

Investing in uncertainty

European power market outlook 2025



Mark Turner Expert in Energy Markets mark.turner@baringa.com



Nick Forrest Expert in Policy, Regulation and Economics nick.forrest@baringa.com

Executive summary

The following executive summary outlines the content in our full annual power market outlook available to power market subscribers. If you would like access to the full unredacted report email <u>MarketReports@Baringa.com</u>

In our third annual European Power Market Outlook we review how our Reference Case for 2035 has changed over time and how we have adapted our outlook to recent developments in policy and market economics. We review the recent political and economic volatility and assess the potential implications of the rise of **populism**, **trade conflict** and **re-militarisation** on the course of the energy transition; acknowledging that this year's outlook points to a more uncertain transition trajectory.

1 Deployment. Our outlook for 2035 continues to see a large and growing share of renewables in the energy mix. However, the composition of that share has been changed in 2025 versus 2024 with a greater role for solar on account of price and availability. Growing support for transition-sceptic parties may generate pushback on energy policies, with the cost of green levies on energy bills coming under political pressure. We also acknowledge that funding the transition through general taxation may prove challenging for countries also expected to fund large increases in militarisation, creating uncertainty over funding availability in certain markets.

2 Demand. Power demand is expected to grow considerably out to 2035 on account of electrification and increased data centre demand. However, weakened transition policies on EV and HP deployment in the face of public pushback against sterner mandates has led us to downgrade our demand projection for these technologies relative to our 2024 outlook, weakening short-term demand growth, even whilst the longer-term picture is boosted by AI demand. We note that the risks of a trade conflict could increase the availability, and reduce the price, of key transition technologies such as EVs on account of Chinese dumping. Equally, re-militarization could signal stronger demand growth in the future as the industrial base is mobilised for re-armament.

Costs. Changing yields have led us to increase our Weighted Average Cost of Capital (WACC) assumptions marginally as inflationary pressures prove more persistent and trade risks weigh on markets, increasing financing costs. Whilst commodity prices have in general trended towards previous levels, bringing CAPEX costs also back towards trend, this does not affect all technologies equally. Although remilitarisation is driving inflationary pressure on raw component prices, Chinese dumping in a trade war scenario has the potential for deflationary pressure, heightening uncertainty.

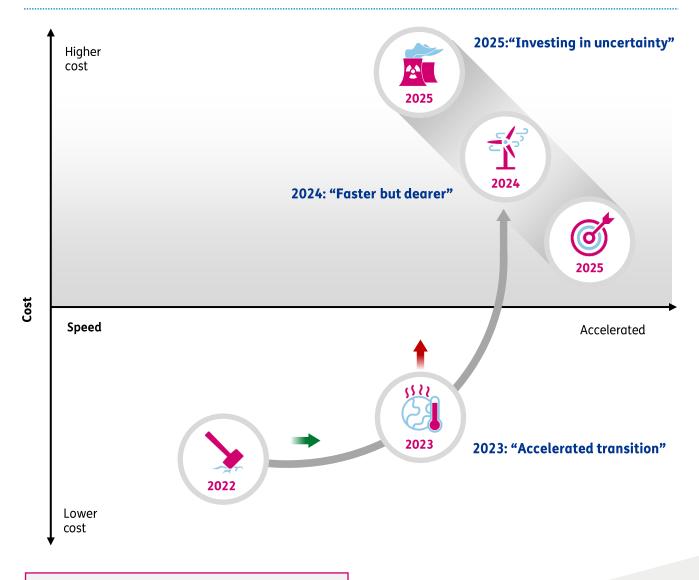
Price & Profitability. Power prices remain elevated for most European countries relative to pre-Ukraine levels. Profitability ratios have increased slightly in our latest 2035 outlook on account of higher average wholesale prices, although we expect wholesale prices to continue to fall as renewable generation increases across our European markets. Greater interconnection is also expected to reduce price disparities between countries. However, greater RES penetration leads to increasing price volatility with an increase in the number of very-low or very-high priced hours, emphasising the increased value of flexibility in a high-RES world.



