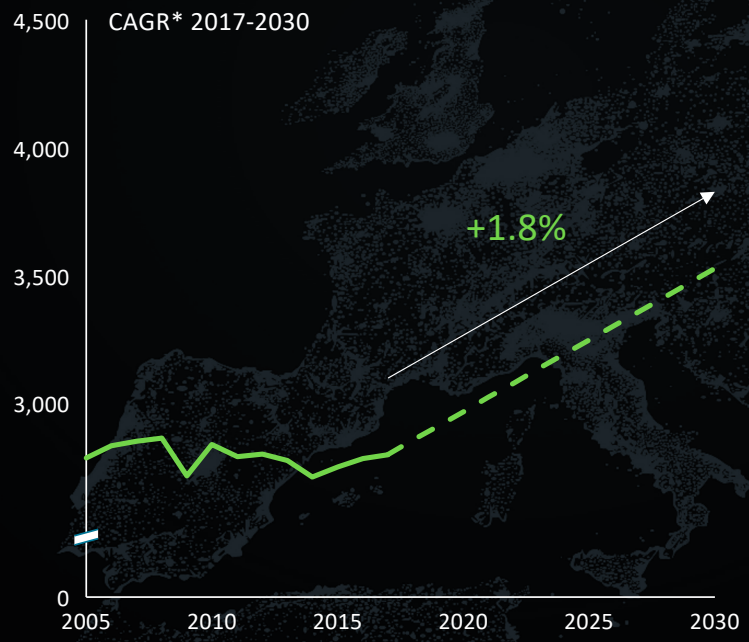
Dove stiamo andando



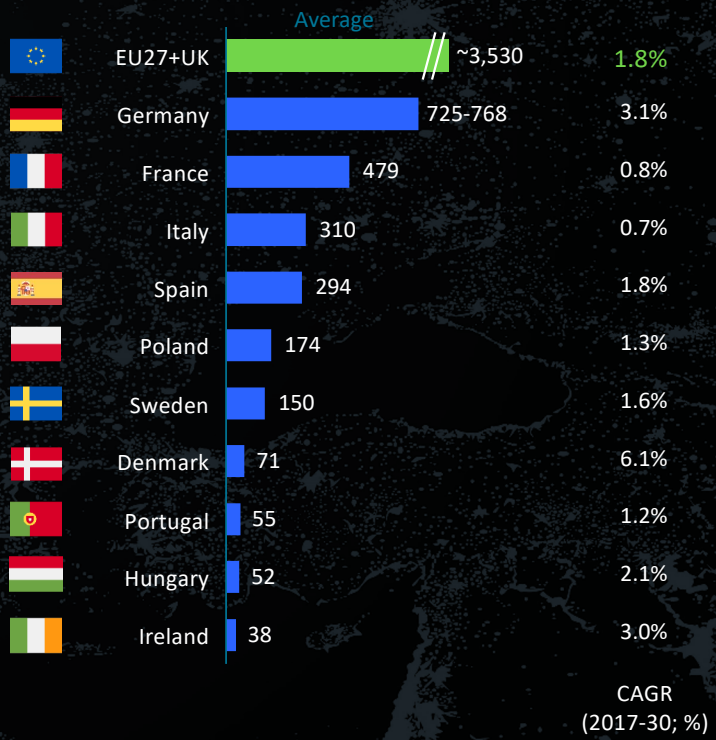
Total electricity demand will rise by +1.8% per year by 2030

DSO grids will need reinforcements and additional transformation capacity in substations to effectively accommodate for the anticipated rise in demand and ensure quality of supply

Final electricity demand (TWh; 2005-2030)



