

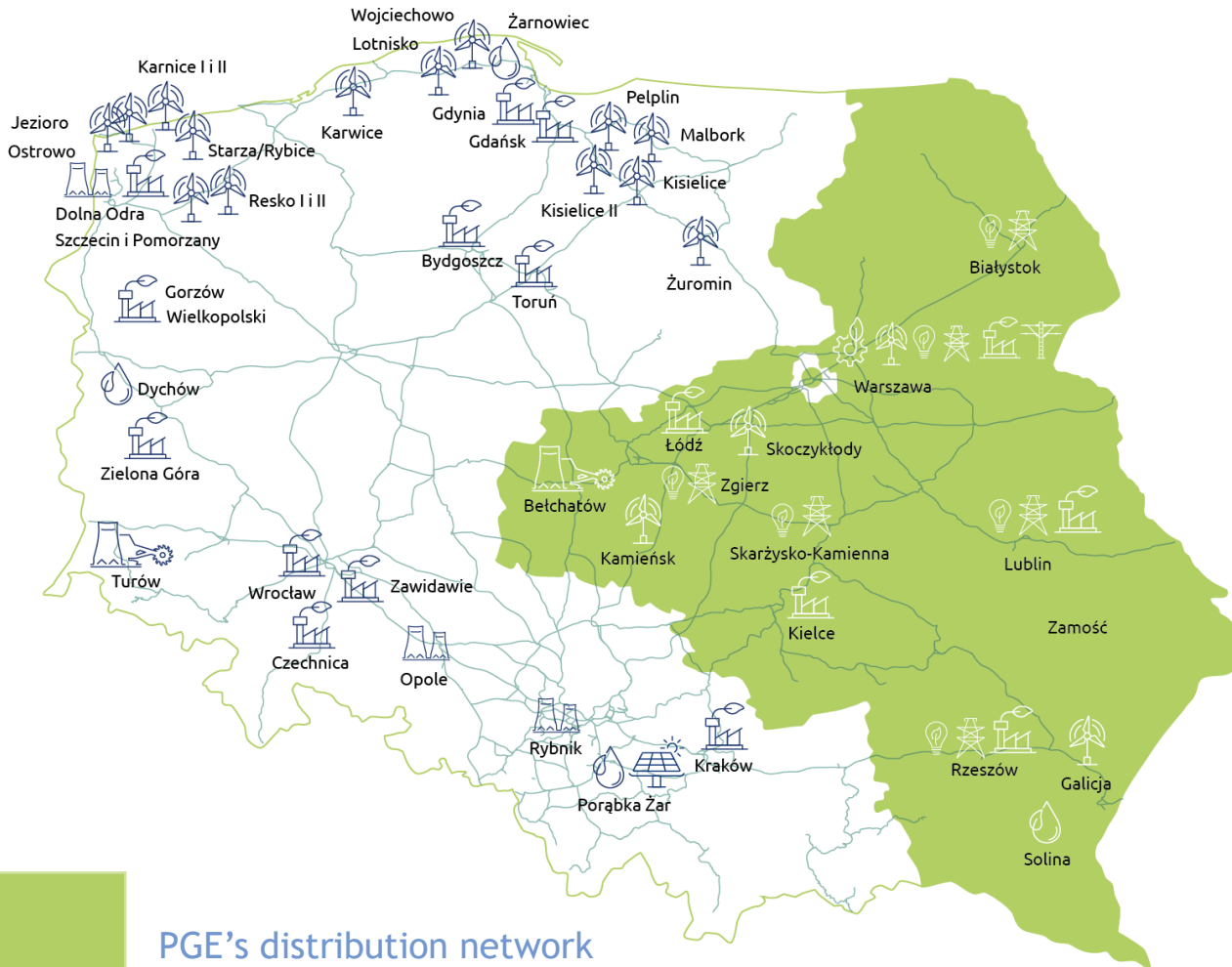
Power and industry - towards climate neutrality