Are we investing in an uncertain transition?

In the early 2020s, decarbonisation ambitions advanced across Europe, with policies such as the RePower EU agenda and renewables descending the cost curve – until the spike in inflation from the gas crisis and supply chain difficulties. Now as the transition progresses, a new set of risks points to an uncertain outlook...

How our annual power market outlooks have changed over time

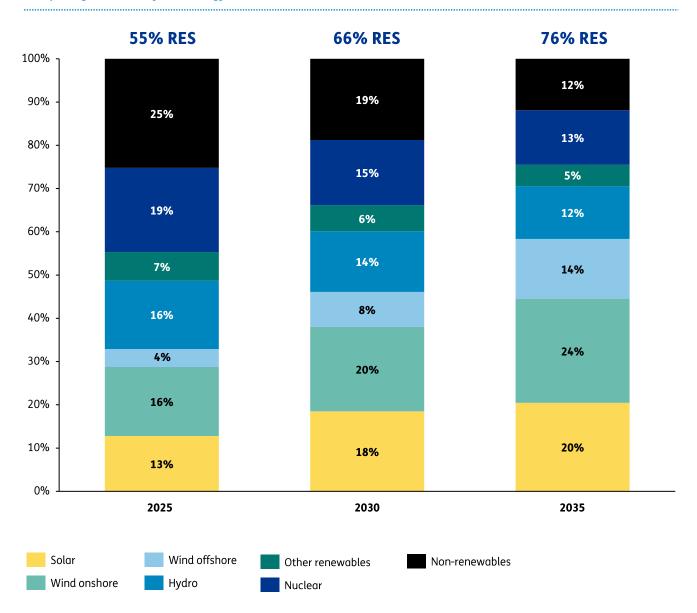


The data in this report comes from our Market Reports, available in more than 60 markets. <u>Find out more</u>



Our 2035 outlook confirms the shift to renewables under current policies

Although we see risks to the transition, under current policies our new outlook does not show a slowing transition, but rather a shift between renewables technologies. In particular, we expect offshore wind to grow the quickest, while the percentage share of hydro contracts. Renewables are expected to exceed three-quarters of generation by 2035.



European generation by technology (%)

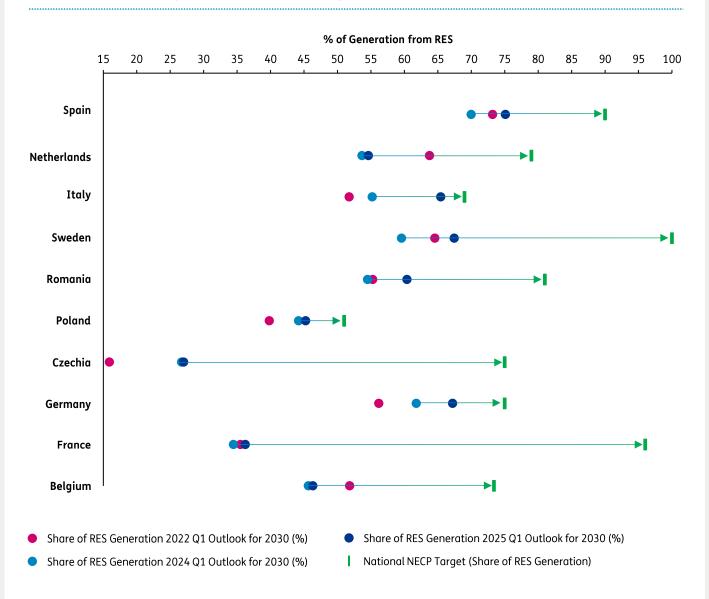
Source: Baringa Power Market Modelling



Our Reference Case shows shrinking ambition gap across Europe

While our Reference case shows the NECP ambition gap shrinking, we still expect most member states to miss their target. EU countries are required to set National Energy and Climate Plans, specifying the target share of renewables in their individual 2030 energy mix. As 2030 approaches, many countries are closing the gap between their ambitions and the policy needed to achieve them.

