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European utilities: prepared for the spending storm

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- **Utility networks are strategically important for European security of supply and decarbonisation targets**
- **Despite huge growth in demand, costs squeezes and supply constraints around raw materials and capacity are limiting expected returns in renewables development**
- **Our analysis highlights those areas we favour and those which we remain more cautious about**

The Utilities – and governments – across Europe are facing increased demands for grid upgrades and connections to reliable and/or renewable capacity. S&P estimates the cost of grid expansion alone at €800 billion between 2023 and 2030 for Europe, and wind capacity growth at €800 billion from 2022-30. Total needs are estimated at €2 trillion up to 2030.[1]

The European regulatory asset base (RAB), a valuation measure of network assets, is expected to show a compound annual growth rate of 7%-8% from 2023-30 versus 3% over 2016-22. Fossil-free capacity is expected to double by 2030.[2] Drivers include the ongoing push for electrification and other tech developments including data centres, with demand from European Data Centres expected to grow by five times by 2035.[3]

[1] S&P, 2024

[2] European Commission, Renewable energy targets, 2022

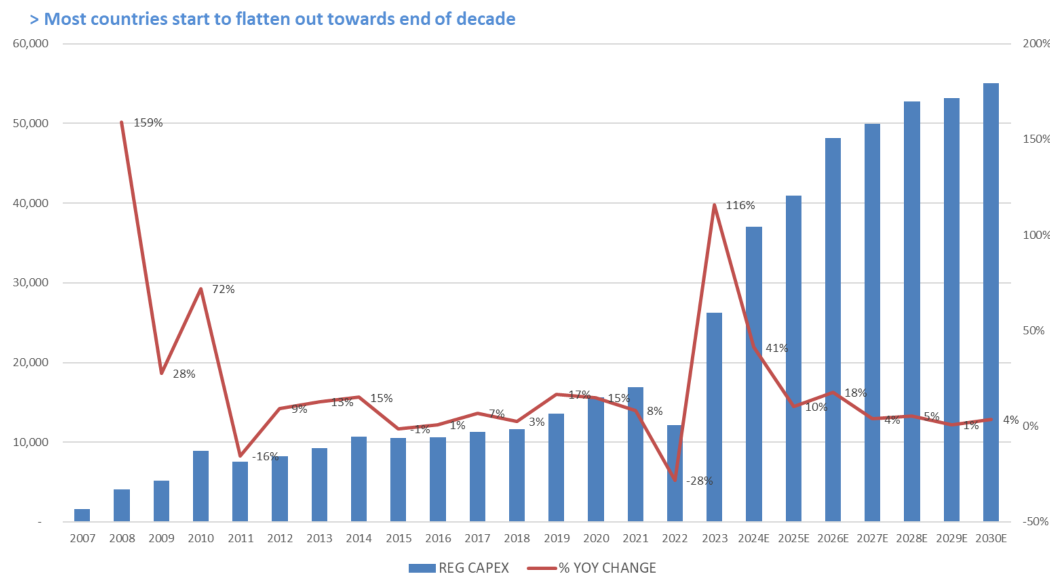
[3] Morgan Stanley Equity Research, European Data Centres to Grow 5x by 2035, 27 February 2024

We knew all this, so why now?

Although an increase in demand was expected, it is the speed of this growth from new areas that has caught regulators by surprise. For example, Goldman Sachs Research estimates that data centre power demand will grow 160% by 2030.[4] Coincidentally and simultaneously, costs squeezes and constraints in the supply of raw materials and production capacity have limited expected returns in renewables development. This is evidenced by the material project write-downs reported in FY2023, such as Ørsted in the US[5] and Vattenfall for UK offshore developments.[6] In addition, improving network regulation, together with the attraction of stable and predictable regulated earnings streams, underpins the pivot towards networks spend.

