

2022 COGEN Europe National Snapshot Survey

17/11/2022



COGEN

EUROPE The European Association
for the Promotion of Cogeneration

Our Vision

Resilient, decentralised
and carbon neutral
European energy system
with cogeneration as its
backbone

2050



COGEN EUROPE

cogeneurope.eu

Our Mission

Cross-sectoral voice of the cogeneration industry

Work with EU Institutions and stakeholders to shape better policies by:



Building a robust evidence-base demonstrating the benefits of cogeneration.



Using the expertise of our membership.



Establishing strong coalitions and partnerships.

MEMBERS

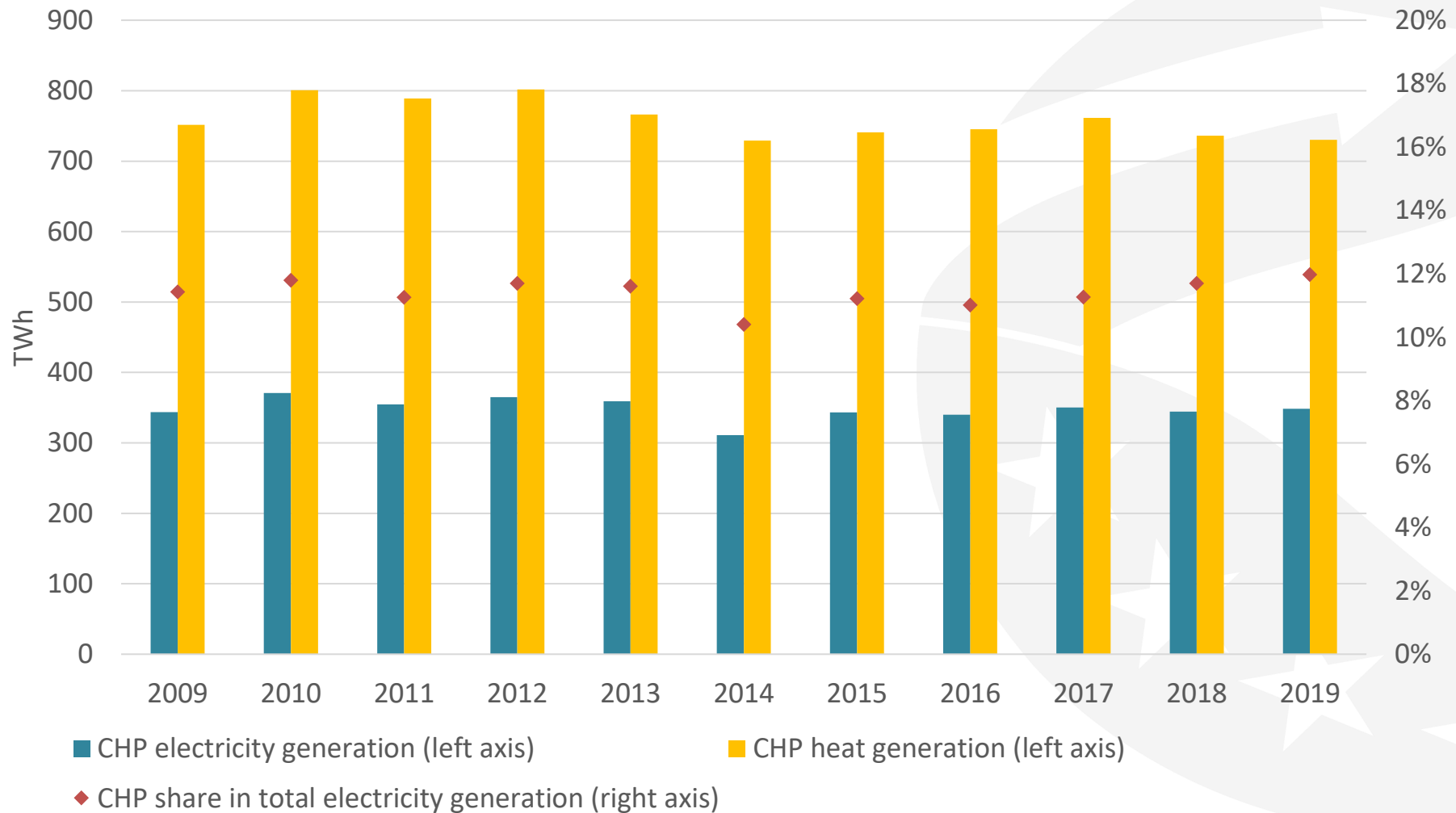
National Associations



Corporate Members



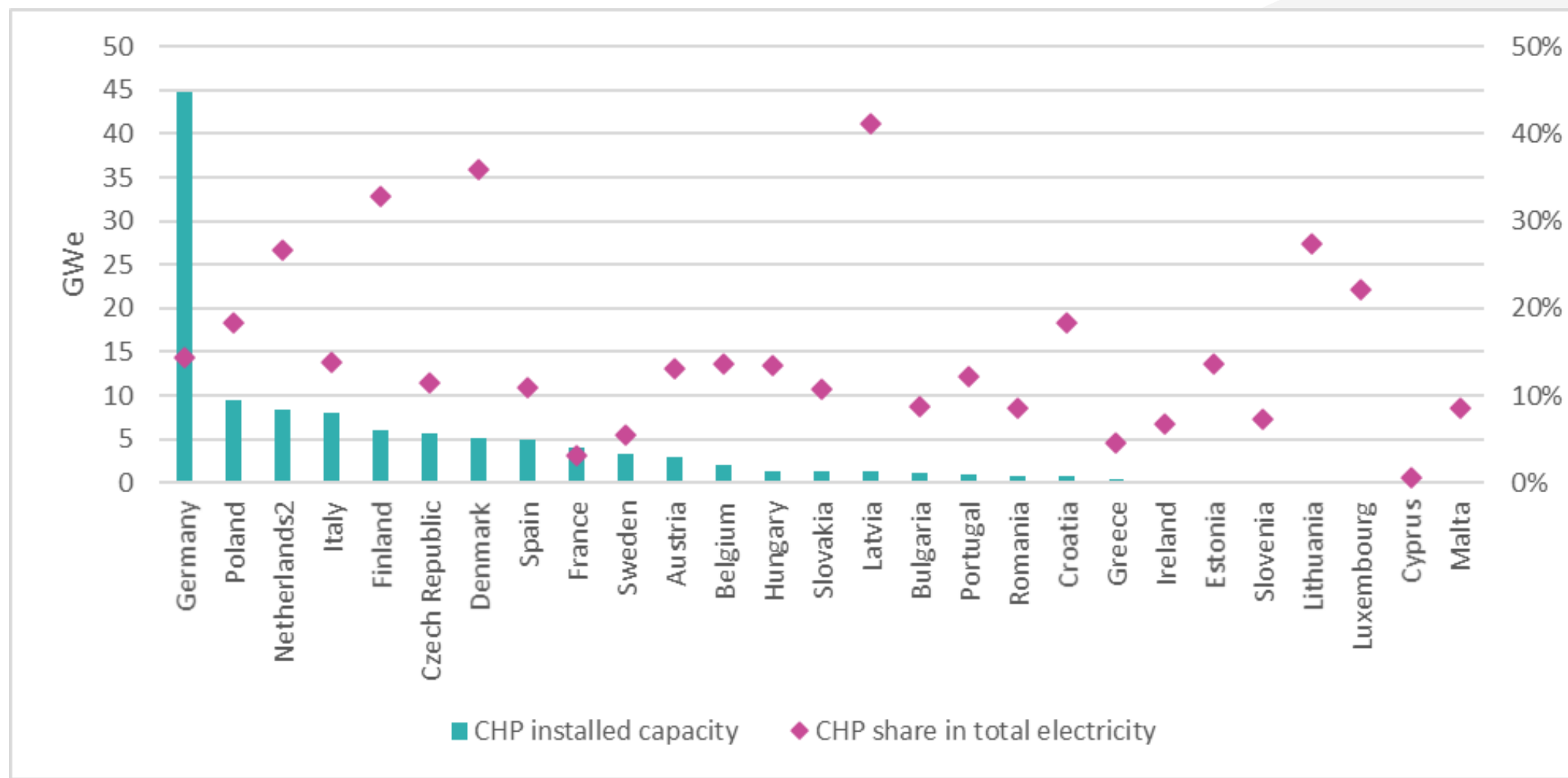
CHP in EU27 Overview



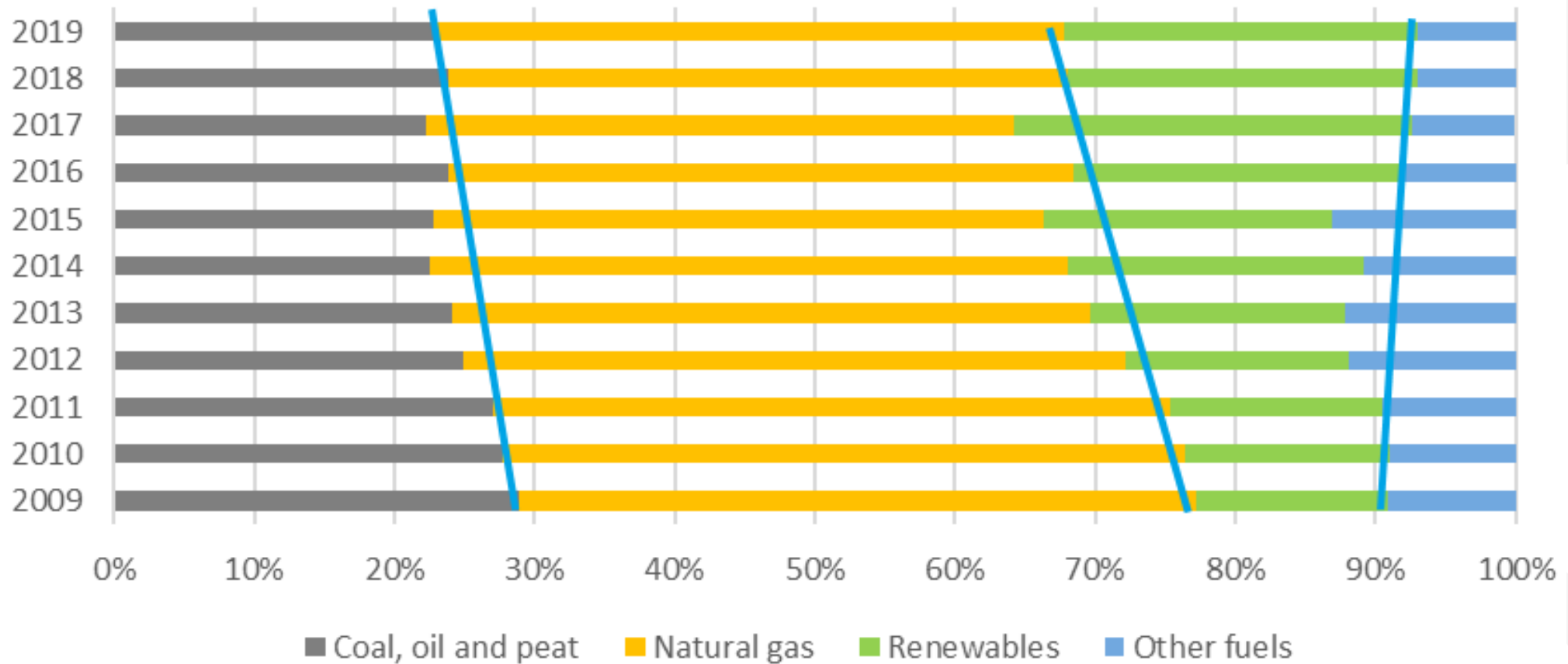
Data source: [European Commission, Eurostat, 2021](#)