March 2024



Leading in the green transition

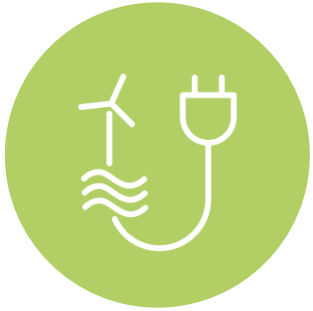
PGE at glance (2023)



PGE's distribution network

Power generation	<ul style="list-style-type: none"> Electricity net production 66.1 TWh Installed electric capacity 17.9 GW Wind farms 772 MW Hydro 96 MW Pumped-storage with natural inflow 287 MW 2 Lignite-fired power plants (Bełchatów and Turów) 3 Hard coal-fired power plants (Opole, Dolna Odra, Rybnik)
Heat production	<ul style="list-style-type: none"> Combined heat & power plants – 16 sites Sales of heat 51.3 million GJ 20% share in heat delivery to households
Storage	<ul style="list-style-type: none"> Hydro pumped-storage 1 256 MW
Distribution	<ul style="list-style-type: none"> Distribution of energy 37.1 TWh Distribution grid: 298,670 km Number of substations: 96,129
Wholesale & Retail	<ul style="list-style-type: none"> Final customers 34.3 TWh Wholesale market 62.5 TWh Over 5.7 million electricity customers

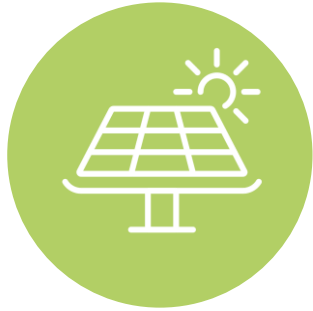
Zero-emission sources at PGE Group by 2040