Capital expenditure for the European Utilities we cover are shown in Figures 1-4, with the numbers derived from company guidance. As can be seen, the jumps in capex are evident in the short term. As such our forecasts show a resultant and expected increase in leverage.

Figure 1: Regulated utilities, capex trend



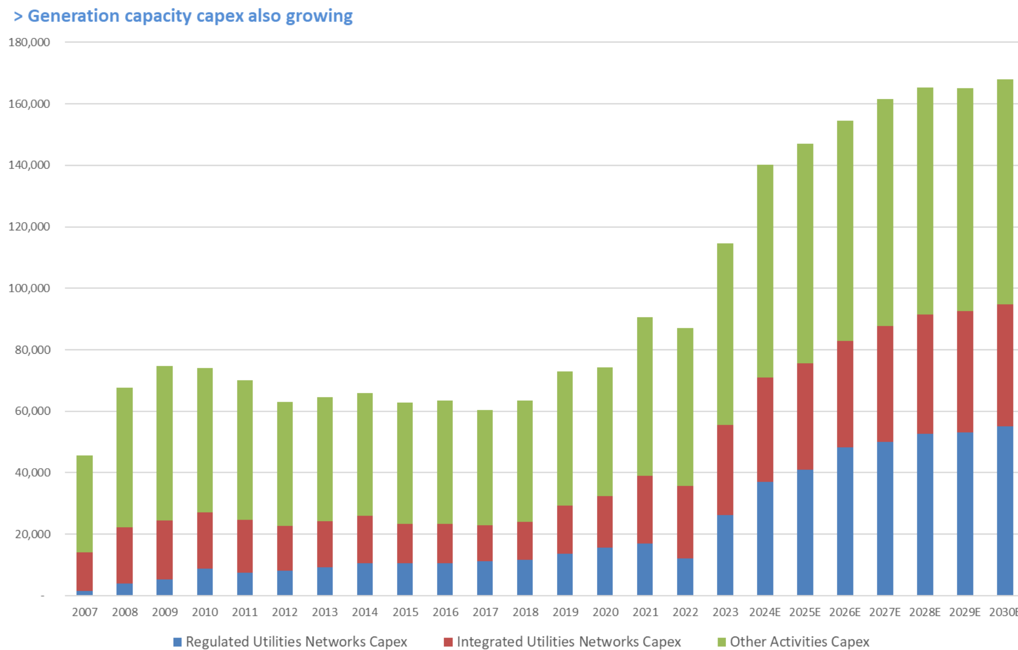
Source: Columbia Threadneedle Investments' analysis of company data, 24 July 2024

[4] Goldman Sachs, AI is poised to drive 160% increase in data center power demand, 14 May 2024

[5] S&P Global, Ørsted surprises with US offshore write-down scale as analysts welcome clarity, 3 November 2023

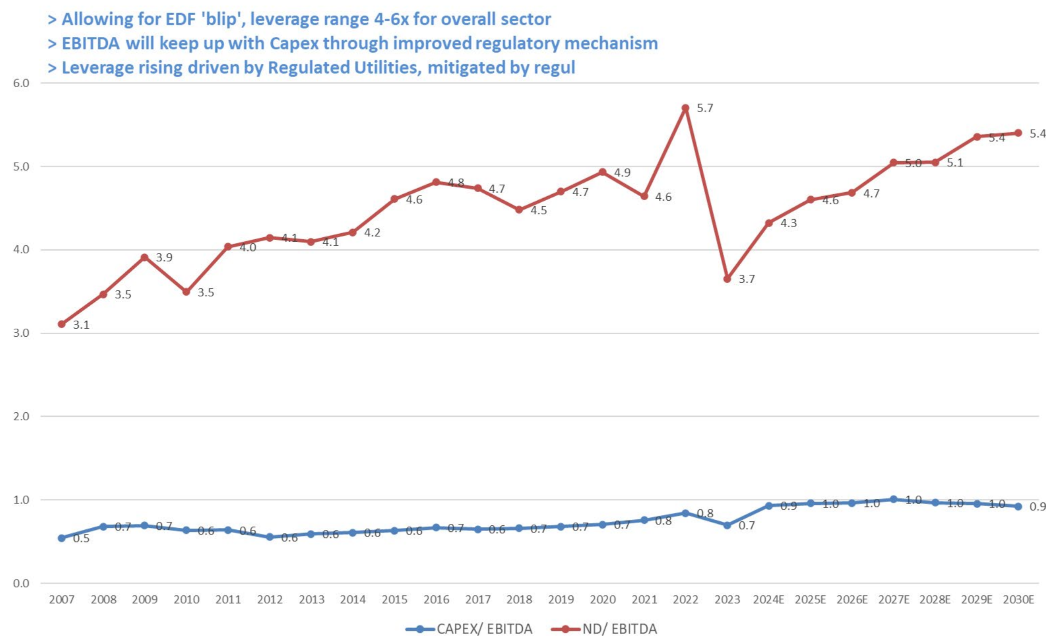
[6] Reuters, Vattenfall exploring 'all options' for British offshore wind projects, 6 September 2023

