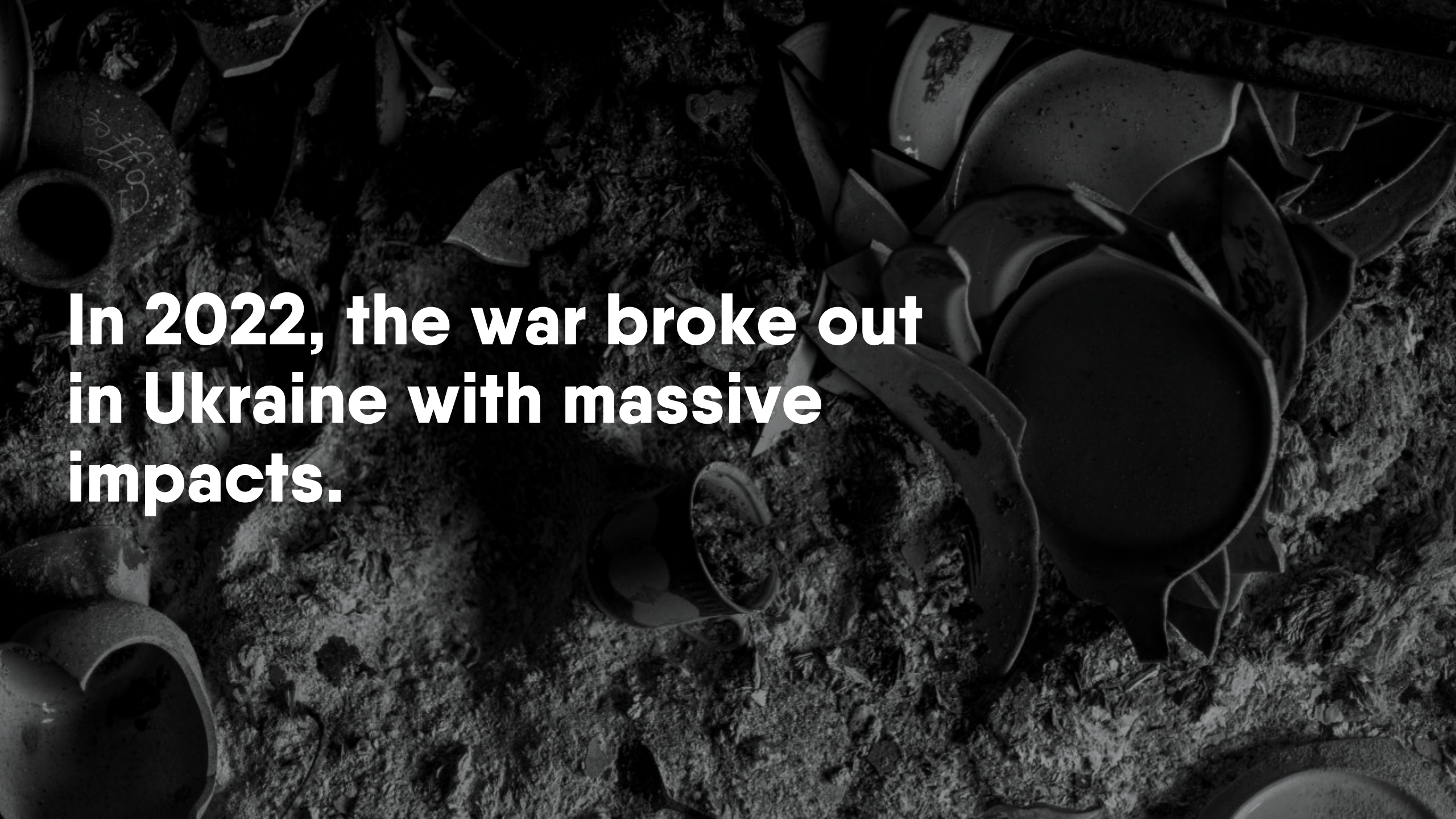




POWER BAROMETER

2023

A black and white photograph showing a close-up of shattered ceramic or pottery fragments. The pieces are scattered across a rough, textured surface, possibly ground or rubble. The fragments vary in size and shape, with some showing distinct patterns or designs. The lighting is dramatic, highlighting the sharp edges and textures of the broken pieces.

**In 2022, the war broke out
in Ukraine with massive
impacts.**

Consumers were heavily impacted by the crisis

+14,5 %

EU-27 medium
households' bills
2021-2022

+76 %

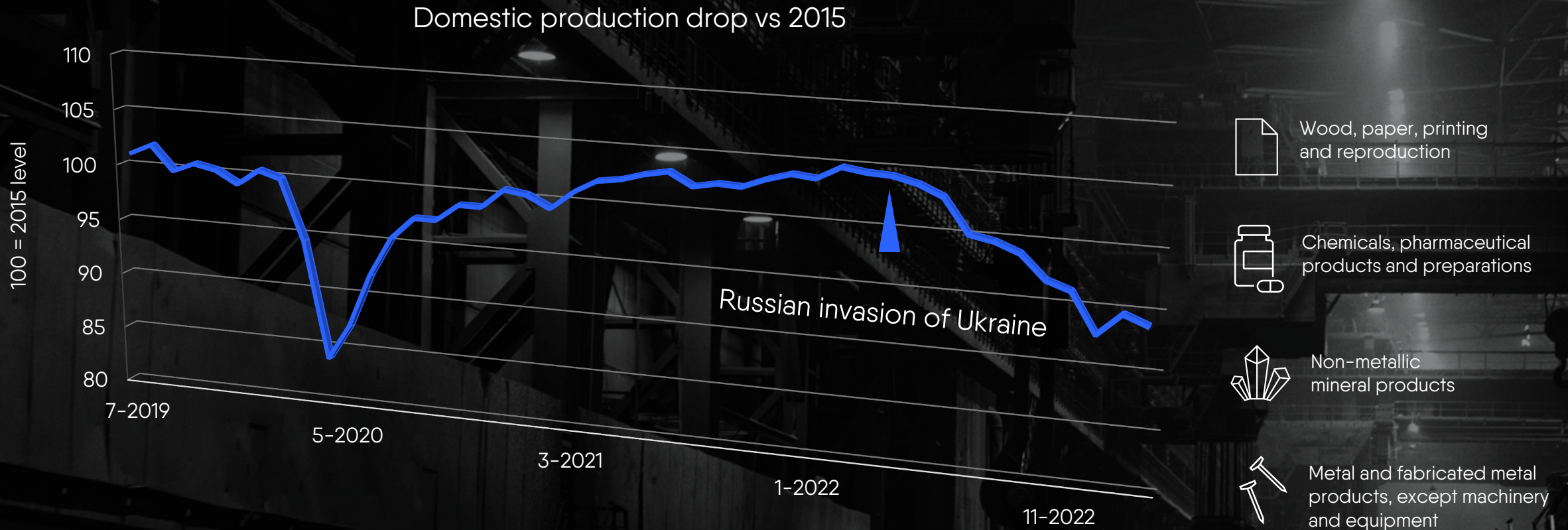
Retail prices for new
contracts in capital cities
2021-2022

€646 bn

EU governments' funding to
shield households & firms



Energy-intensives saw their production decrease



35-45%

EU aluminium, zinc, and silicon taken offline, with risk of permanent smelter closures, in 2022.



Oil & gas companies reaped huge profits



Figures represent the average profits made by the 5 largest oil & gas companies and utilities (EDF and Uniper losses excluded)