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CHP by country in 2019

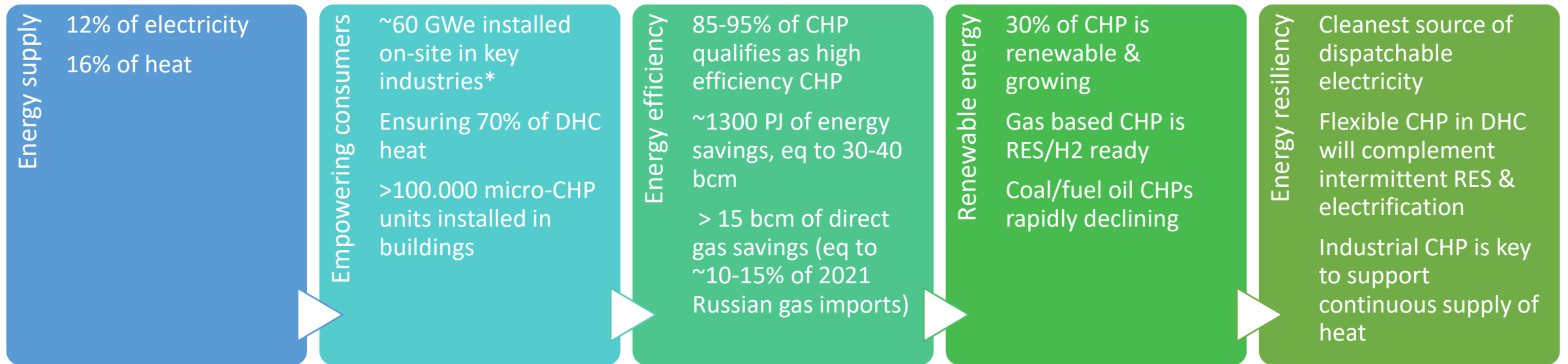


CHP Fuel Mix in the EU (2009-2019)



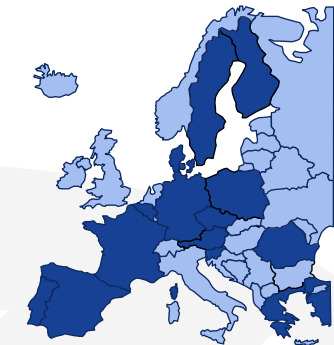
Data source: [European Commission, Eurostat, 2021](#)

CHP Contribution to EU climate & energy objectives



* chemical, pulp & paper, alumina, ceramics, primary food processors, hospitality, health, agriculture.

Expert contributions from **15** CHP national experts...



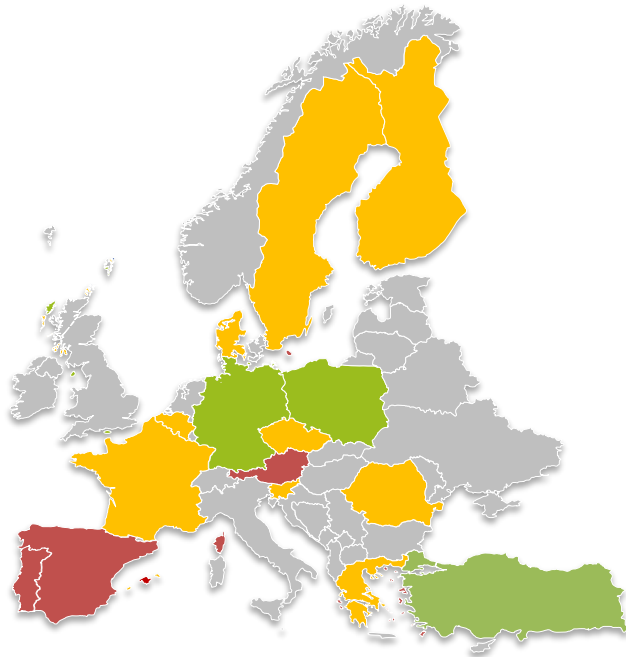
2022 Cogeneration National Snapshot Survey