Figure 2: Total European Utilities Development of Capex mix



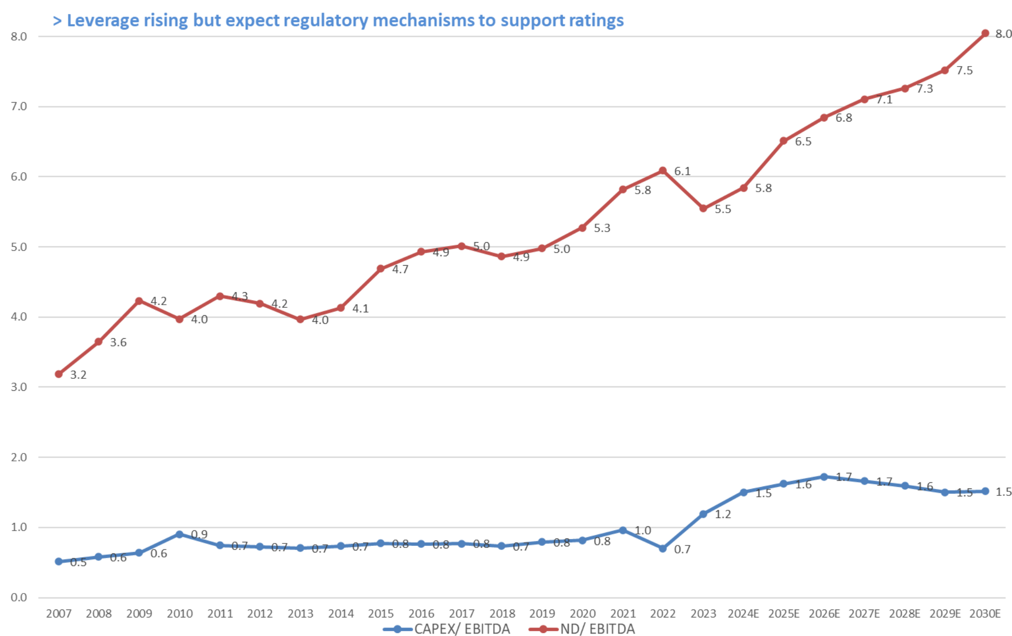
Source: Columbia Threadneedle Investments' analysis of company data, 24 July 2024

Figure 3: Total European utilities adjusted net debt/EBITDA and capex/EBITDA



Source: Columbia Threadneedle Investments' analysis of company data, 24 July 2024

Figure 4: Regulated utilities, adjusted net debt/EBITDA and capex/EBITDA



Source: Columbia Threadneedle Investments' analysis of company data, 24 July 2024

But isn't this bad for credit?

