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2026 T-5 Polish Capacity Market auction target

Policy Note I Aurora Energy Research

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2026 T-5 Capacity Market auction target overview

The 2026 T-5 Polish Capacity Market auction target was published 12/07/2021. The target is too low to ensure that sufficient capacities are under contract in 2026 to provide security of supply.

The 550 gr rule excludes technologies with emissivity higher than 550 gr/kWh (coal and lignite) from participation in the Capacity Markets of EU member states from 1st July 2025 onwards. As a result, most coal capacities will have no Capacity Market support beyond the period 2025-8 (depending on the date and duration of their contract). Due to their low efficiencies and high ETS prices, these plants will be unable to cover fixed costs. Their closure would create demand for some 16 GW of new dispatchable capacity in the period 2021-30.

The Capacity Market is the means of procuring the necessary dispatchable capacity. Due to the coal plants‘ exclusion, the transmission system operator (TSO) must consider forecast plant closures when setting Capacity Market targets. The auctions take place five years before the delivery date, whereas plant operators must inform the TSO of planned closures only three years in advance.

Some 9.2 GW (all capacities given are derated) of newbuild capacities have preregistered for the 2026 T-5 auction, including 4 GW of gas, 3.3 GW of DSR and 1.9 GW of batteries. 5 GW of newbuild dispatchable capacities would be sufficient to ensure security of supply without the need to extend the lifetime of uncontracted coal assets. However, the 7.1 GW Capacity Market target will procure only 1.6 GW of newbuild capacity should all eligible prequalified existing capacity bid in.

Instead, the low target means that at least 3.3 GW will need to remain in the system beyond the expiry of its Capacity Market contract to ensure security of supply. Some form of new subsidy mechanism will be required to keep these plants online.

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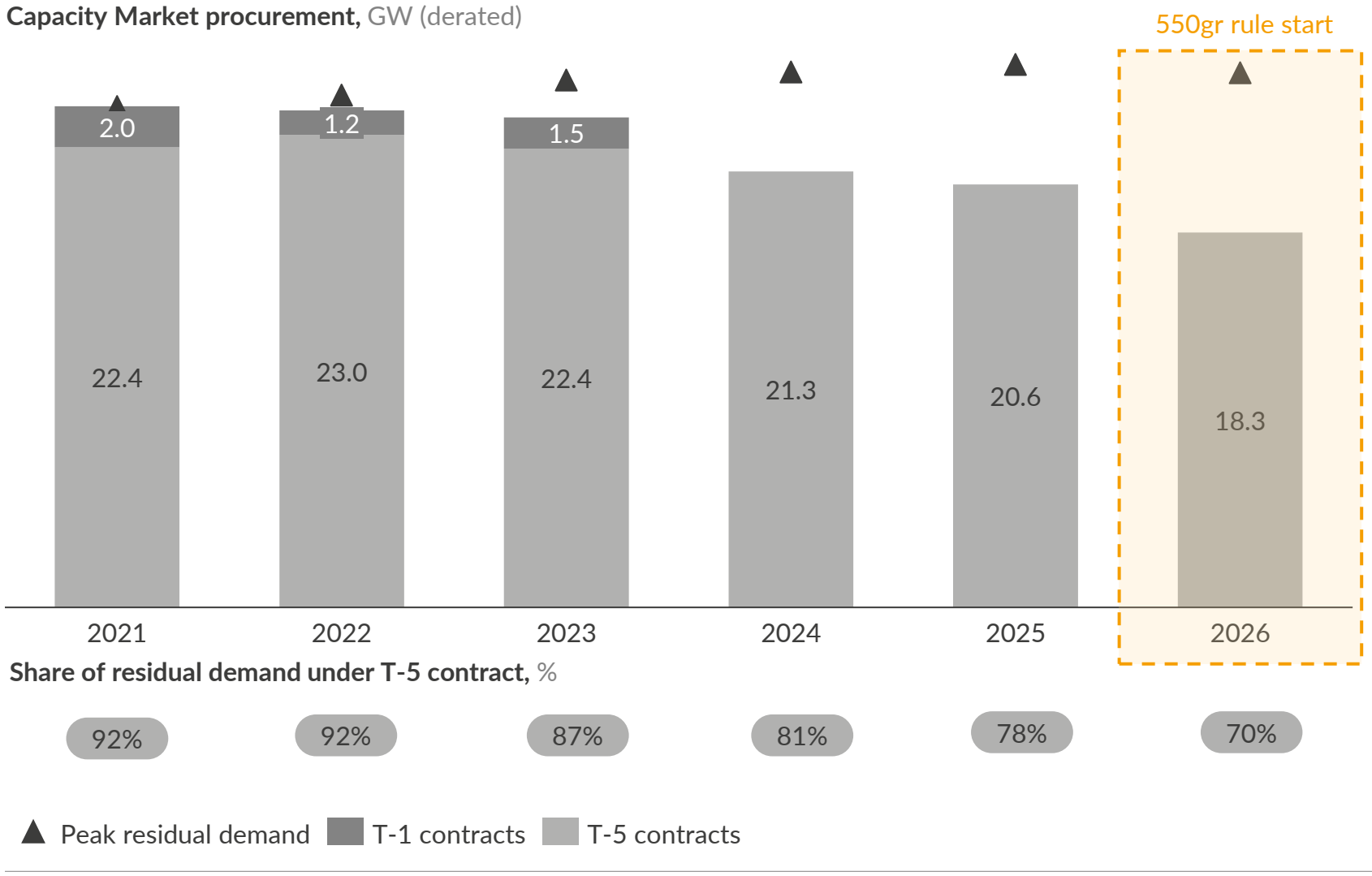
- The 2026 T-5 Capacity Market target covers a far lower share of projected residual demand than historical auctions
- 3.3. GW (derated) of uncontracted coal capacities will need to stay online to ensure security of supply
- Coal units without Capacity Market contracts will require some form of subsidy to cover fixed costs
- Sufficient capacities prequalified for the auction to ensure security of supply while allowing for economic coal closures