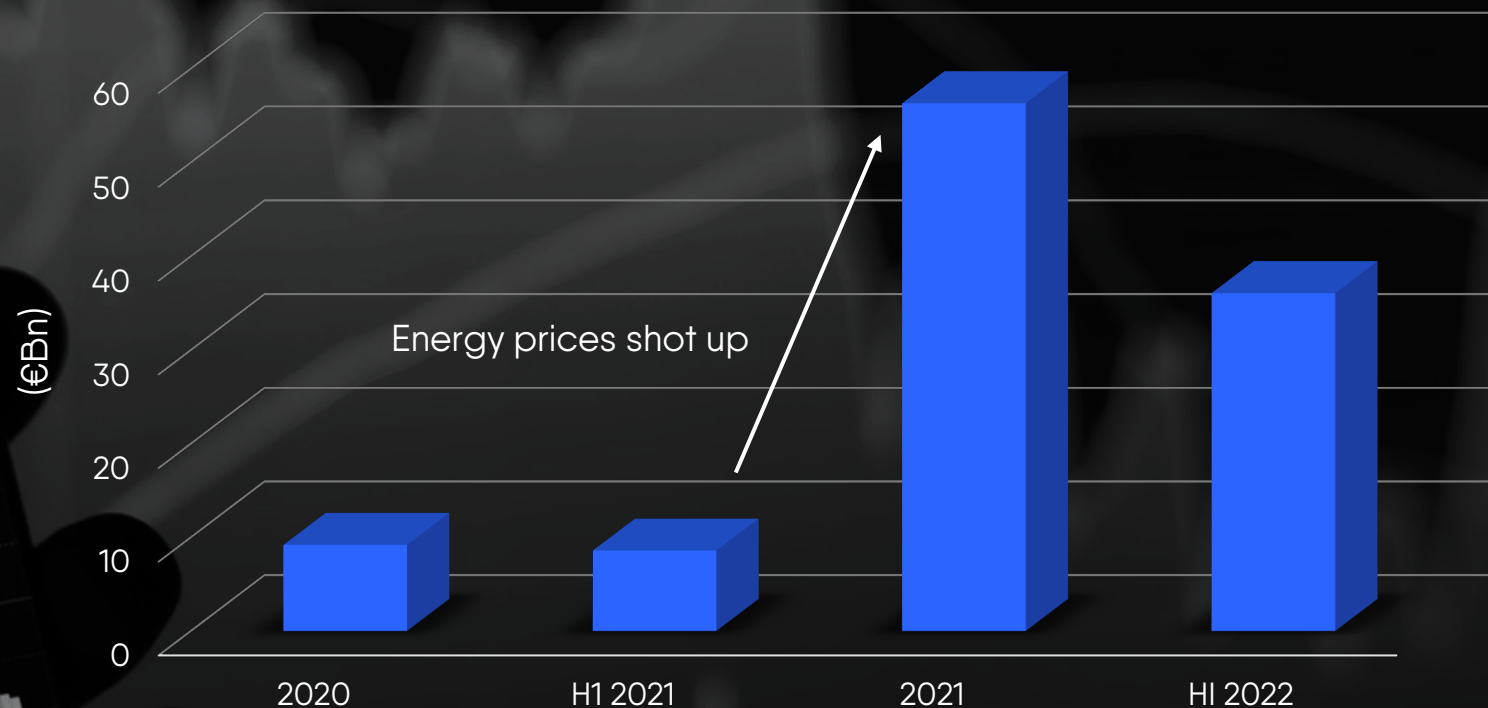


Utilities faced liquidity crunch due to huge collateral needs

€ 148 bn

Credit lines from governments to utilities to meet liquidity needs

Margining exposure for European utilities



Political interventions hindered power markets

-53 %

Activity on the Iberian forward market in 2022 vs. 2021

0

Practically no activity on Romanian forward market after emergency ordinance in August 2022

-75 %

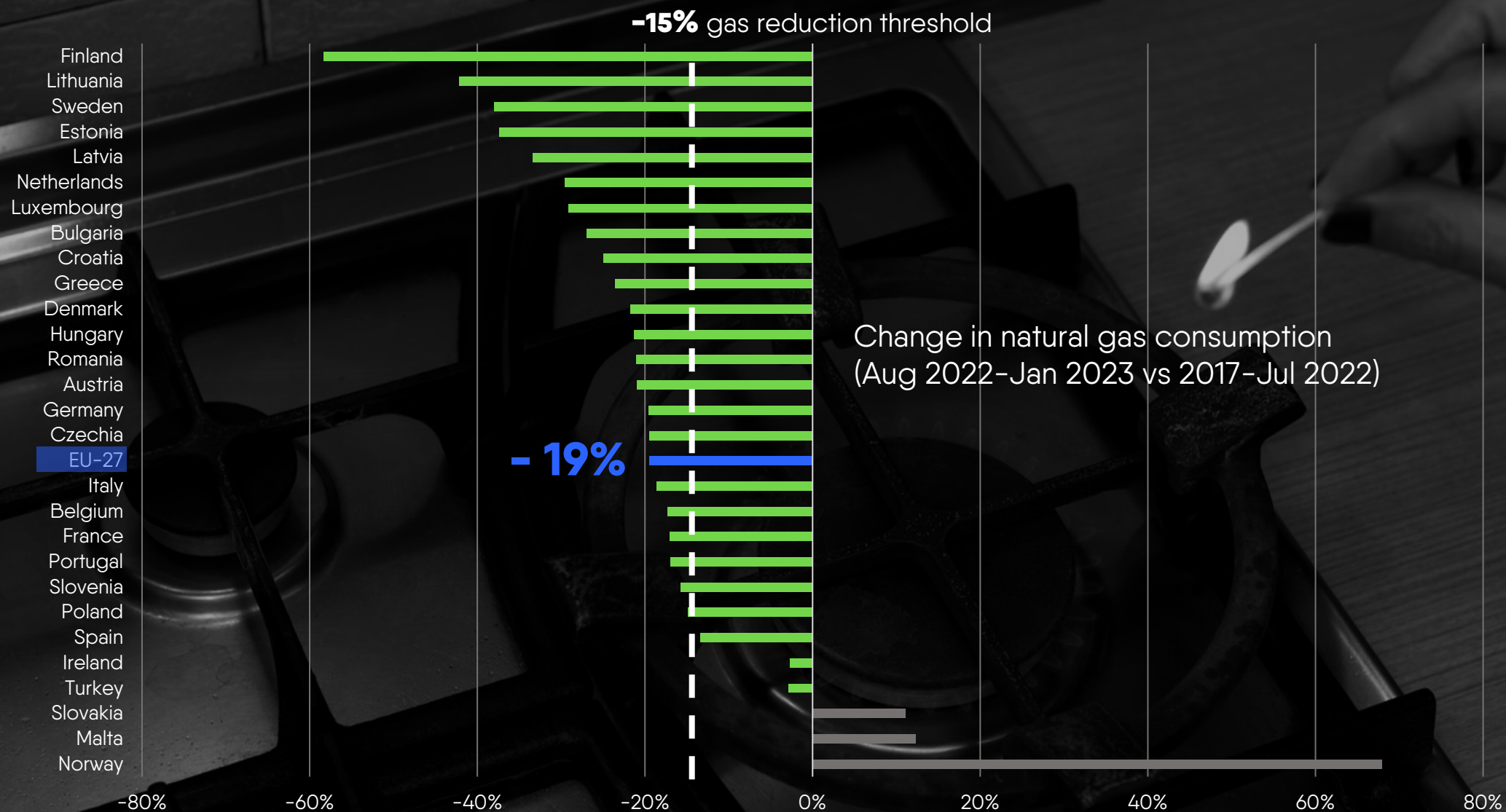
Utility PPA capacity signed in 2022 vs. 2021

- 59 %

Wind final investment decisions (FIDs) in 2022 vs 2021



Yet gas savings surpassed expectations

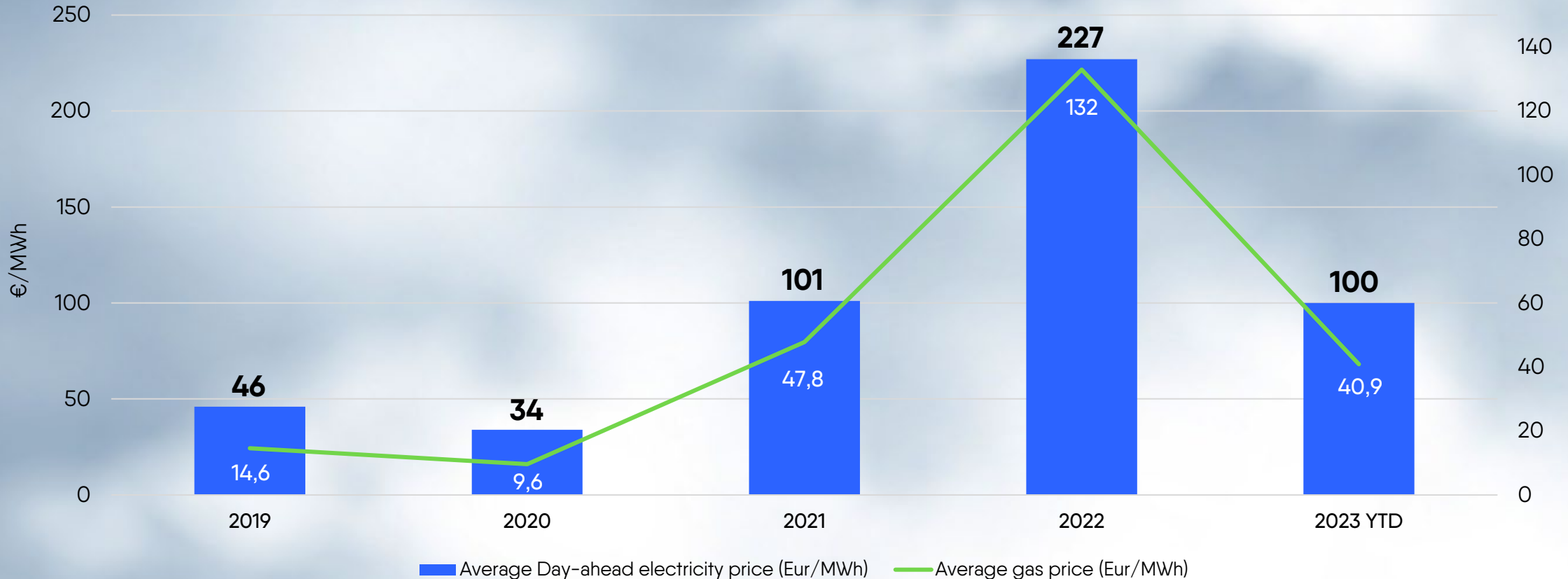


A dramatic photograph of a bright sun partially obscured by a large, dark, textured cloud. Sunbeams (crepuscular rays) radiate from behind the cloud into a clear blue sky. The overall mood is one of hope and breakthrough.