Share of 2030 renewable generation (%) and NECP targets



Note: Effective target rate has been used for Germany. Source: Baringa Analysis, European Union, Ember



Three big risks loom over the energy transition in Europe

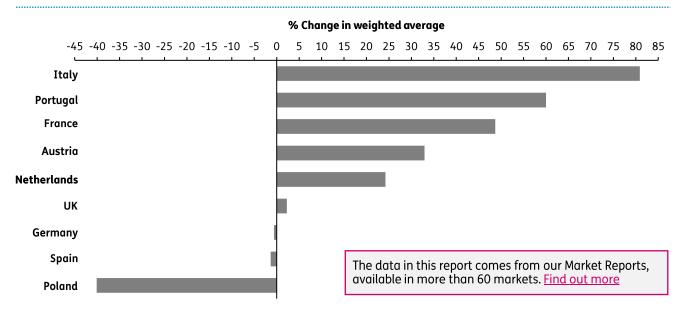
Europe is embarking on a new transition to remilitarise – likely to put pressure on budgets and supply chains. At the same time, we may have entered a time of 'trade risk', again bringing fiscal and supply chain pressure, at a point where populist politics is questioning the cost and speed of the energy transition.



Recent elections have weakened climate consensus

The 2024 'year of elections' led to significant shifts in Europe and around the world – in large part a rejection of incumbents, but also a growth in support for climate sceptics across many markets. These are not generally outright climate deniers, but more nationalist parties sceptical of the costs and speed of the transition.

Change in voter support for climate scepticism in last election (% change in weighted average)

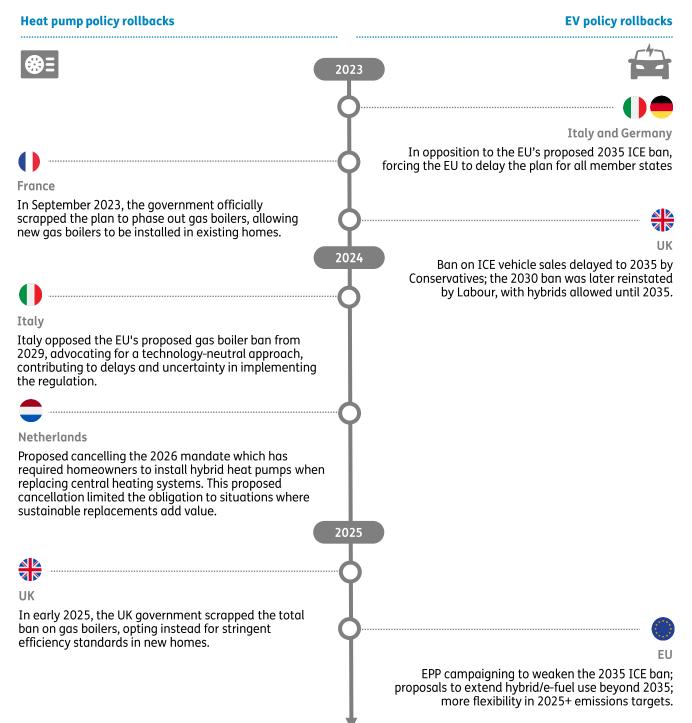


Note: The weighted average has been calculated as a function of both vote share and climate scepticism rating of each party in power. Source: Baringa Analysis and Havard political party rating



This has driven emerging policy rollbacks

Much of the demand growth expected in the energy transition comes from the electrification of other sectors, including heat and transport - unlike the early 2020s story of ever-extending green targets, in this arena targets have started to be rolled back when considered too painful for industry or households



