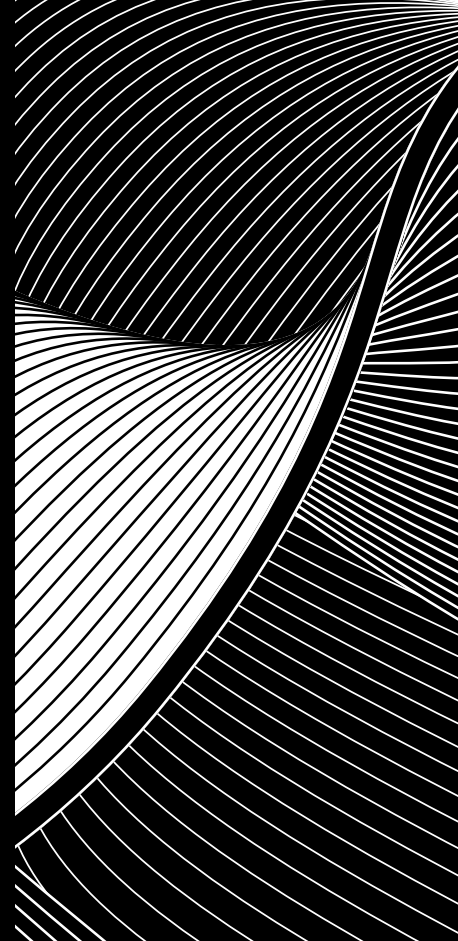


# Pathways

## Infrastructure Adjacencies: Where Infrastructure Meets Private Equity

March 2026



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**3** What are infrastructure adjacencies?

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**6** Aging grid requires investments beyond replacement and renewal costs

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**9** Renewables services: The growing market of independent service providers

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**12** Data centres: Capacity growth and rising complexity drives demand for specialist services

## Executive summary



**Infrastructure ecosystem:** Infrastructure-adjacent companies provide services, technologies and products to the underlying infrastructure end-markets and are part of the broader infrastructure ecosystem.



**Secular tailwinds.** Similar to traditional infrastructure investments, infrastructure-adjacent companies have robust long-term growth and structurally recurring demand.



**Consistent cash flows.** Like infrastructure assets, infrastructure-adjacent companies typically exhibit pricing power and generate durable cash flows over time.



**Private equity levers.** Like private equity, infrastructure-adjacent investments offer opportunities for accelerated growth through commercial investments, operational improvements and strategic initiatives aimed at improving the growth and profitability of the company, maximising returns upon exit.

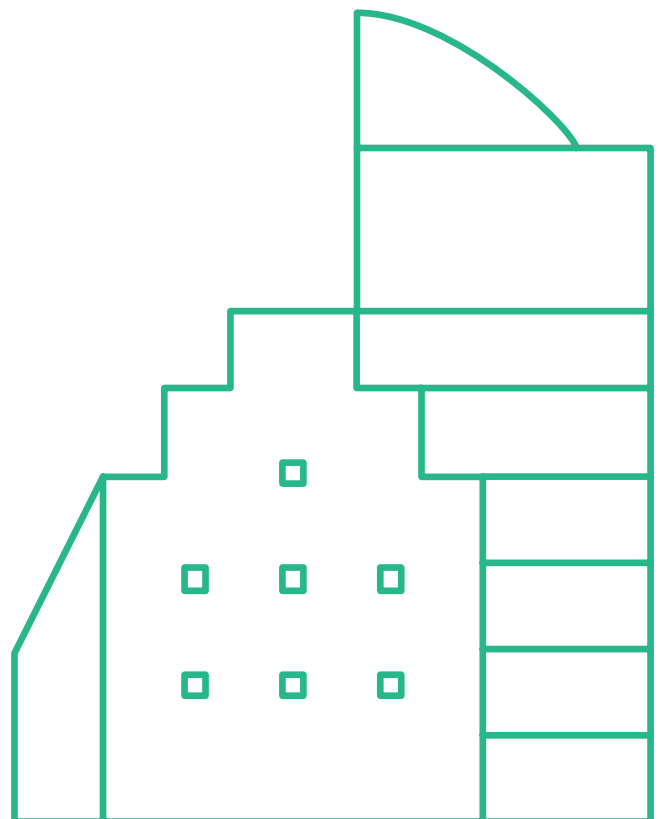


**Sizeable investment opportunity.** The market size of infrastructure-adjacent investment universe represents a sizeable area of investment opportunity with an annual deal flow estimated at ~1,200 deals globally.