**Today, we see signs of
relief from the crisis**

Gas prices fall, electricity wholesale prices follow

Day-ahead electricity prices vs gas prices



Electricity prices followed market fundamentals.
Although still higher than in 2019, prices falling since autumn 2022.



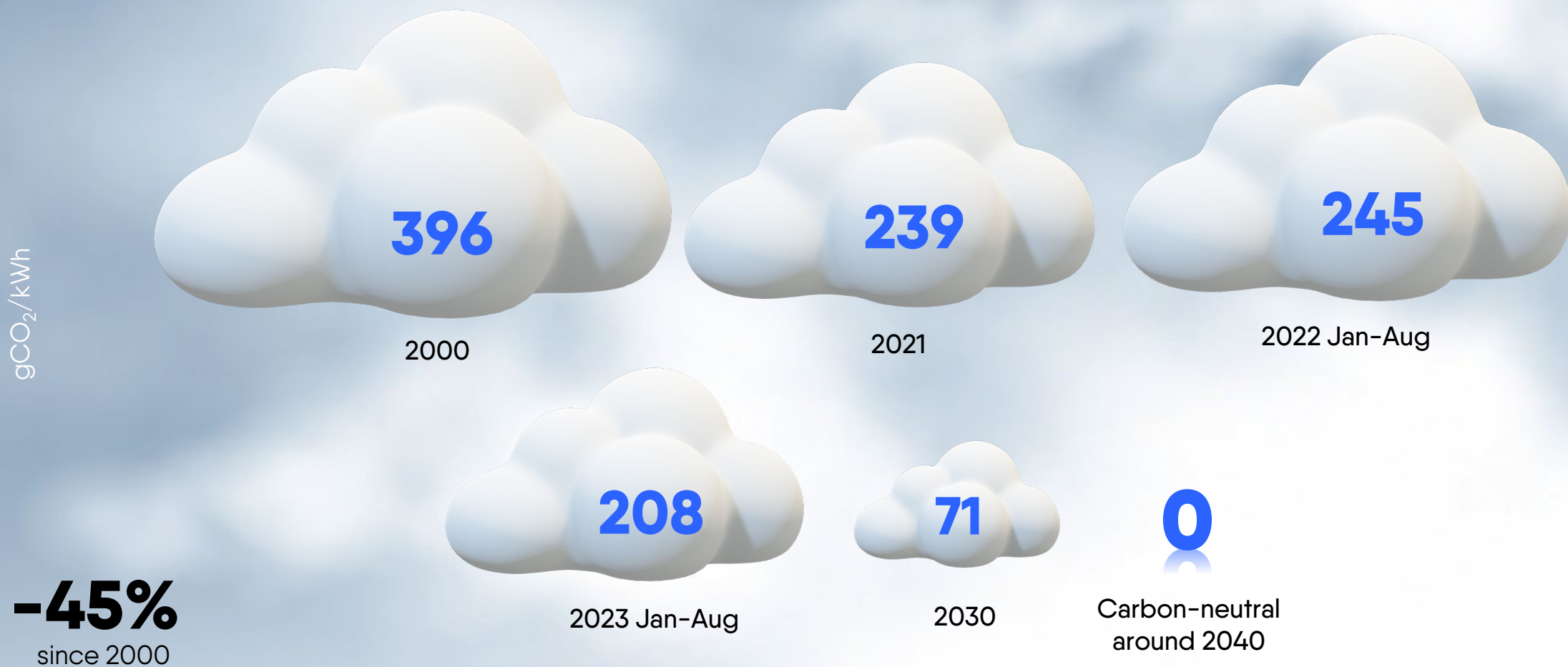
Retail prices started declining



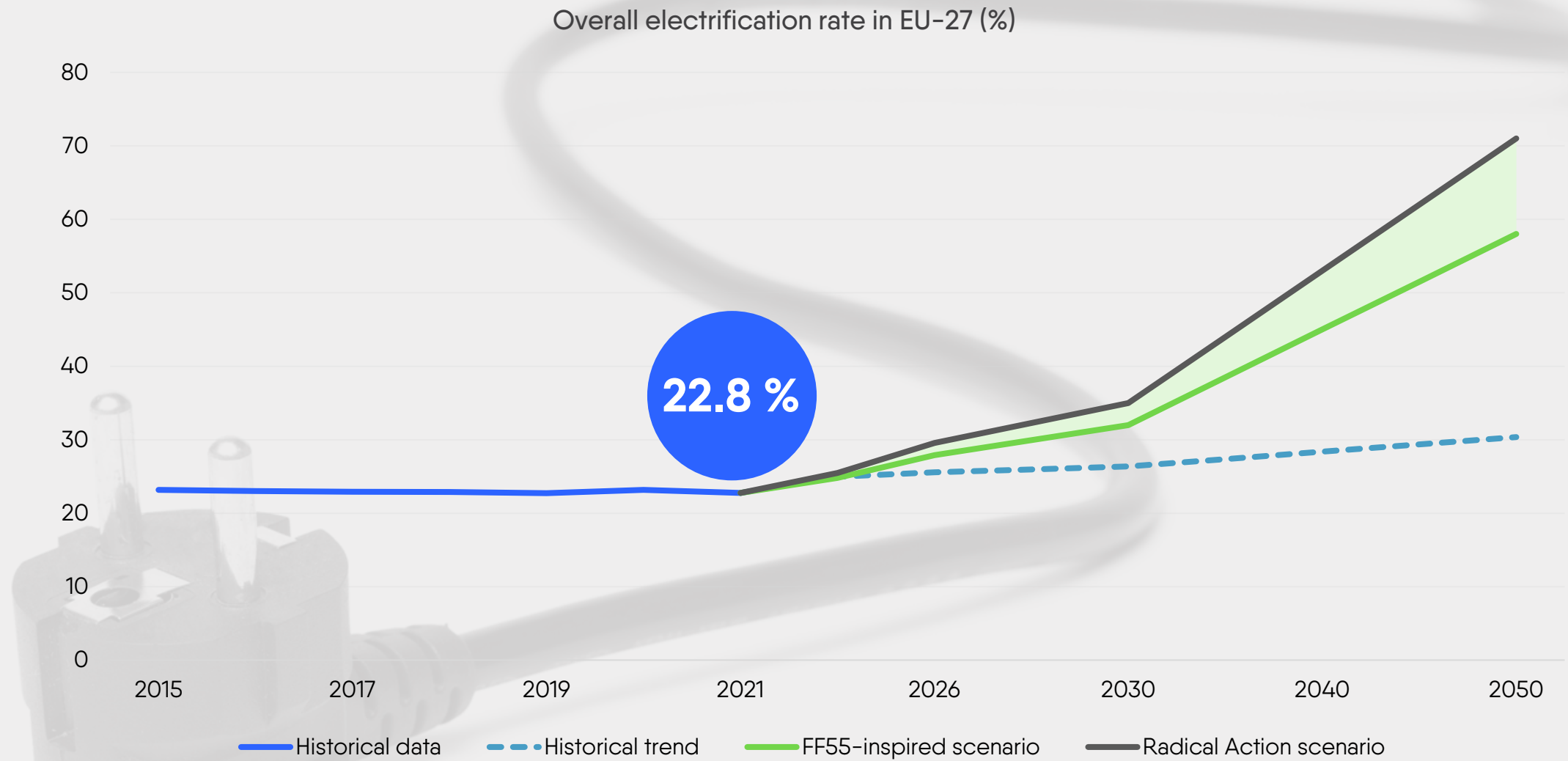
Average price in 2023 however still 58% higher than in 2021.