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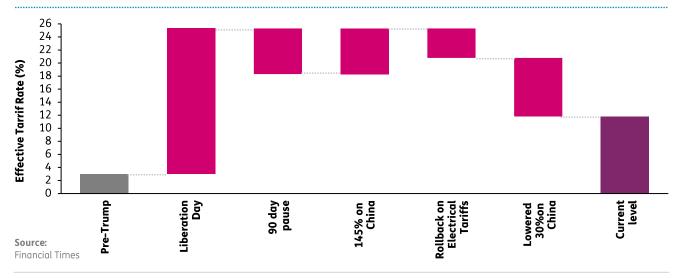
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Even on 'pause', Trump's tariffs have undermined globalisation

Trump's recent tariff announcements represent a significant departure from recent history. This takes the US effective tariff rate on goods to 18.2% (as of April 15th 2025), returning to levels last seen in the 1930s, even with his 90-day pauses reducing them significantly from the initial announcements.

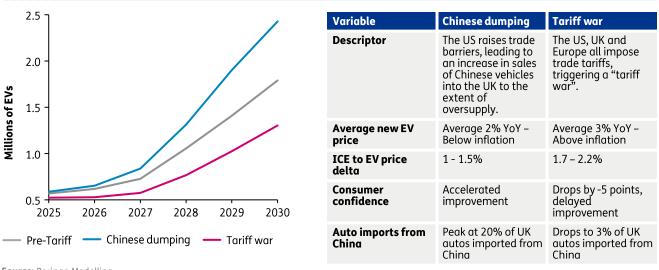
Global effective tariff rate from the US



A potential trade war brings further uncertainty to the EV outlook

In a widespread trade war, EVs, which tend to have complex global supply chains that rely on China, could become significantly more expensive. However, if Chinese exports to other markets are disrupted and manufacturers start dumping products at cost, a flood of cheap models and components may accelerate deployment trends.

UK annual EV sales



Source: Baringa Modelling

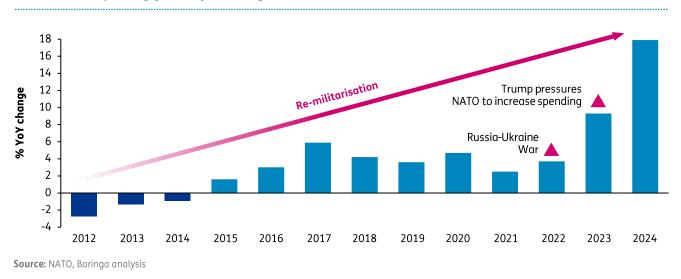
Please refer to our "Trump Trade Tariffs: Impact on UK EV Uptake" Report for detailed insight



Security threats signal remilitarisation

After the Cold War, Europe enjoyed a large 'peace dividend', spending much less on defence as the Soviet threat collapsed, and benefiting from a US-led security umbrella. Both of these long-term certainties are now gone and governments across Europe are pledging to rearm, a shift that will put pressure on budgets.

NATO defence spending, year on year change



Remilitarisation may create a new bout of component inflation

German debt brake and constitutional change

CY '25E

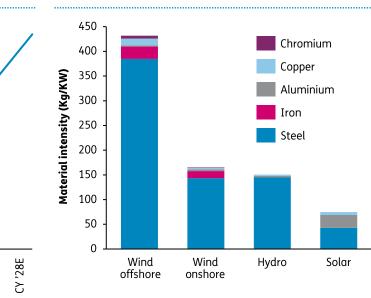
CY '26E

CY '27E

With war continuing in Ukraine, questions over US security guarantees, and pressure to reach long-missed NATO military spending targets, Europe has pledged to rearm. As many components and input materials are common to military hardware and energy assets, this may lead to a new wave of input inflation in Europe.