Offshore Wind

2.5 GW
by 2030

>7 GW
by 2040



Photovoltaic

3 GW
by 2030



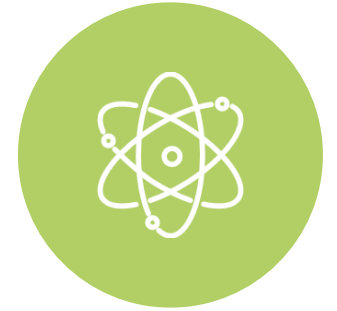
Onshore Wind

1.5 GW
by 2030



Energy Storage

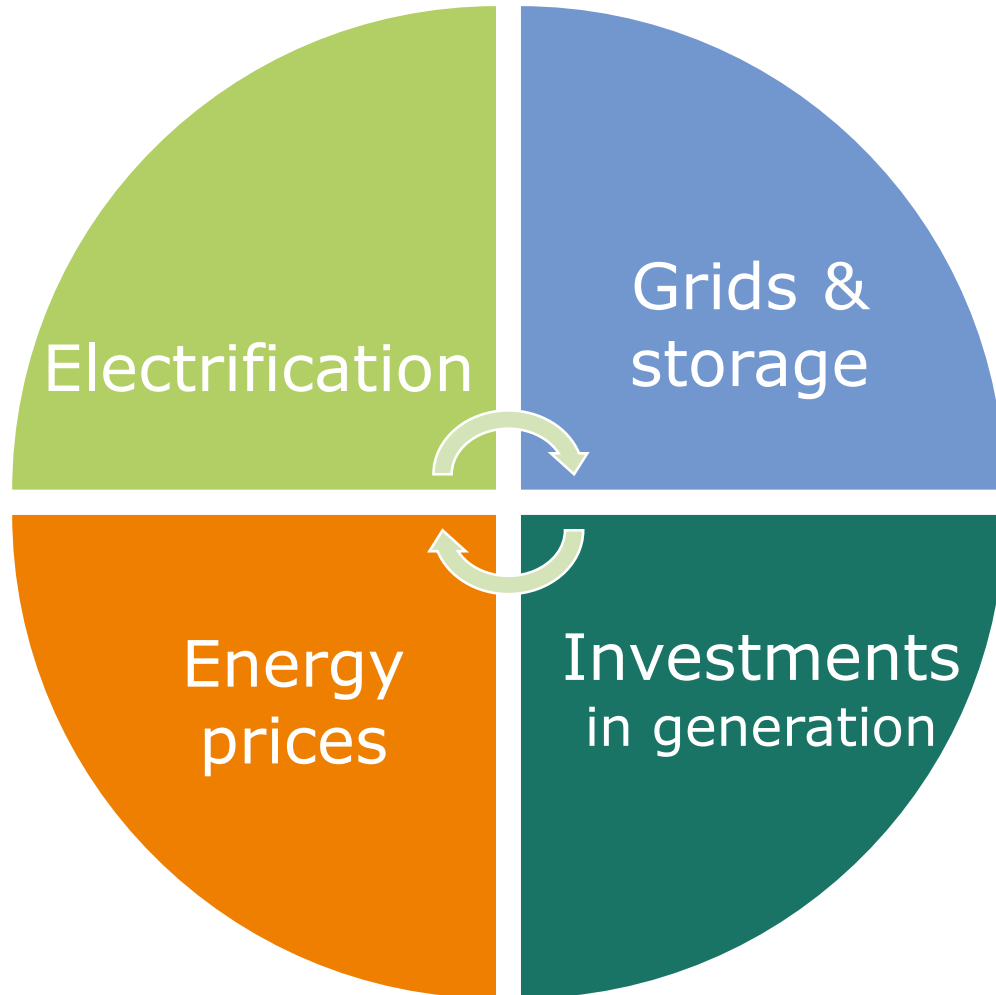
0.8 GW
by 2030



Nuclear Power

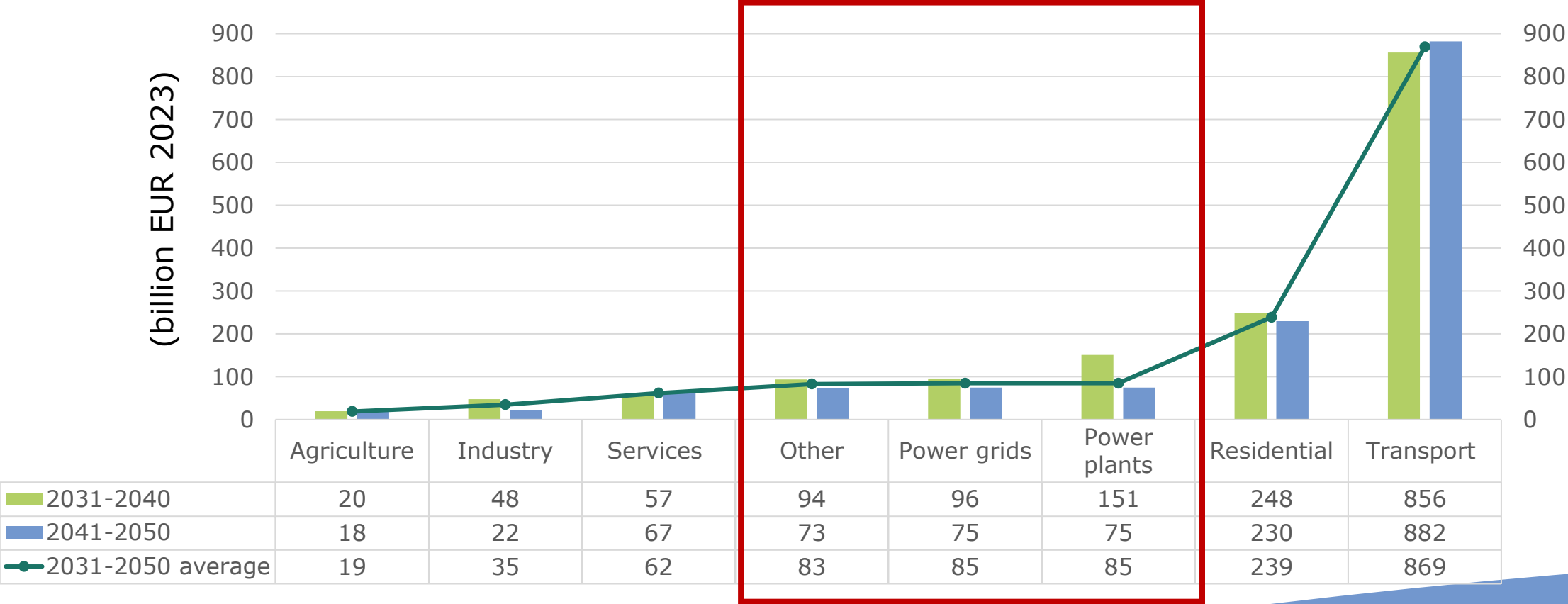