Power sector's emission intensity reaches lowest level ever



Electrification rate must triple by 2050



Source: Eurelectric Eurostat (2000-2021) & Eurelectric's decarbonisation scenarios (2023)

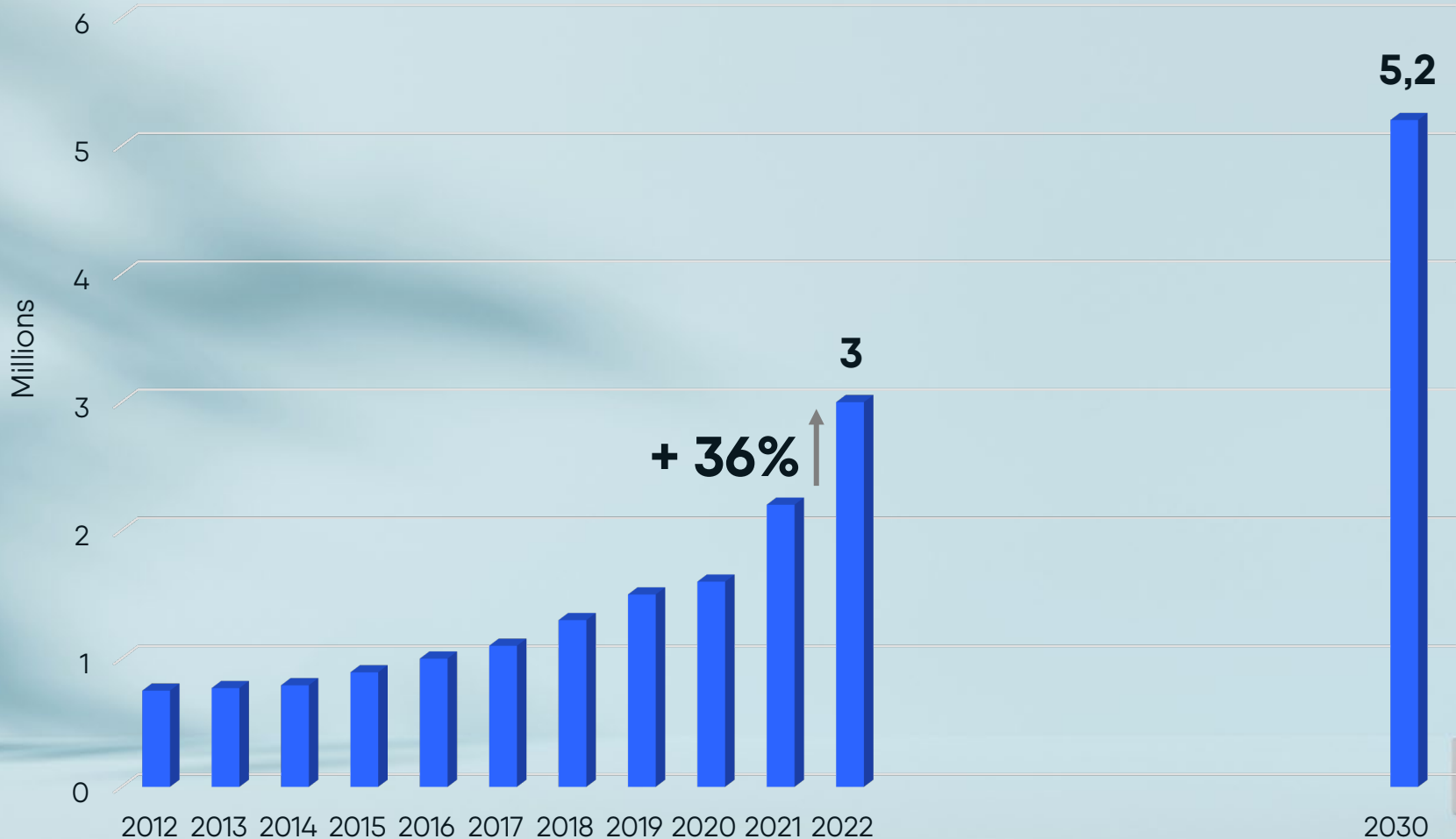
The urgency is on.

1. We need to strengthen security of supply through large-scale electrification



Europe reached 20 million heat pumps in 2022

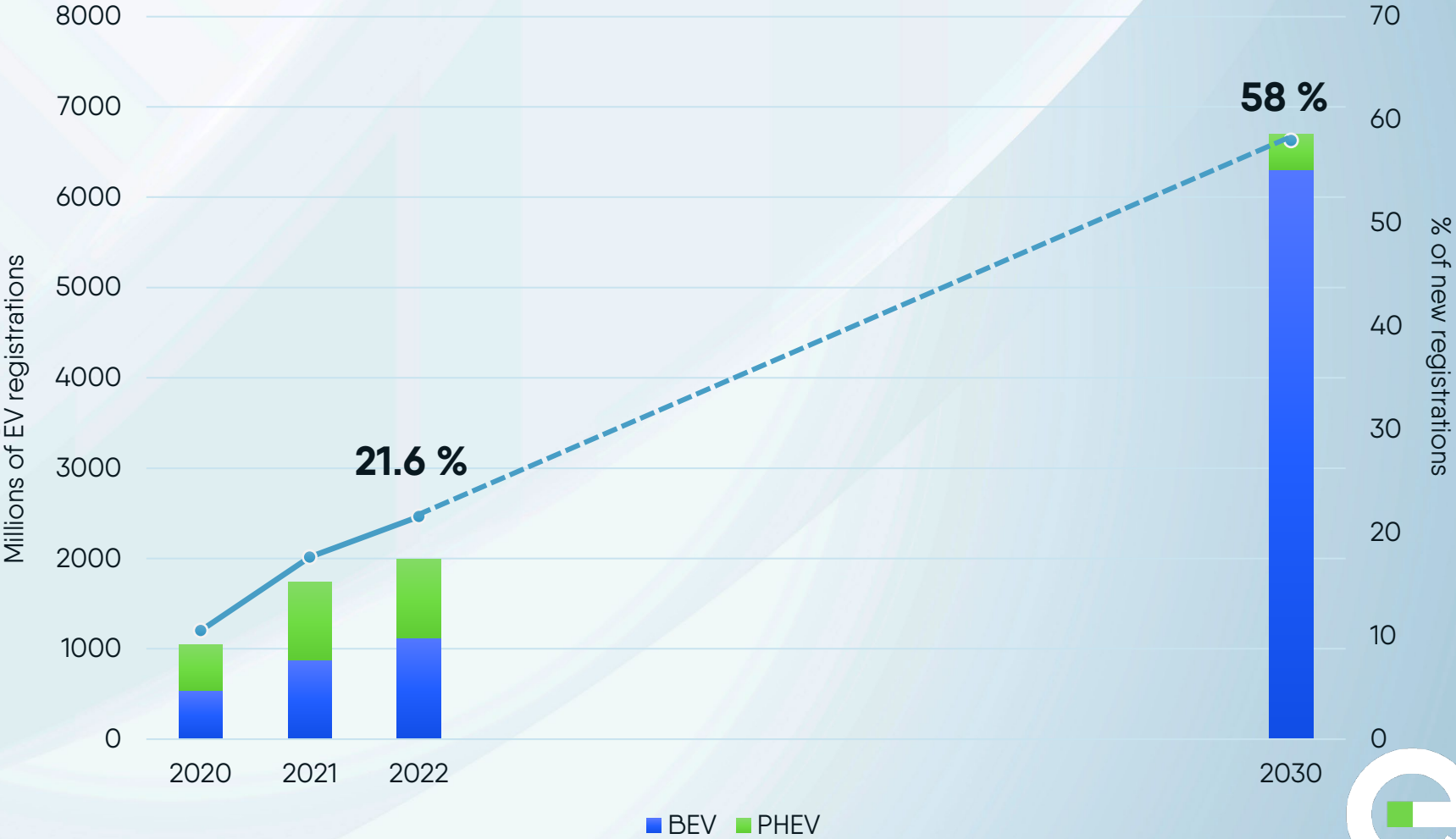
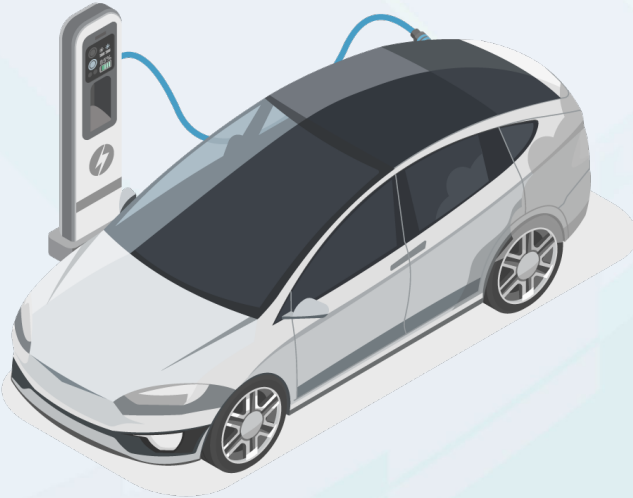
Heat pump sales/year



Source: Eurelectric, EHPA for historic data & Eurelectric's decarbonisation scenarios for 2030 (2023)