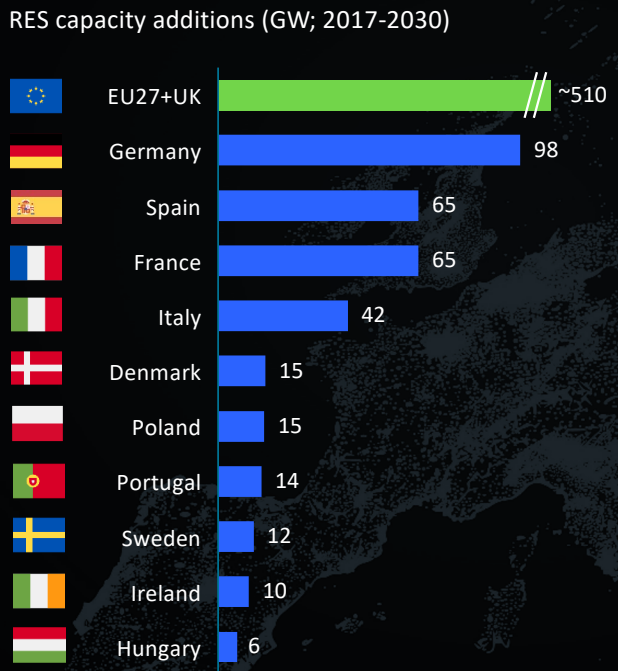
Final electricity demand per country (TWh; 2030)



Source: Eurelectric; DSOs and associations; iea; Monitor Deloitte

* Compound annual growth rate

70% of new 510 GW RES capacity will be connected at distribution level

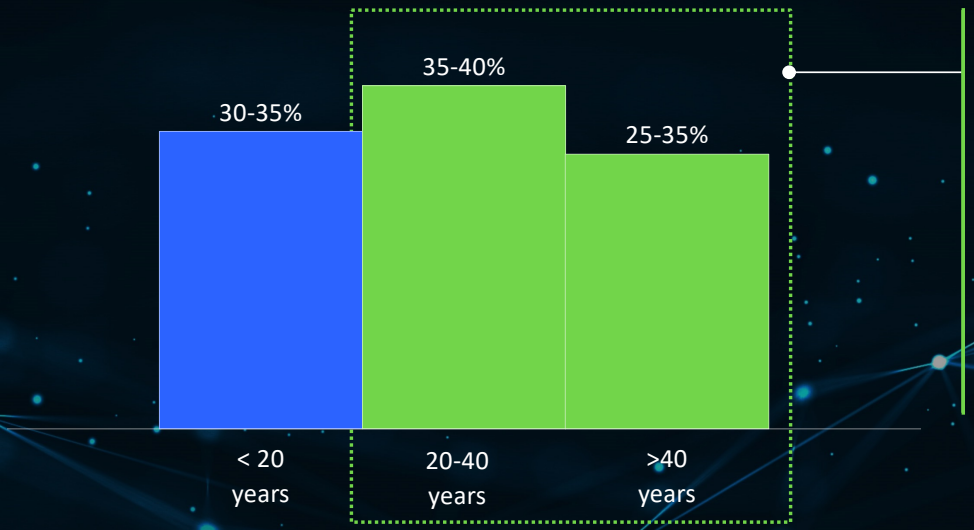


	New RES connected to DSO grids (%; 2017-2030)	Self-consumption capacity additions (GW; 2030)	Cumulative RES capacity (GW; 2030)
EU27+UK	~70%	~40	~940
Germany	~93%	9.0	179
Spain	~25%	2.3	119
France	~85%	~1	111
Italy	~83%	~0	95
Denmark	~37%	0.2	22
Poland	~67%	6.6	24
Portugal	~56%	1.9	27
Sweden	~30%	n.a.	38
Ireland	~43%	0.2	13
Hungary	~90%	n.a.	7

Source: Eurelectric; DSOs and associations; Monitor Deloitte

Distribution grids are ageing

Average age of low-voltage lines in 2020 (in %)