Source: European Commission, Directive on common rules for the internal market of electricity

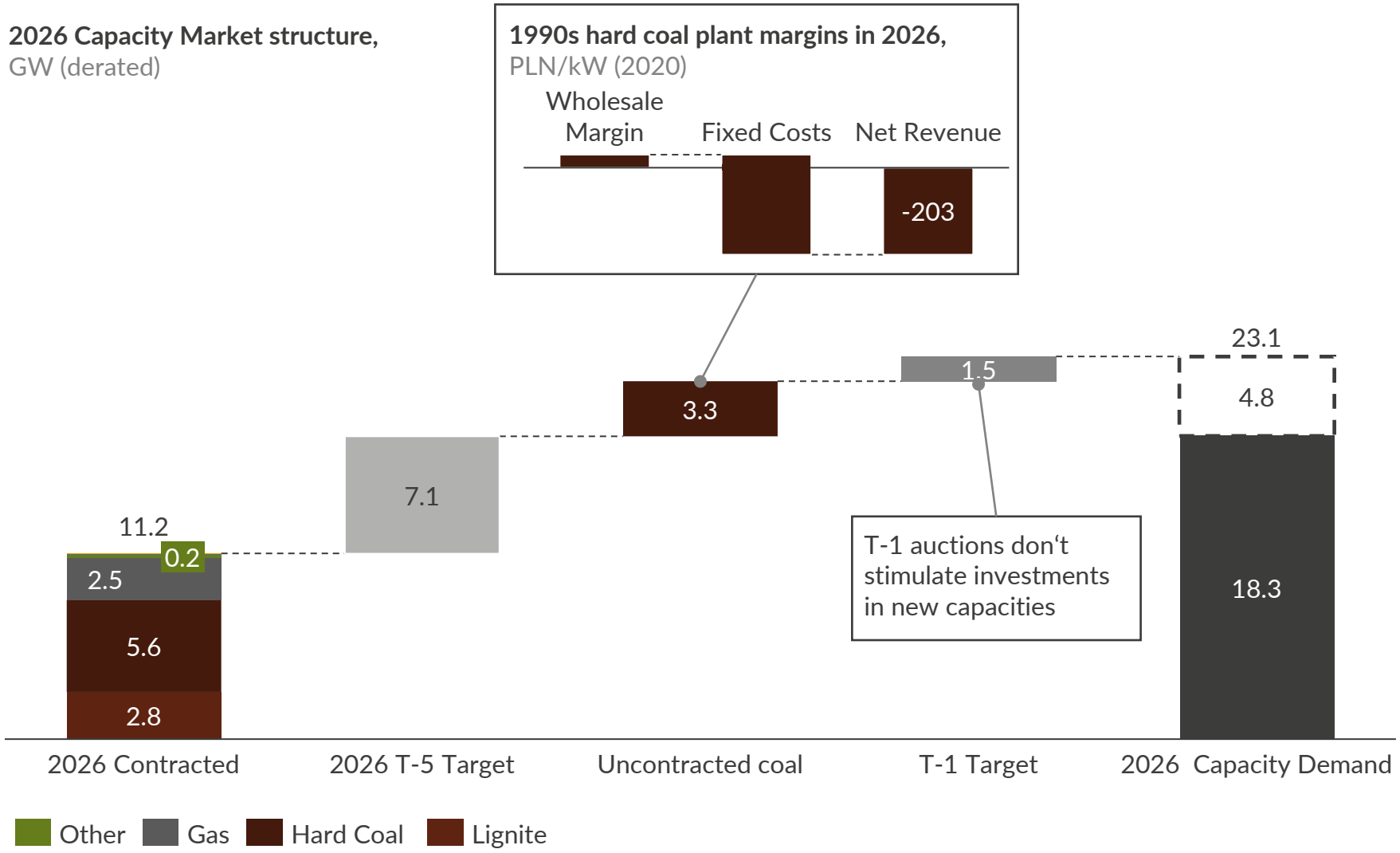
The 2026 T-5 target is significantly lower than for previous auctions, despite rising demand for dispatchable capacity



- Residual demand is the difference between total demand and renewable generation
- CHPs with production profiles defined by heat demand provide some security of supply while not being counted towards the Capacity Market
- Residual demand falls slightly in 2026 compared to 2025 as large offshore wind capacities enter the market
- The T-5 auction target for 2021-3 was around 90% of peak residual demand, with coal plants making up most of procured capcity
- The target has since fallen despite growing demand and the need to stimulate new investments in dispatchable technologies

The 2026 T-5 auction will procure insufficient capacities to ensure security of supply unless uncontracted coal remains online