2.8 GW
by 2040

What do we need to deliver climate targets?

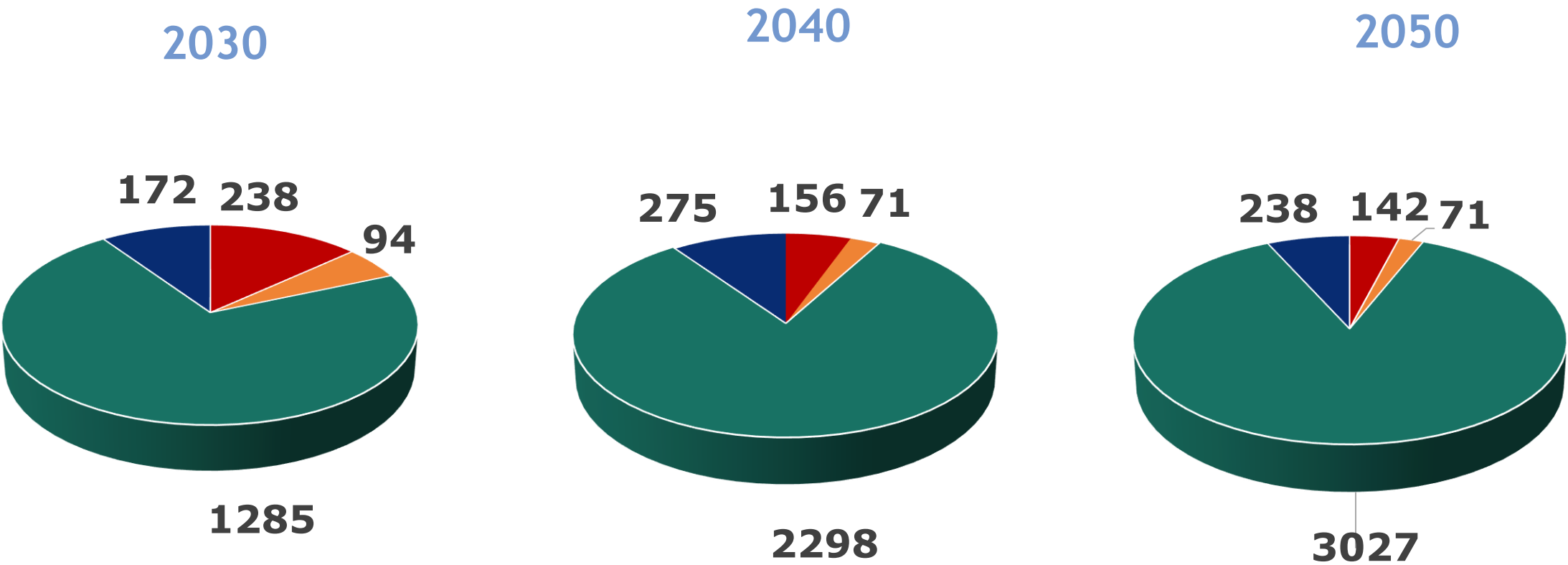


Investment needs to deliver climate targets

Average annual energy system investment needs acc. to EC's Impact Assessment of 2040 target in 90-95% emissions reduction scenario