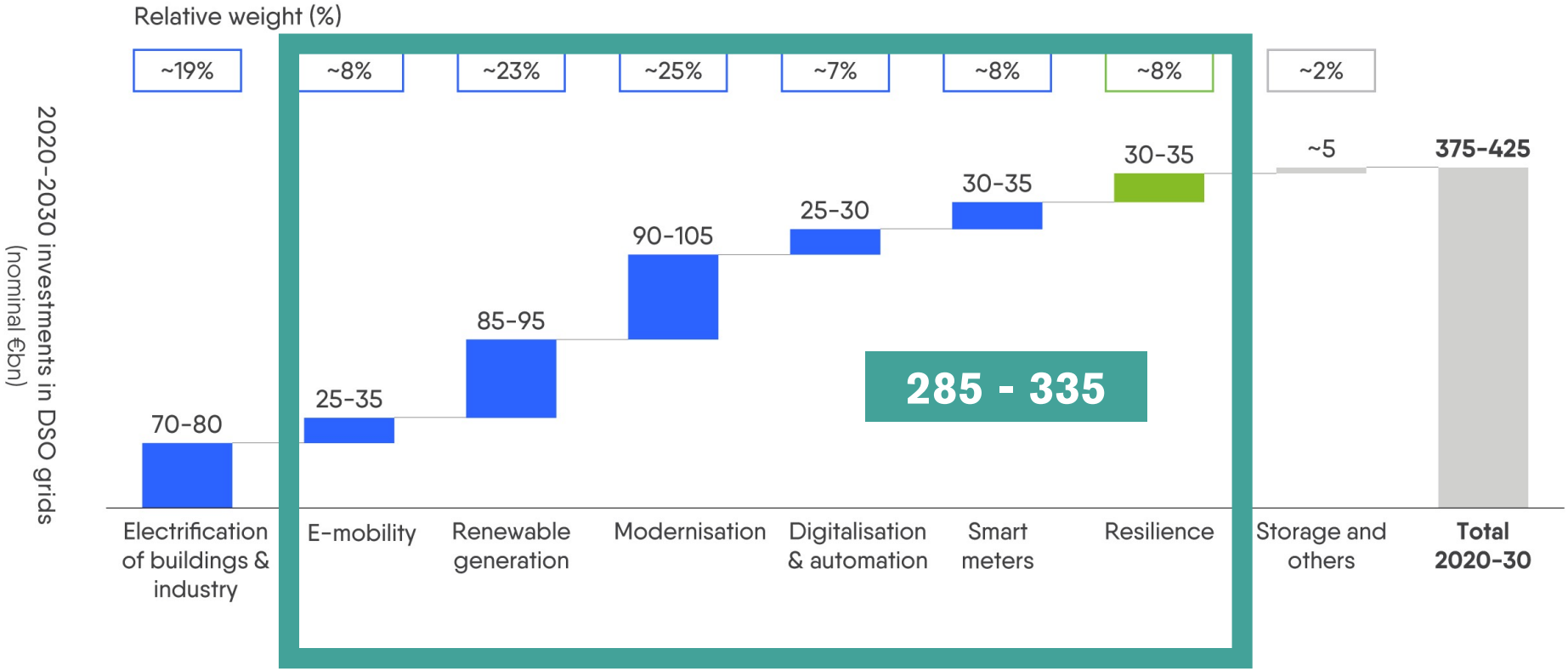


Half of all low-voltage lines could be over 40 years old by 2030

The replacement equipment must be planned to ensure compatibility with new digital assets and avoid obsolescence

Source: Eurelectric; DSOs and associations; Monitor Deloitte

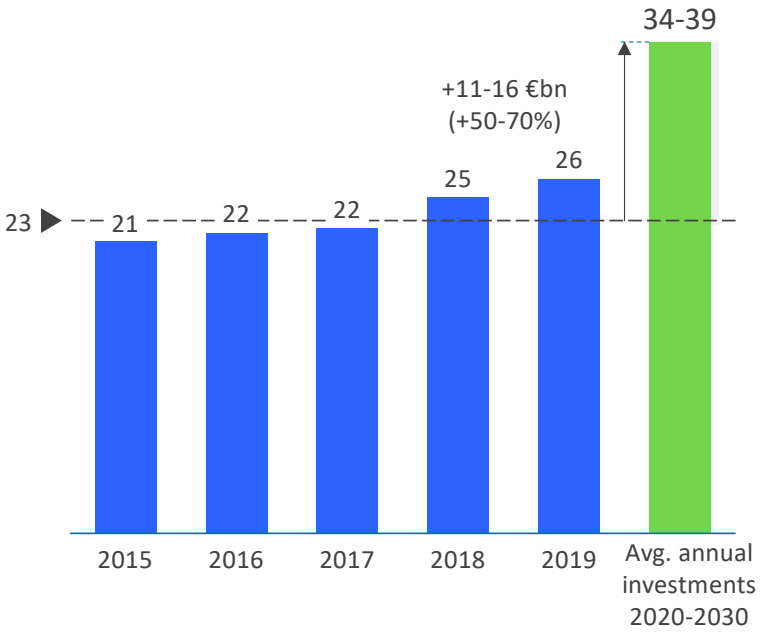
Key investment drivers: modernisation, renewables and electrification