2026 Capacity Market structure,
GW (derated)



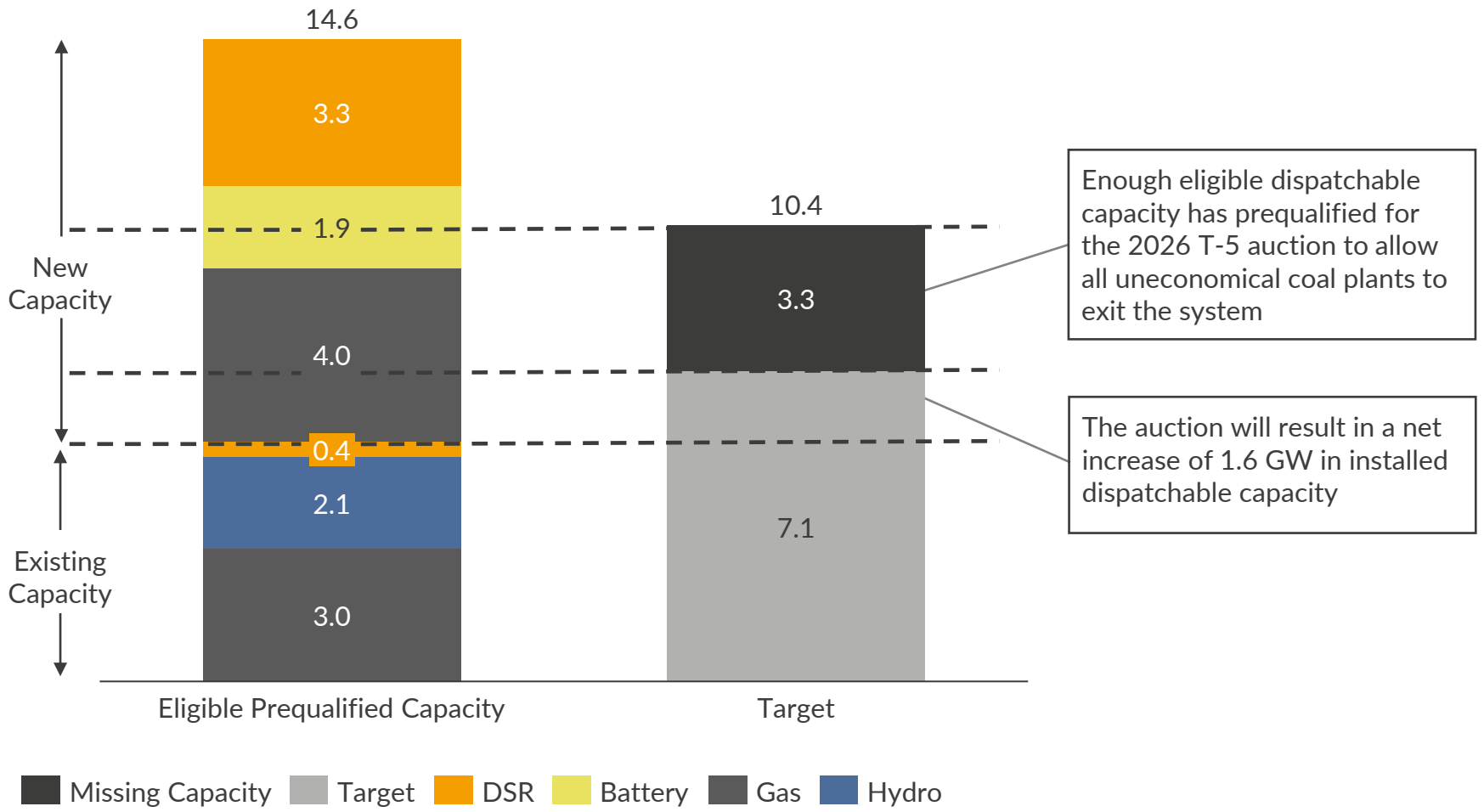
Derating factors: gas CCGT 0.9482, coal 0.9176, hydro storage 0.9929, battery 0.9611, DSR 1

Source: PSE

- Considering historical procurement and the capacity needed to ensure security of supply, around 23 GW of derated dispatchable capacity will be needed in 2026
- T-1 auctions procure around 1.5 GW historically, mostly DSR
- The 550gr rule means that coal capacities are excluded from participating in the 2026 auction and coal closures must be forecast in seeting the target
- The T-5 auction target of 7.1 GW will require around 3.3 GW of derated coal capacities to remain online once their CM contracts expire
- High ETS prices severely limit coal running hours, with wholesale margins unable to cover fixed costs. The plants would require subsidies to remain online

Sufficient capacities have prequalified to meet capacity demand, but a low CM target prevents their buildout

Eligible prequalified capacites for 2026 T-5 auction, GW (derated)