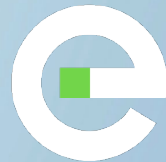
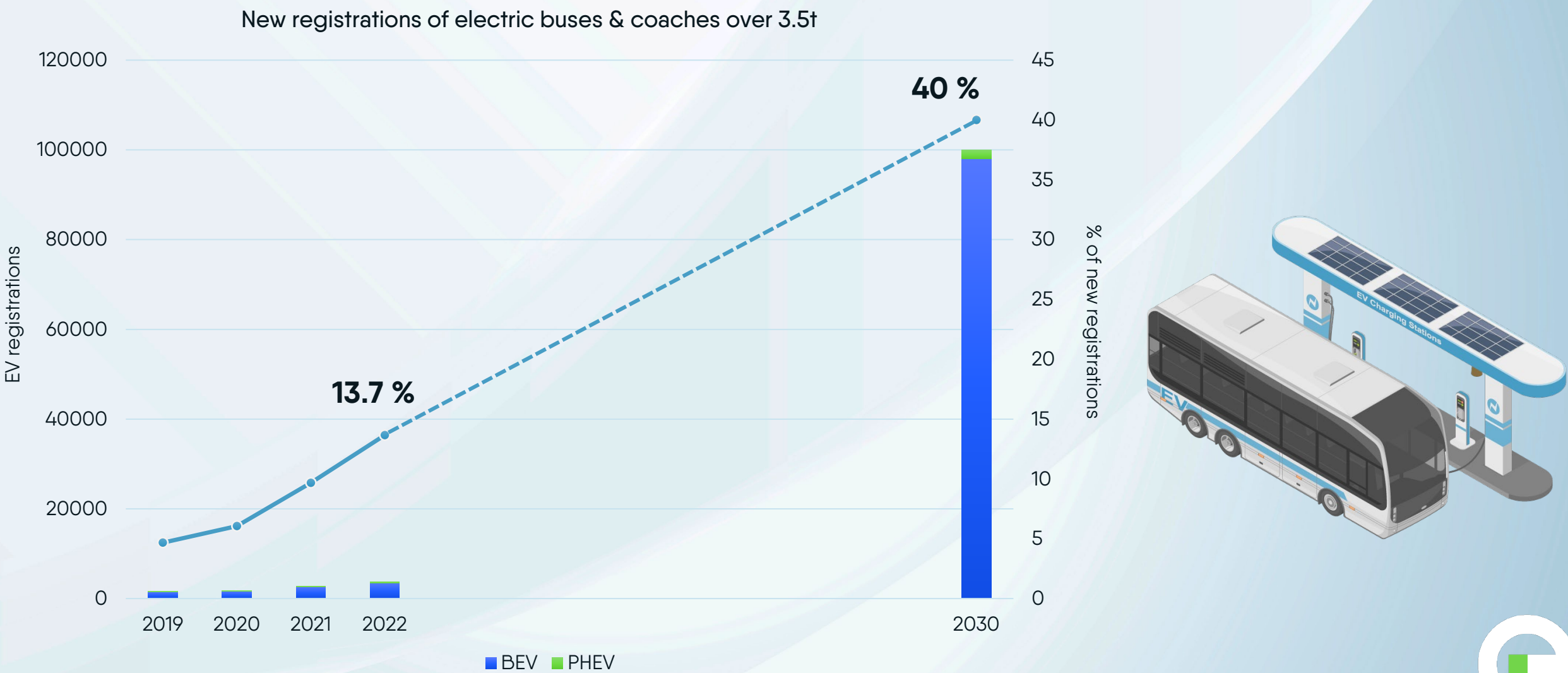
The EVolution needs to accelerate

Electric Passenger Cars

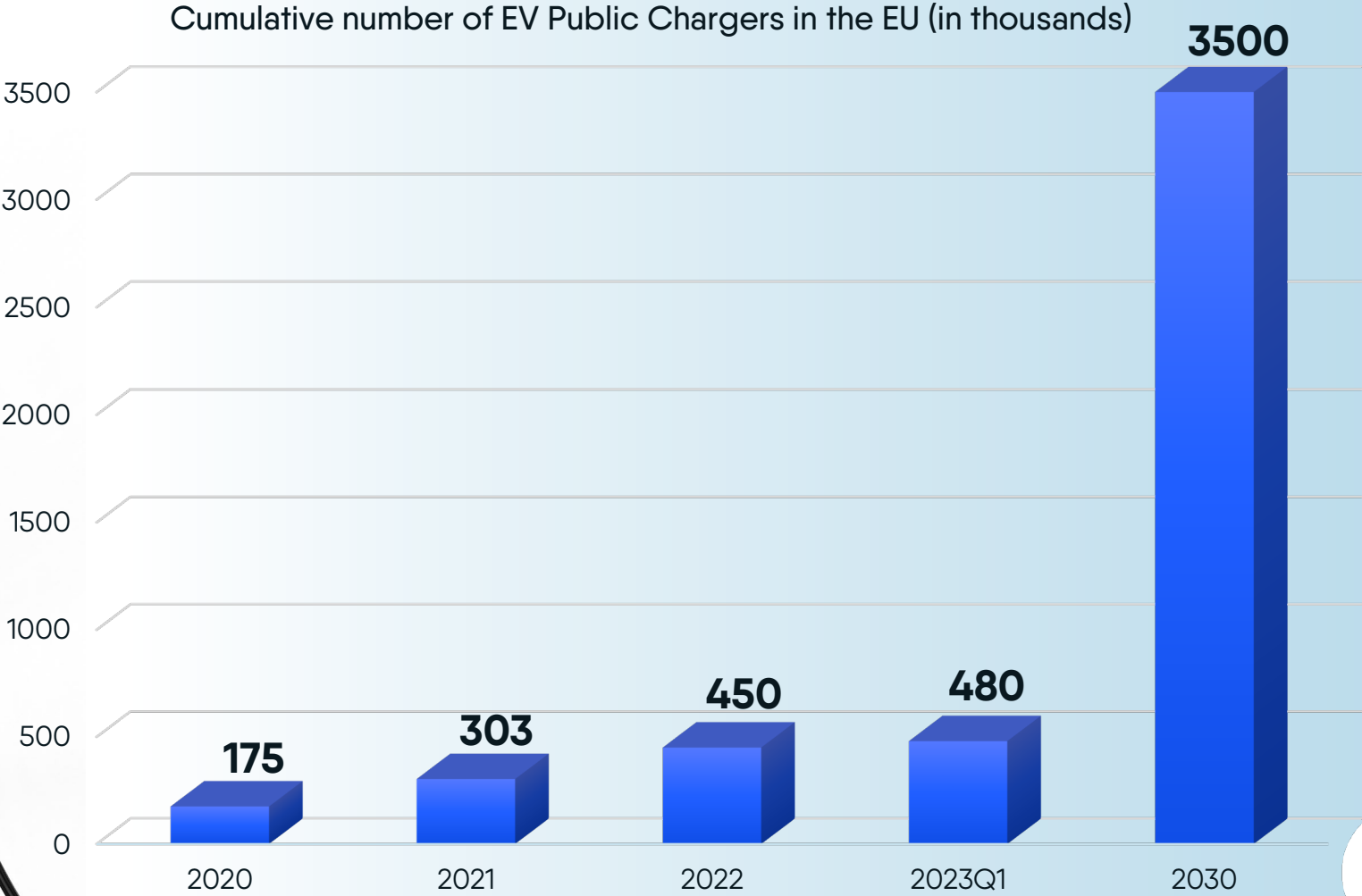
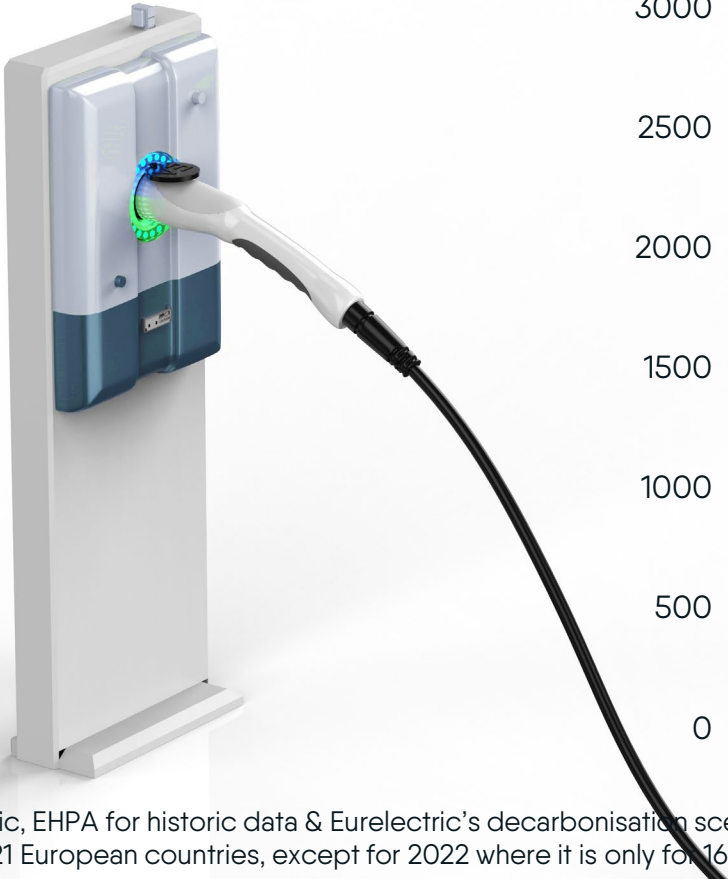