Source: DSOs and national associations; Monitor Deloitte

Investments in distribution grids need to increase by 50-70% to €34-39bn/year

EU27+UK annual investments in power distribution grids and key drivers (nominal €bn; 2015-2030)



Total investment needs €375-425bn

Source: Eurelectric; Eurostat; iea; DSOs and national associations; Monitor Deloitte

Grid investments have major societal benefits

E.DSO
SHAPING SMARTER GRIDS FOR YOUR FUTURE

SUSTAINABILITY

€17-22bn annual CO_2 savings

€40-140bn annual savings in health
58,000 premature deaths avoided

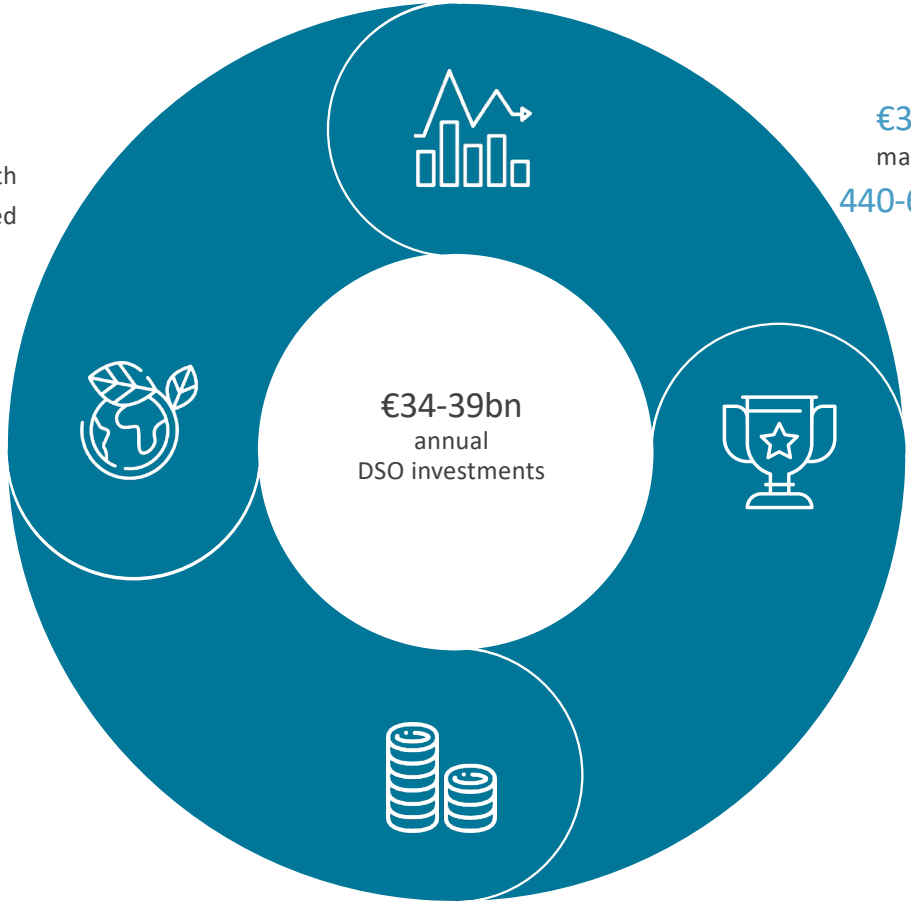
460 Mtoe lower final energy consumption by 2030

ECONOMY

€30-35 bn of annual revenues for EU companies (e.g. manufacturers & service providers)

440-620k quality jobs per year related to DSO grids

€30-35bn annual sales in equipment (~90% of total investment)