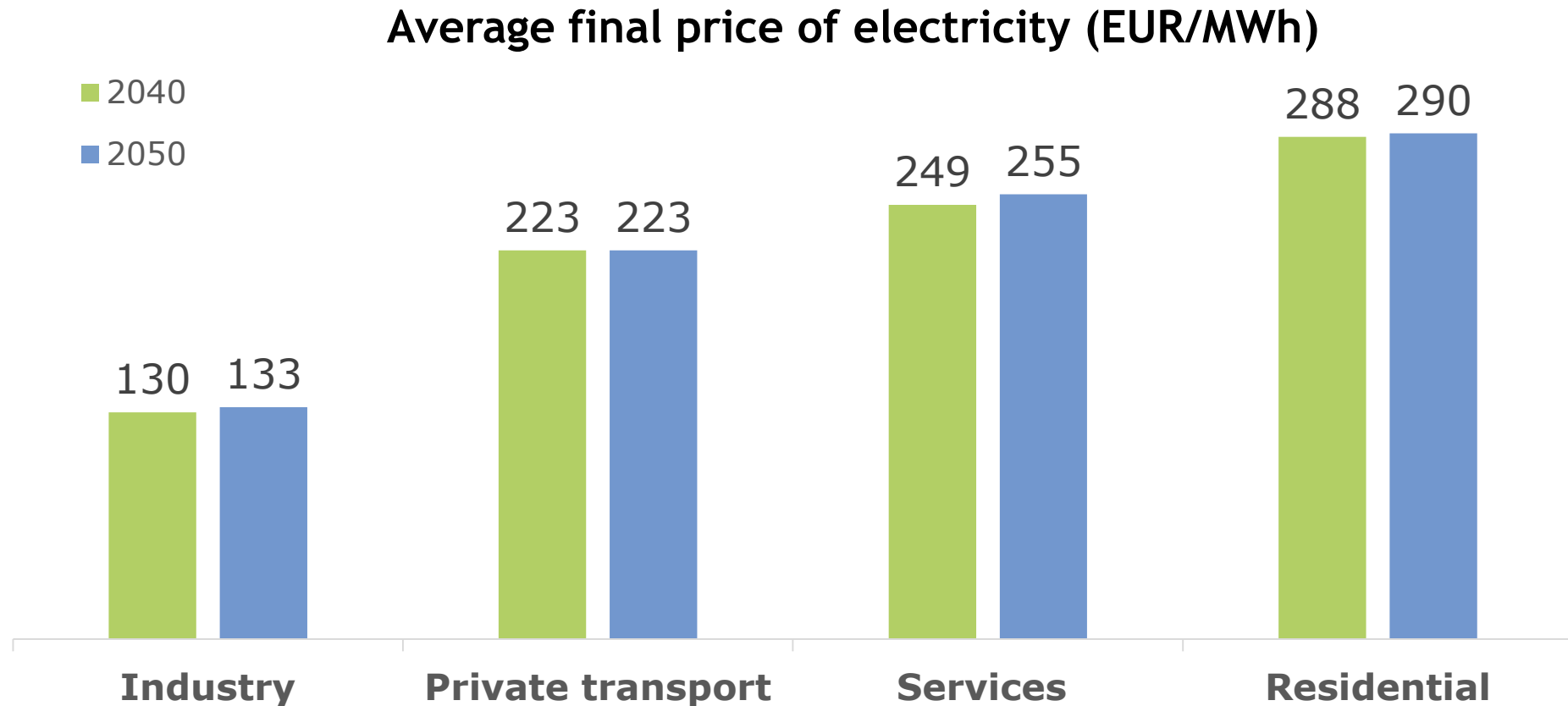


Net installed power capacity (GW) under 90-95% emissions reduction scenario



- Fossil fuels
- Nuclear
- Renewables
- Storage and flexibility options (GW)

Electricity prices under 90-95% emissions reduction scenario



EC: „[Prices] remain fairly stable in the long run with very similar patterns across scenarios, reflecting electricity production system costs shifting to lower operating costs and higher capital-related costs”

Thank you!