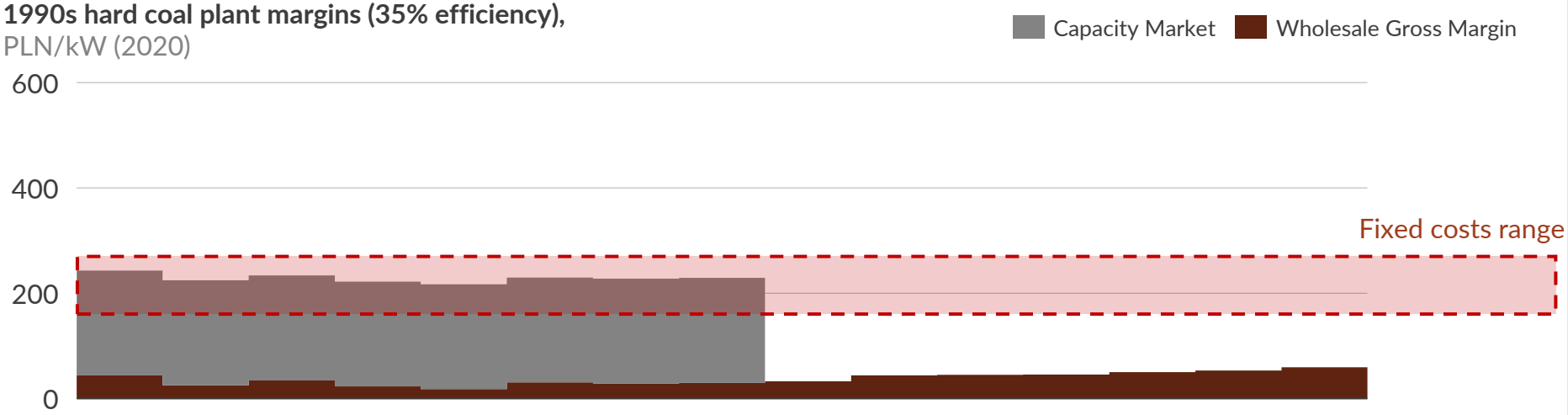
Enough eligible dispatchable capacity has prequalified for the 2026 T-5 auction to allow all uneconomical coal plants to exit the system

The auction will result in a net increase of 1.6 GW in installed dispatchable capacity

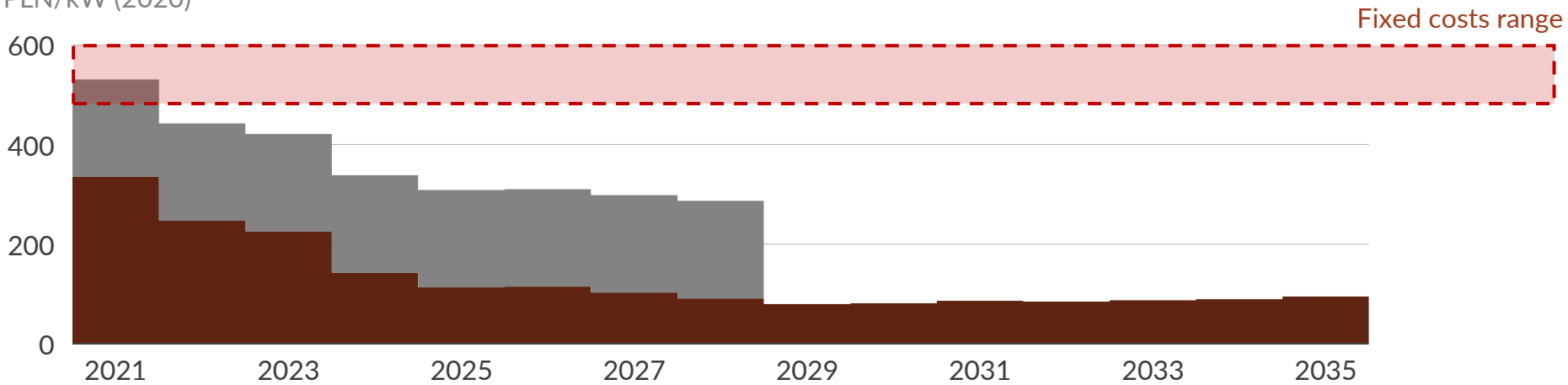
- 4.8 GW of new capacity would be sufficient to ensure security of supply while shutting coal units which operate at a loss
- Sufficient capacity has prequalified for the 2026 T-5 auction to meet this demand
- Instead, we expect less than 2 GW of newbuild capacities to be procured as a result of the low target, including the 700 MW Ostroleka gas plant
- Aurora's modelling shows that the following plants become unprofitable and should close once their CM contracts expire: old Jaworzno, Laziska, Siersza, old Kozienice, Rybnik, Ostroleka, most units at Polaniec, some units at Belchatow (most have contracts running beyond 2026) and old Turow