Source: Eurelectric, European Alternative Fuels Observatory (2018-2022) & ACEA (2030)

E-buses still a small fraction of new fleet



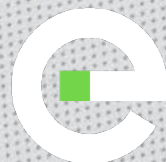
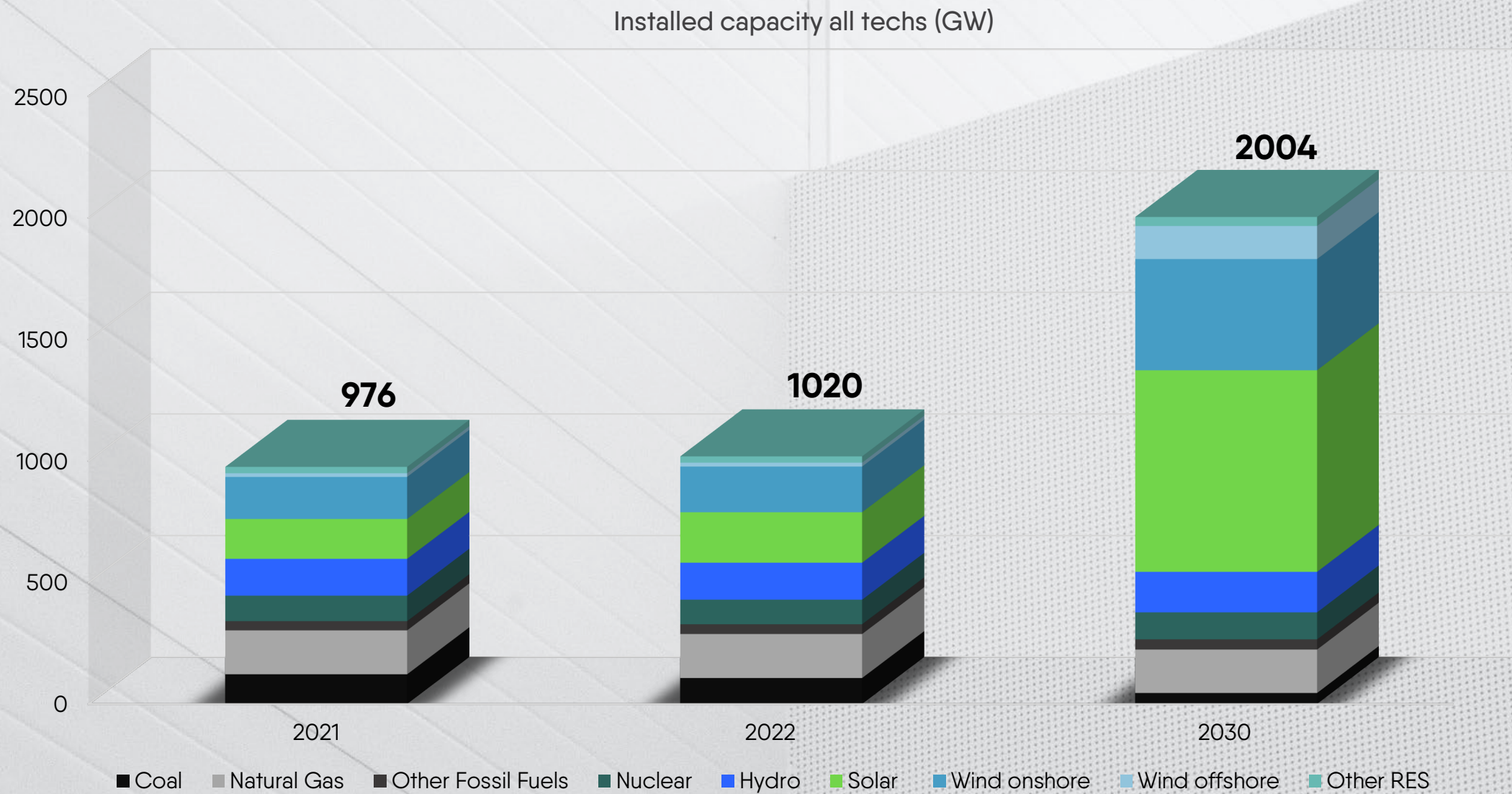
Number of public chargers for EVs need to drastically increase



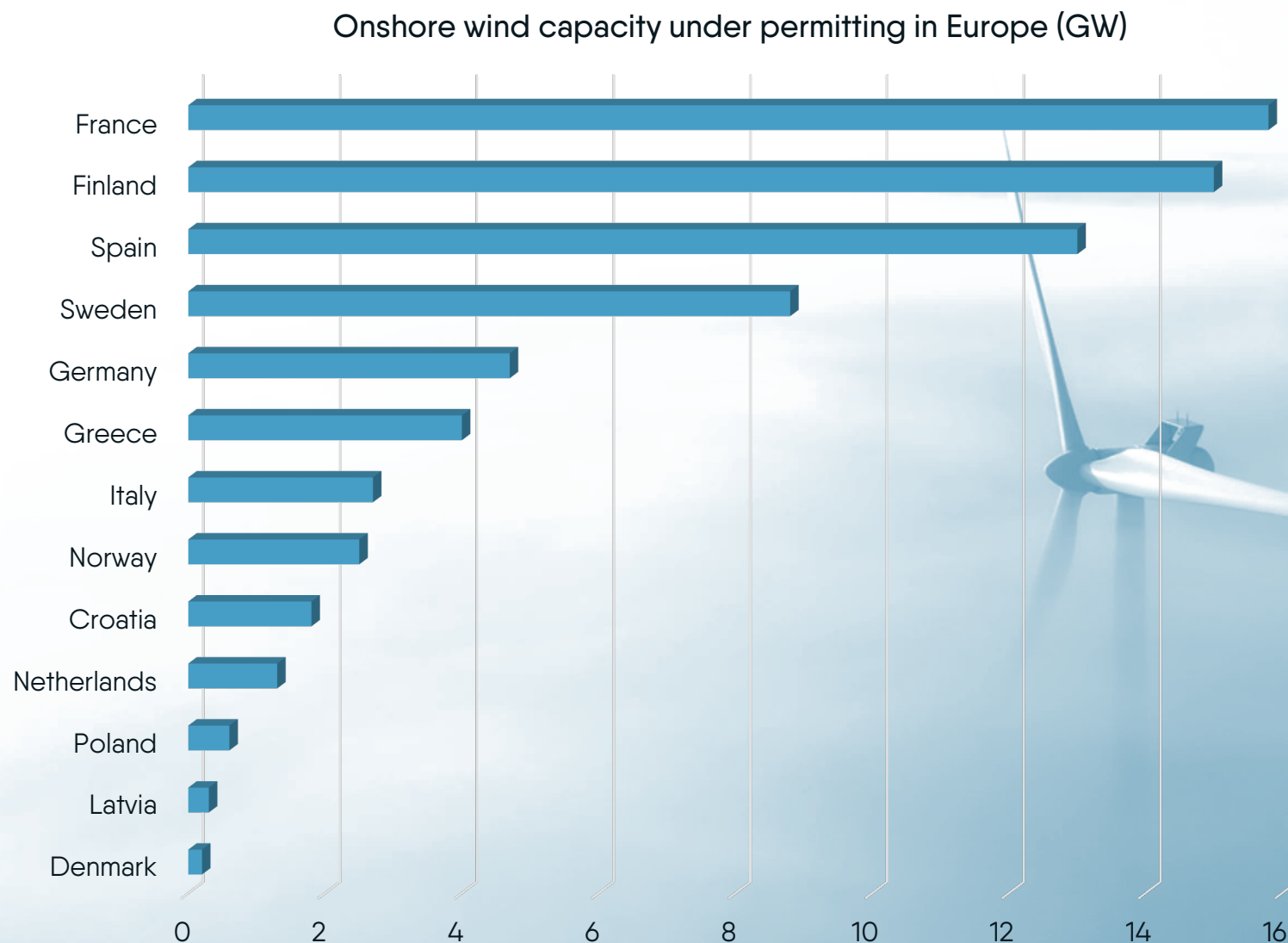
Source: Eurelectric, EHPA for historic data & Eurelectric's decarbonisation scenarios for 2030 (2023)
The data is from 21 European countries, except for 2022 where it is only for 16 markets.