COMPETITIVENESS

€28-37bn average electricity cost reduction

+€175bn annual savings in fuel imports

Territorial cohesion and promotion of local economies

CUSTOMER EMPOWERMENT

~40 GW self-consumption capacity added

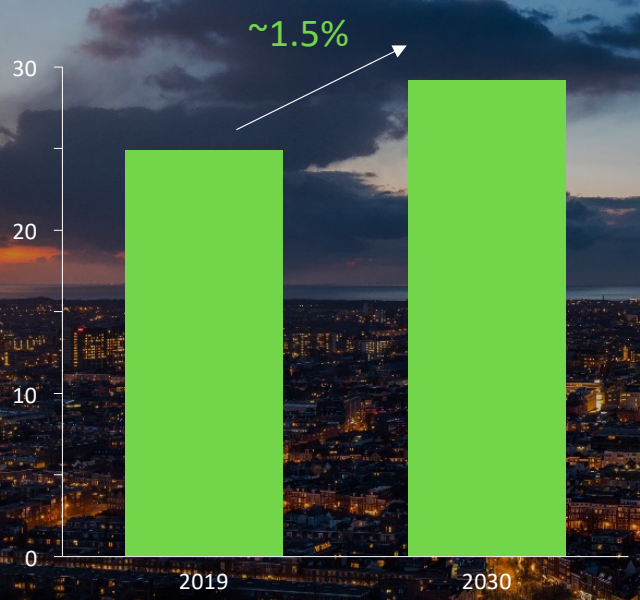
50-70m EVs with smart charging

New services: storage, electric heating, smart appliances, aggregators

~0.2-0.3% of current EU GDP in annual investments in power distribution grids

Investments will only impact electricity costs marginally

Impact on electricity cost per unit



Investment will help lower the total energy bill

- DSO investment will result in an increased cost of electricity (CAGR~1.5%), but inflation comes on top
- **Investment in distribution grids has long and short term benefits as they enable:**
  - RES deployment which will reduce electricity costs, thanks to 50-65% lower costs on RES than on fossil generation
  - electrification that will drive additional efficiency help ultimately reduce the total energy bill
  - flexibility measures that increase cost-effectiveness

Source: Eurelectric; DSOs and associations; Monitor Deloitte

eurelectric
powering people

Policy recommendations Overview

EU level National level

Challenges		Policy issues	Regulatory actions	Policy level
Plan & execute investments	Planning	Low long-term visibility and lack of planning	Facilitate flexible national planning frameworks aligned with the energy transition and remove regulated investment limits	National
	Funding	Barriers for DSOs to apply for EU funds	Facilitate access of DSOs to EU funds and prioritise investments in DSO grids in EU post-COVID recovery plans	EU + National
	Execution	Bureaucratic delays in permits & environmental authorisations	Simplify and accelerate authorisation and permit processes, facilitating proper involvement of local communities	National
Improve security of supply & automation	DSO role	Little clarity on principles of enhanced role of DSOs	Facilitate a EU general framework for cybersecurity and data management. Speed-up CEP implementation, including DSO/TSO roles and responsibilities	EU + National
	Remune-ration	Historic costs and low exposure to disruptions are intrinsic features of current remuneration models	Enable cost-reflective remuneration and incentive models to enable grid transformation and the energy transition	EU + National
Enable the energy transition	Flexibility	Lack of comprehensive regulation on flexibility	Develop roles, smart infrastructure, economic signals and information exchange procedures	EU + National
	Tariffs	Electricity tariffs should be more cost-reflective	Enable tariff structures that optimise long-term power investments and facilitate economic sustainability	National

Source: Eurelectric, DSOs and national associations; Monitor Deloitte

Links

1. https://www.flickr.com/photos/eurelectric/albums/72157717885365028

2. Grid Investments study, available at: https://www.edsoforsmartgrids.eu/connecting-the-dots-distribution-grid-investment-to-power-the-energy-transition-2/

3. E.DSO position paper su TEN-E https://www.edsoforsmartgrids.eu/e-dso-position-paper-on-the-revised-ten-e-regulation-proposal/

4. Proposta di emendamenti: https://www.edsoforsmartgrids.eu/wp-content/uploads/E.DSO-suggested-amendments-to-TEN-E-Regulation.pdf

Contatti

Roberto Zangrandi

Secretary General
E.DSO – European Distribution System Operators
Email: roberto.zangrandi@edsoforsmartgrids.eu
Tel: +32 2 737 1340 – Mobile : +32 479 808097
Rue de la Loi 82, 1040 Brussels, Belgium

www.edsoforsmartgrids.eu