...representing **82%** of installed capacity **in EU27 & Turkey**

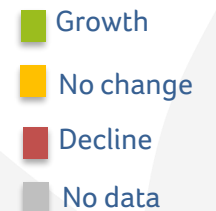
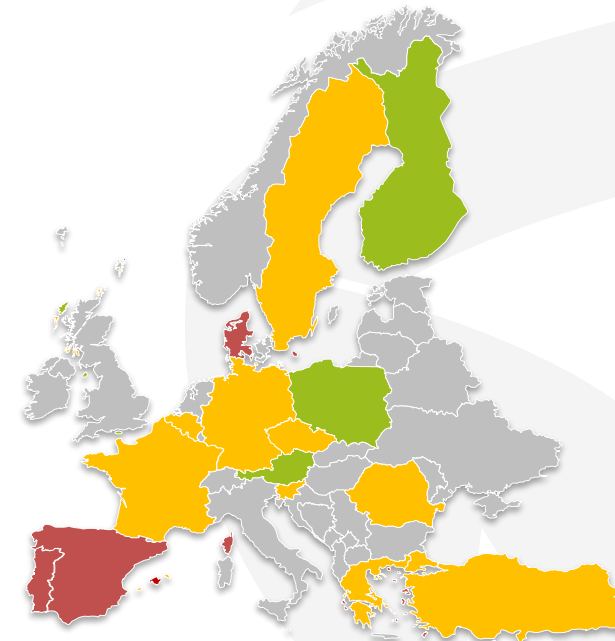
...capturing the **European CHP industry sentiment**

CHP Market Developments in Europe (2020-2021)

CHP Installed Capacity



CHP Electricity Production

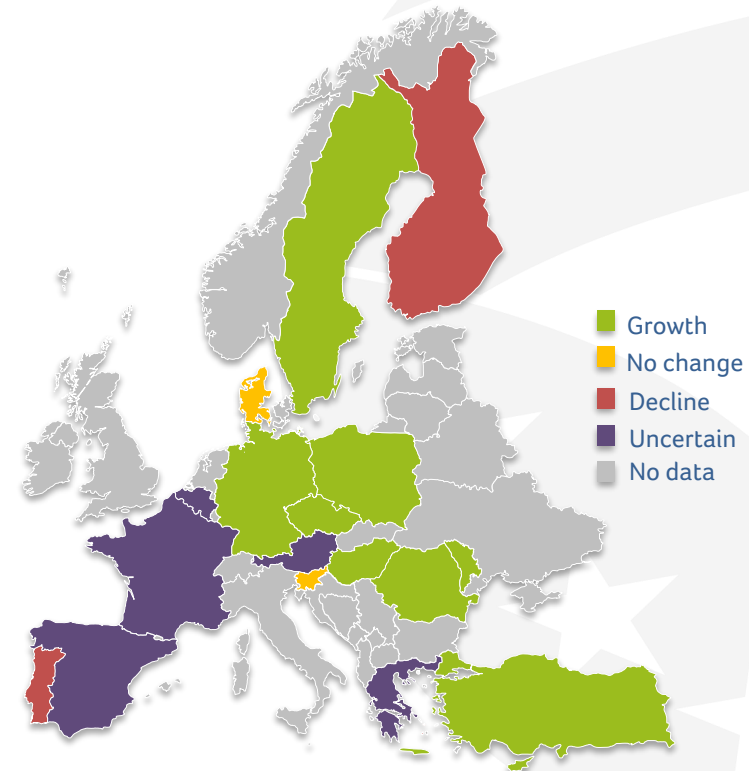


- CHP stable in ~50% of markets
- Growth segments included natural gas & RES CHP

* Percentages on all slides represent the aggregated answers weighted by the installed capacity in each country.

5-year CHP Outlook

Growth expected in **60% of the CHP markets** in Europe, in the next 5 years.