Capacity must double by 2030

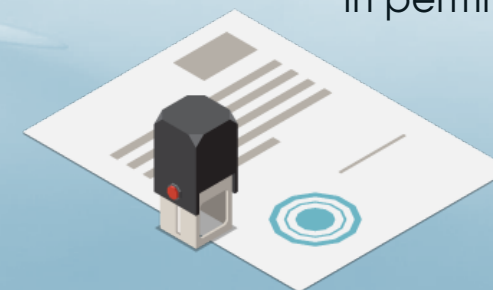


Permitting procedures yet to see improvement



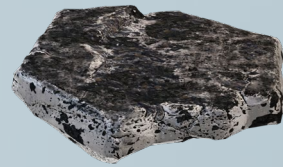
80 GW

Wind capacity stuck
in permitting in 2022



EU domestic production lacks in certain stages of the supply chain

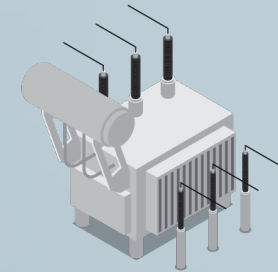
Share of EU production in global production for different stages of the supply chain



Raw materials



Processed materials



Components



Assemblies

Lithium-ion
batteries

1 %

8 %

9 %

0 %

Wind energy

1 %

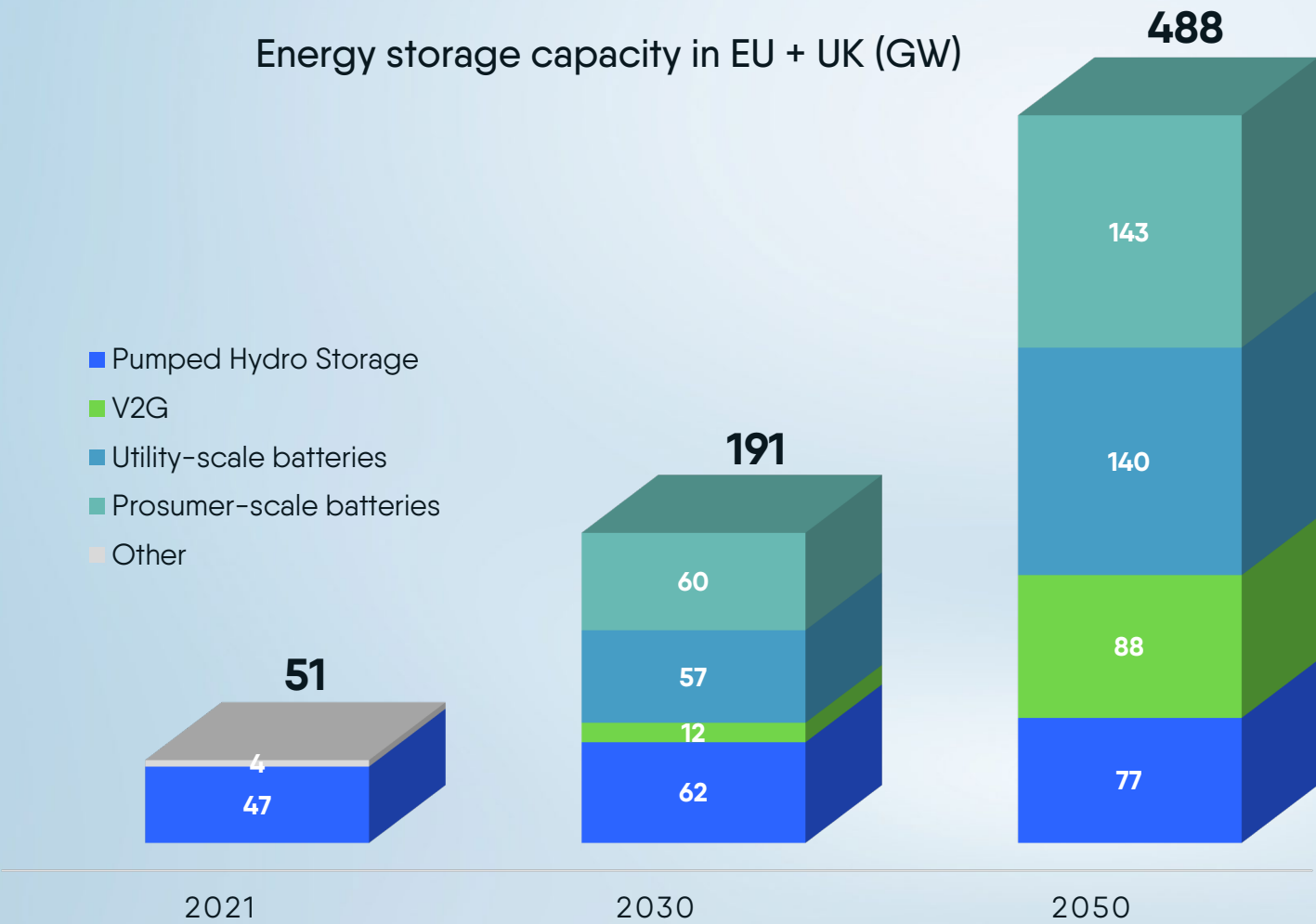
12 %

18 %

58 %



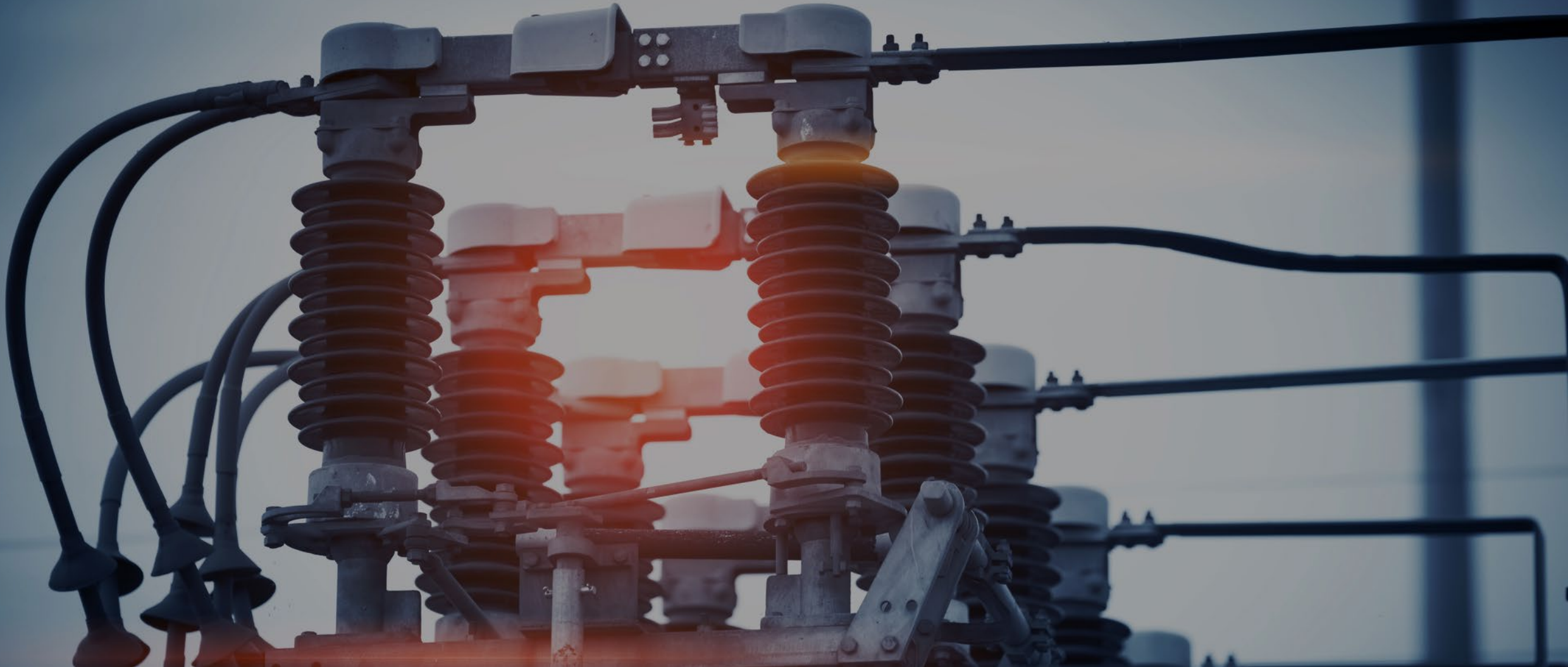
Storage solutions need a massive push



Source: Eurelectric Decarbonisation Speedways, International Hydropower Association, EASE (Energy Storage Targets 2030 and 2050; Activity Report 2022)

The urgency is on.