Material intensity by technology (kg/kW)



Source: Baringa analysis, FactSet

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100

90 80

indexed to 2020 = 100

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Leading to two distinct potential extremes



We have assessed two hypothetical scenarios for CAPEX. The first scenario sees lower CAPEX driven by US tariffs and dumping of lower cost Chinese components into Europe. In contrast, the second scenario assesses remilitarisation, resulting in higher CAPEX due to strong commodity demand from global rearmament.

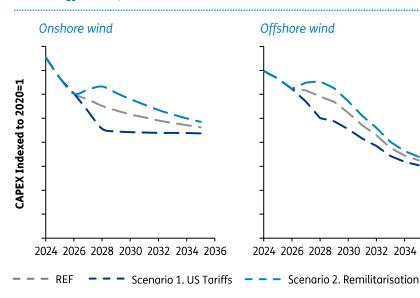
Variable	Base	Scenario 1. US Tariffs	Scenario 2. Remilitarisation
Descriptor	Baringa's current Reference Case projection, presenting our best expectation of events.	The US maintains high tariffs on China (90 day pause lapses without a deal), resulting in dumping in Europe and cheaper component cost. This could allow renewables to become more cost competitive and accelerate deployment.	Countries accelerate remilitarisation, causing component inflation through increased competition for resources, particularly as a result of remilitarisation. This could increase the cost and hence slow the energy transition.
Metals prices	Prices generally falling within our Reference Case	Price shock between - 5% and -75% on current prices, varied by commodity price volatility historically	Price shock between 5% and 120% on current prices, varied by commodity price volatility historically
Producer Price Index	Rises slowly in line with Reference Case assumptions	Minor decrease in PPI	Minor increase in PPI

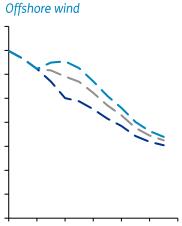
Creating a divergence in CAPEX outlook



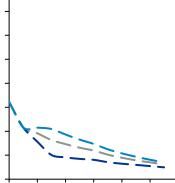
The alternative projections shown below represent extreme cases for each of the scenarios, but illustrate the potential risks of major re-militarisation or the reversion of a major trade conflict between the US-China. The results point to the sensitivity of CAPEX to changing global events with the largest relative impact on onshore wind, due to lower costs than offshore wind but higher material intensity than solar.

Technology CAPEX, indexed to 2020=1





2024 2026 2028 2030 2032 2034 2036



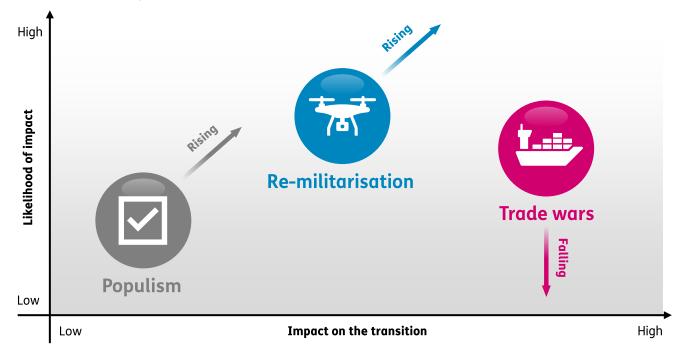
Solar

Source: Baringa Power Market Modelling



Assessing future risks

The three risks we have identified in this document are evolving and not yet fully actualised. As a consequence, their likelihood is likely to change over time. Recent election results point to rising risks of populism and remilitarisation. However, Trump's trade conflict appears to be de-escalating on account of agreements for 90 day pauses and a series of bilateral deals such as the UK-US deal. We will continue to monitor how these risks evolve, and incorporate them into our Reference Case as they materialise.



Power experts



Chris Kavanagh Expert in Power Markets

chris.kavanagh@baringa.com



Euan Gillham Expert in Power Markets euan.gillham@baringa.com



Authors



Caspian Conran Lead Economist

caspian.conran@baringa.com



Maddy Binns Political Economist

maddy.binns@baringa.com

Find out more: www.baringa.com

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