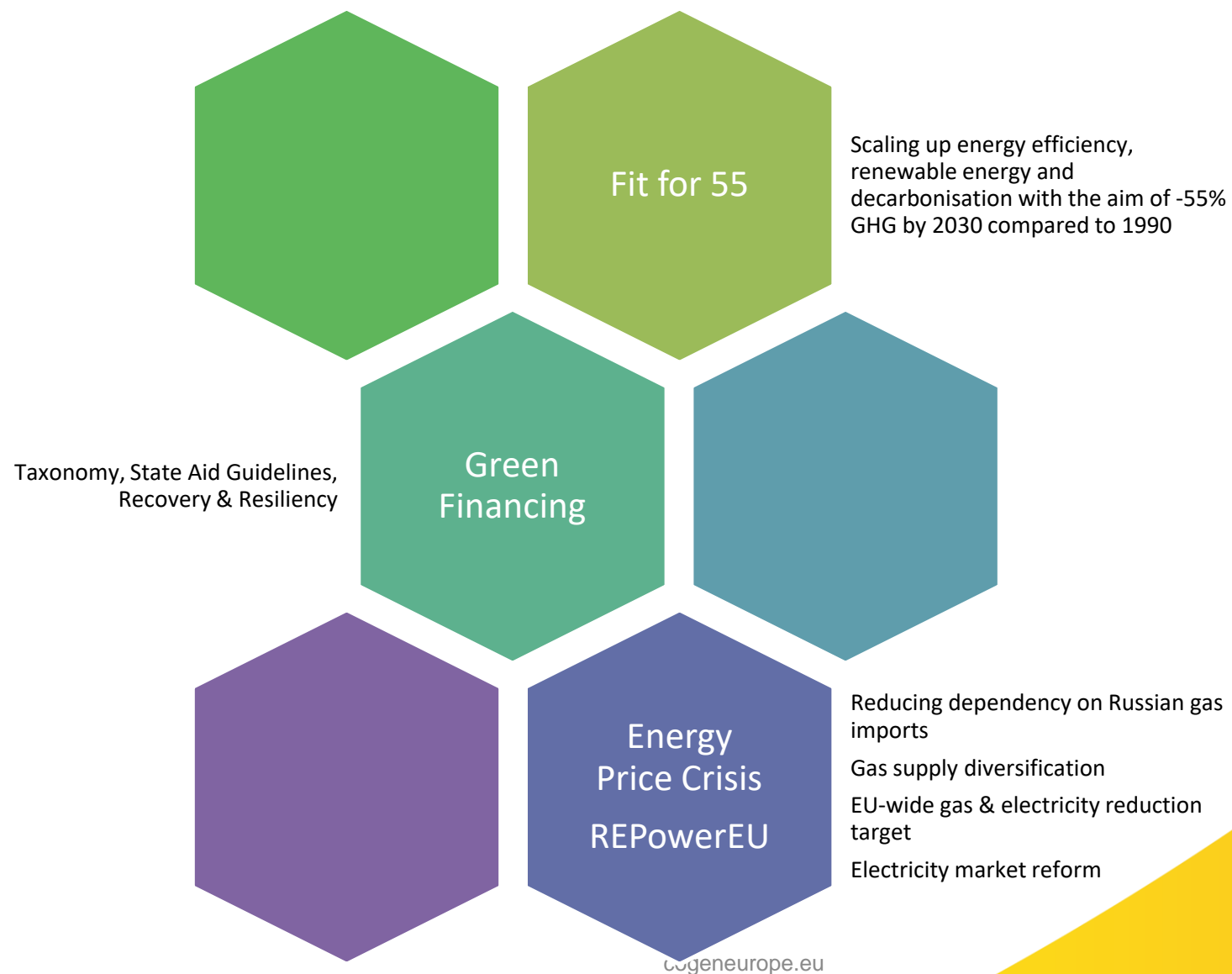
CHP growth trends by segment

Segment	Current trend*	Outlook*	Key markets
RES	62%	64%	FI, DE, PL, SI, ES, TR
Natural gas	58%	48%	CZ, TR
DHC	42%	58%	CZ, DE, PL, RO, SE, TR
Industrial	50%	57%	CZ, DE, PL, RO, SI, TR
Commercial	55%	59%	CZ, DE, PL, SE, TR
Domestic	62%	46%	CZ, FR

Overview of CHP support schemes

	Feed-in Tariff	Tender schemes	Feed-in Premium	Investment Aid	Certific ates Scheme	Tax Incentives	Capacity mechanis ms	Other	No support
Belgium					✓	✓	✓		
Czech Republic		✓	✓	✓					
Denmark									✗
Germany	✓	✓	✓	✓		✓	✓		
Greece			✓						
Spain	✓	✓						✓	
Austria				✓		✓			
Poland		✓					✓		
Portugal	✓								
Romania		✓							
Slovenia	✓	✓		✓					
Sweden									✗
Turkey									✗