2. We need to drive the expansion and digitalisation of electricity grids



Power supply is increasingly reliable

● 2018
● 2021

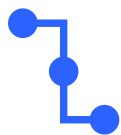


Network extension does not match growing needs



+ 19 %

additional connected
customers 2019 - 2022



+ 19 %

connection requests
between 2020 and 2021



+ 1.5 % primary
substations and **+ 1.2 %**
secondary substations
between 2018 and 2021



+ 0.8 %
in total length (km)
between 2021 and 2022



+ 0.2%
in overhead lines (km)
between 2021 and 2022



+ 1.7%
in underground cables
(km) between 2021 and
2022

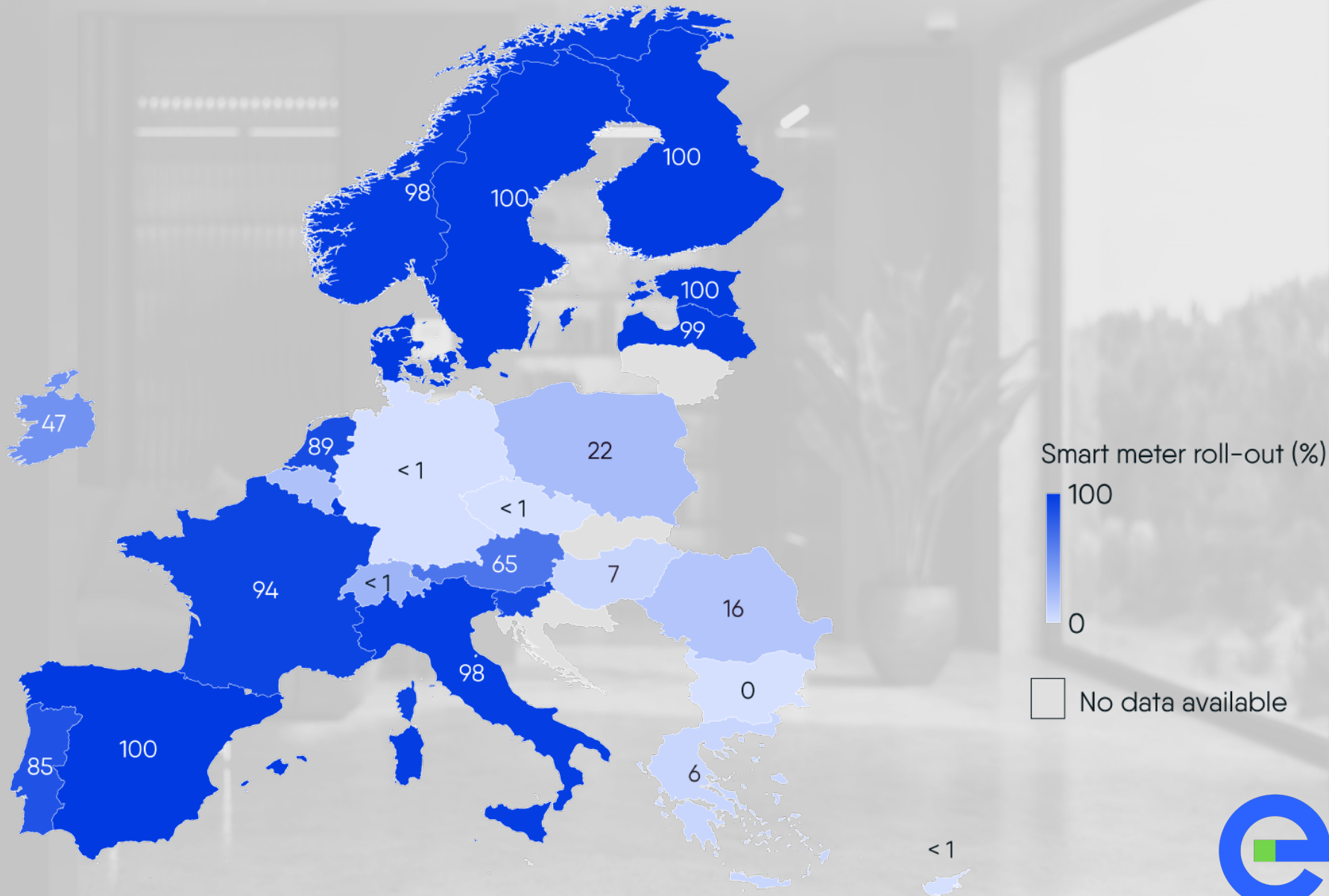


Smart meter roll-out: progress, but disparities persist



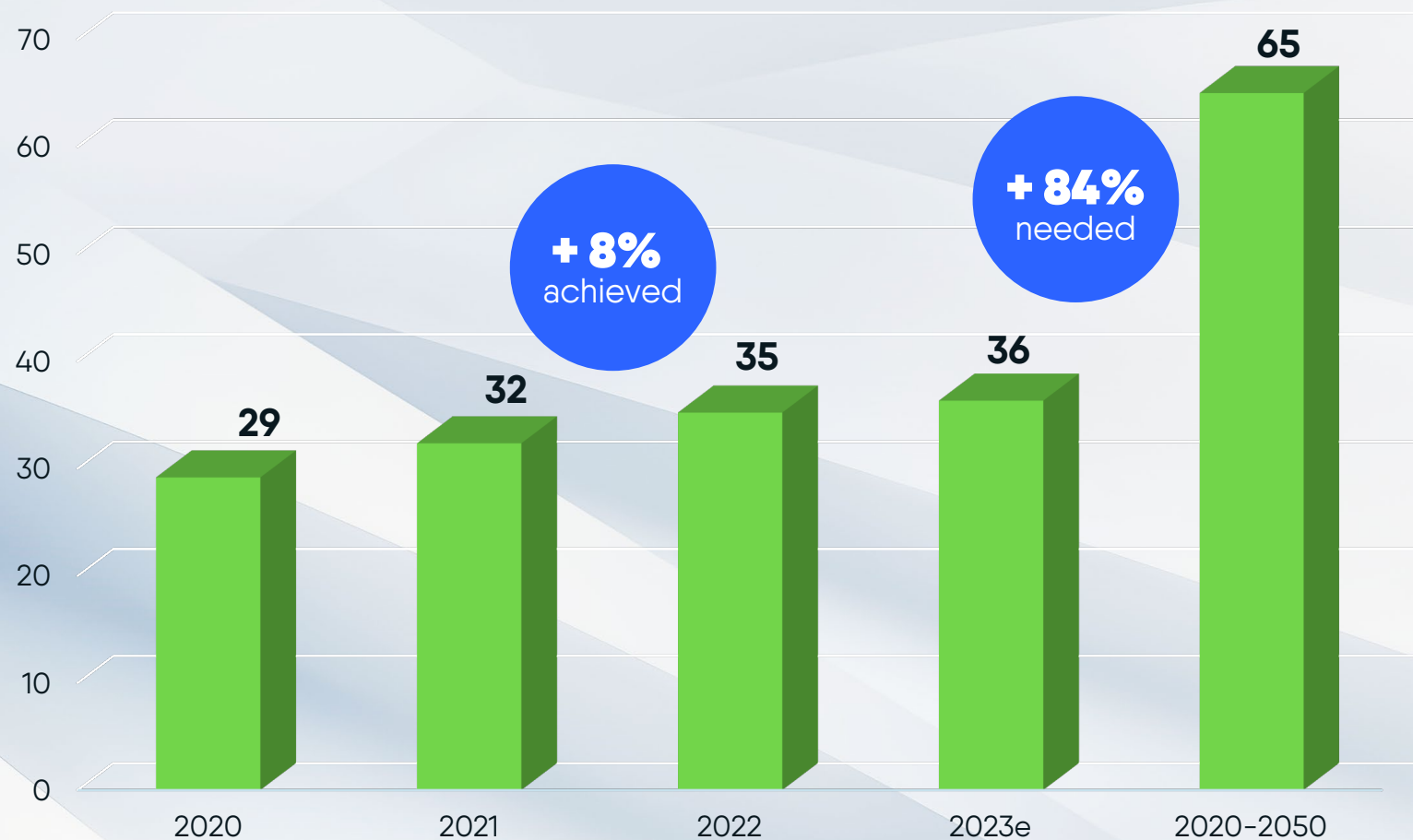
48 % EU penetration rate (2020)

56 % EU penetration rate (2022)



Grids must urgently be boosted

Investments in distribution grid/year (in 2022 bn Euro)



The urgency is on.

3. We need to foster a fair distribution of risks and benefits



Foster a fair distribution of risks and benefits

**Fairness among
energy suppliers**



**Fairness for
customers**



**Fairness for
Member States**





Policy Recommendations

Security of supply

- Finalise & implement Green Deal with focus on electrification
- Facilitate permitting for electricity generation and infrastructure
- Ensure adequate investment signals for all needed assets
- Modernise and update the system adequacy methodology

Distribution Grids

- Launch an ambitious Power Infrastructure Deal
- Modernise tariffs and incentivise anticipatory investment
- Ensure access of distribution grids to EU funds
- Facilitate permitting for grid infrastructure
- Formulate a modern mandate for Regulators

Fairness

- Ensure proportionality in political interventions
- Target support measures to vulnerable customers and reduce taxes and levies on electricity
- Avoid counterproductive market interventions (e.g. banning disconnections)
- Acknowledge different starting points & include just transition measures in next MFF