Coal plants will become uneconomical and should shut the moment their CM contracts expire

1990s hard coal plant margins (35% efficiency),
PLN/kW (2020)



1980s lignite plant margins (34% efficiency),
PLN/kW (2020)



- The buildout of renewable capacities, first through the delivery of auctioned projects and later through merchant investments, reduces the running hours of coal plants
- High ETS prices push most coal units beyond gas CCGTs in the merit order, further reducing wholesale margins
- Depending on fixed costs and contracted capacities, plants risk being forced to operate at a loss even with capacity payments, while also needing to meet the cost of BREF refurbishment
- The 2026 Capacity Market assumes at least 3.3 GW of hard coal and lignite will remain in the system while making large losses

Source: Aurora Energy Research

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II. About Aurora

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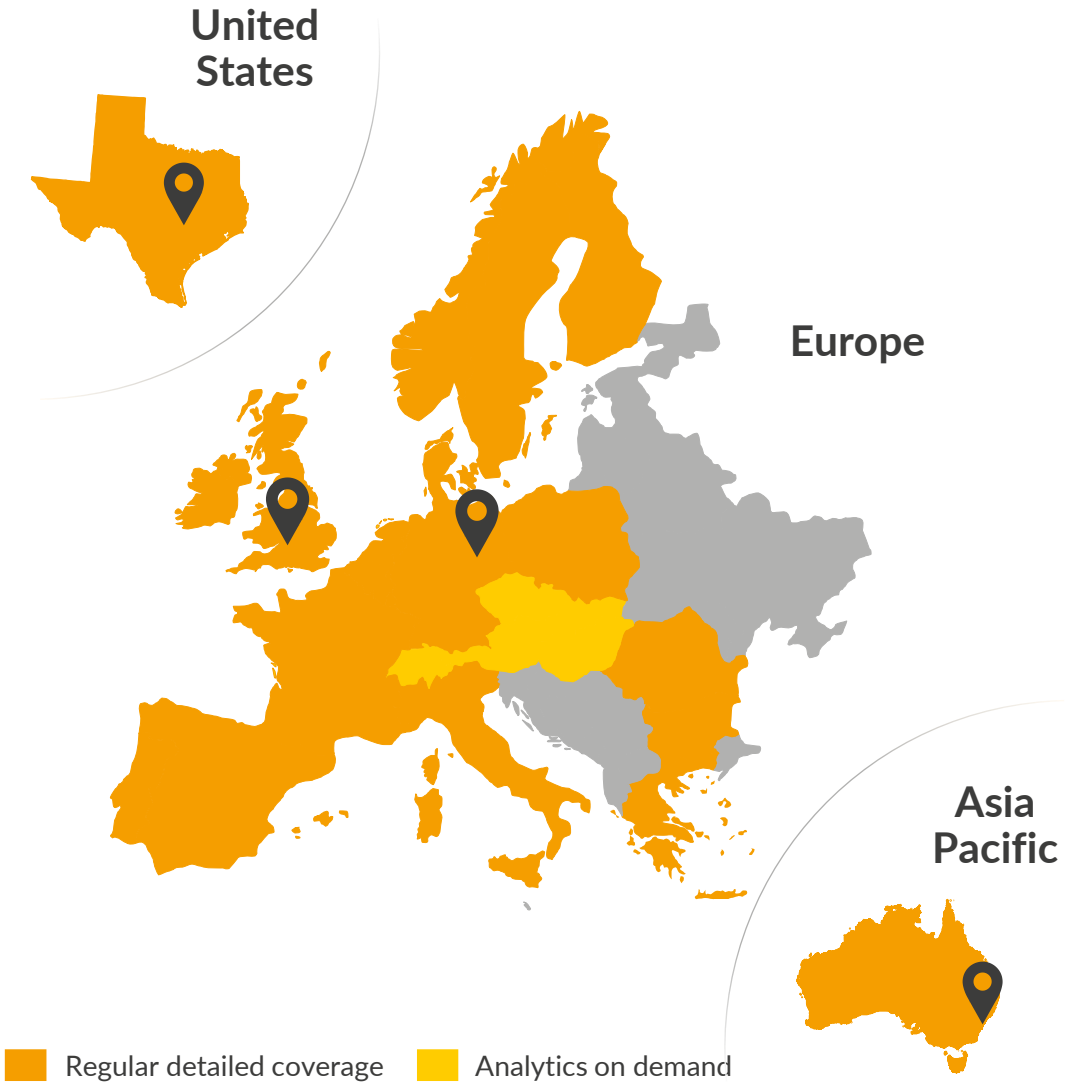