We actually believe the higher capex needs are mitigated by the significantly improved regulatory mechanisms in Europe, in particular Italy and Germany, which govern how much network owners and operators can charge their customers. Not all utilities benefit from regulated earnings – they tend to be confined to owners and/or operators of electricity and gas transmission and distribution assets, ie pipes and wires only. In the UK, water infrastructure is regulated. These assets are critical to a nation's energy needs.

To provide certainty, domestic regulators agree how much a regulated utility can spend on maintaining or improving these assets, and therefore how much it can charge its customers. How regulated revenues are derived varies from country to country, but in general allowed revenues are made up of the RAB multiplied by a determined weighted average cost of capital (WACC), then increased by compensated costs, depreciation and bonuses or reduced by any specific penalties. Inflation is factored into either the WACC or the RAB.

Not all jurisdictions use a RAB, but the general aims are the same – to compensate investment in a critical infrastructure base. A total figure is specified for a period of time, usually every five years (a regulatory period), and divided by the number of customers, or a limit is placed on how much tariffs can change on a yearly basis. To encourage investment, regulators ensure that regulated utilities are compensated for cyclical and macro risks beyond their control. This is why we like defensive regulated utilities in credit.

Broadly, the newer regulatory mechanisms allow utilities to adapt to macro changes during any regulatory period and receive faster compensation for unexpected spend, versus the alternative of waiting for updated regulatory reviews every five years.

Examples include:

- The concept of "TOTEX" (total expenditure, ie capex plus opex), first used in the UK and now in Italy, allows for flexibility to adapt expenditure to changes within a regulatory period to reflect new tech or environmental needs, rather than sticking to a defined list at the start of every regulatory period
- Speedy recognition of changes to inflation, cost of debt and country risk factors that feed faster into allowed charges
- Faster recognition of capex and work in progress with "in-period" adjustments together with incentives for special projects and retention of efficiency outperformance (ie beating regulatory cost assumption)
- Timely recovery of unexpected costs
- Cost inflation and cost of debt reference periods are shorter and more relevant
- Re-thinking the fixing cost of equity and debt to limit the risk of a regulatory lag before changes in rates feed through to allowed returns
- No volume or commodity risk

Who are the best and worst?

Based on the above, we see the strongest regulatory jurisdictions are Italy, Germany, France and the UK. The weakest are Portugal and Spain, with ongoing time-lags, compensation for inflation risk, work in progress and the independence of regulation from political influence or electoral changes. We see the Netherlands and Belgium as average. Regulated utilities in the Netherlands – TenneT, Alliander, Enexis, Stedin and Gasunie – are however 100% owned by the state and benefit from a strong commitment to maintaining a minimum A- rating enshrined in a "Dutch Framework of Agreement".[7]

Challenges?

Several potential challenges exist:

- The higher cost of capital in the form of inflation and interest rates, with companies having to balance the cost of debt to fund high capex and improving equity returns
- Strong regulatory frameworks invariably attract poor quality, short-term shareholders on the lookout for stable earnings streams and decent returns on equity
- Supply chain risks that continue to flag a shortage of technical skills, raw materials and production capacity
- Election risks that may impede the build-out of renewables (and therefore earnings projections) in the US, and a weaking "green" influence as voters increasingly focus on affordability

[7] S&P Global, Dutch Electricity And Gas Transmission And Distribution Framework: Supportive, 7 March 2023

What do we take away from this?

Electricity networks are strategically important for European security of supply and decarbonisation targets. Governments, regulators and utilities are also refocussing on domestic public service obligation mandates that prioritise security of supply.

However, cost squeezes are making investment in renewables less attractive than networks that benefit from predictable regulated returns. The quality of allowed regulated returns is improving with better ability to cover costs, shorter recovery times and recognition of the complexity that higher and newer sources of demand place on existing networks.

We prefer electricity networks to gas networks and are cautious on gas distribution other than in Italy and the UK where gas remains important within the analysed time frame.

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