EU ENERGY & CLIMATE POLICY LANDSCAPE

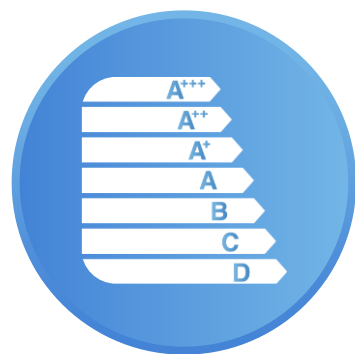


CHP's Multiple Benefits in 2050



€4-8 Bn

↓ cost for
energy system



150–220 TWh

↑ energy savings
across energy system



~20%

↓ remaining CO₂
emissions



13-16%*
of total electricity

and ~30-36% of flexible
thermally generated
power at times of low
wind & sun and to cover
peak demand



19-27%**
of total heat

and 52-100%*** of
thermal heat in
buildings, industry
& district heating

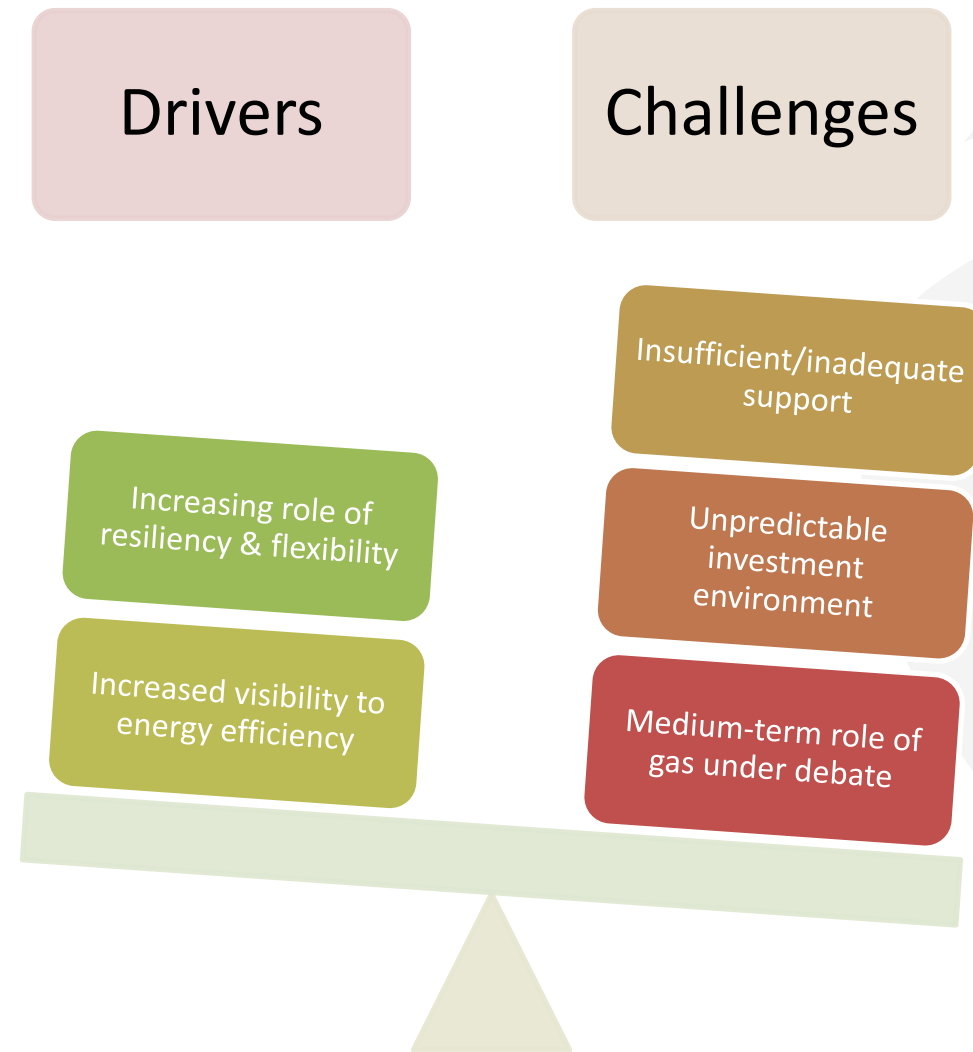
* excluding off-grid RES for P2X generation.

** excluding furnaces.

*** excluding furnaces; DHC for industry is 100% CHP.

Source: Artelys, 2020. [Towards an efficient, integrated and cost-effective net-zero energy system in 2050](#)

2022 Snapshot Survey Takeaways



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