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Source: Aurora Energy Research

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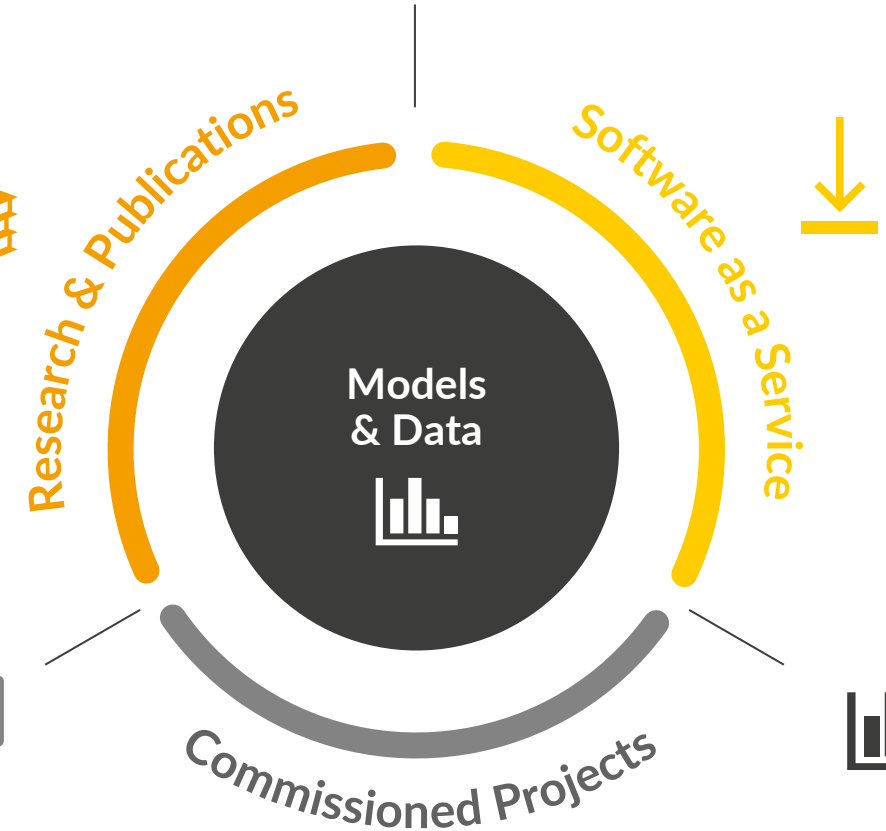
  - First-of-a-kind wind tool launched in 2019 and already widely adopted in GB, Germany, France, Iberia, Poland and Australia



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- Market-leading long-term models for power, gas, carbon, oil and coal markets
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Source: Aurora Energy Research

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	Ireland Power & Renewables Market Service		Ireland Flexibility Service		
	German Power Market Service	German Renewables Service	North-West European FCR Forecast		
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	ERCOT Power & Renewables Market Service				
	Australian Power & Renewables Market Service		Australian Flexibility Service		

Source: Aurora Energy Research

Details and disclaimer

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