**Investment themes.** In this paper, we explore three investment themes in utilities, renewables, and digital infrastructure where we see growing opportunities for infrastructure-adjacent strategies.

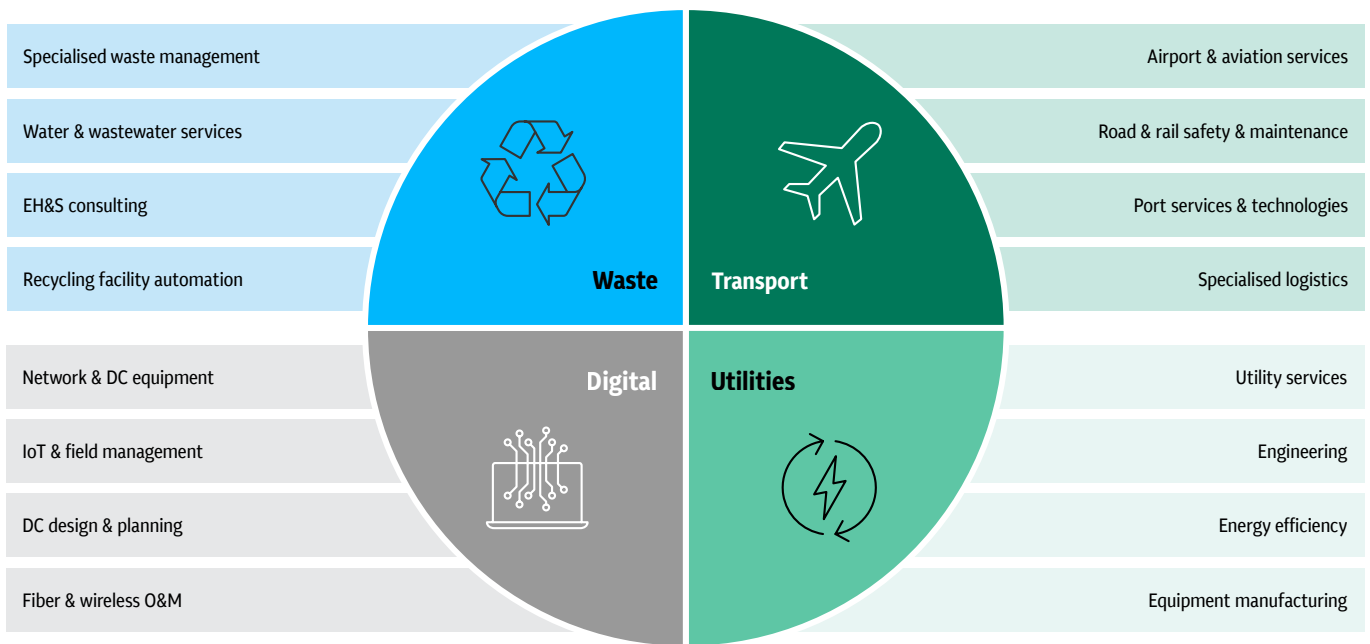
# What are infrastructure adjacencies?



Infrastructure-adjacent companies provide services, technologies and products to underlying infrastructure businesses.

These include the maintenance of infrastructure assets, the software enabling core operations, testing and inspection to ensure safety and service quality, and specialised outsourced services to help critical infrastructure providers deliver service to their customers. Examples are illustrated on Figure 1. While infrastructure-adjacent businesses often (but not always) operate an asset-light model, they are part of the broader infrastructure ecosystem and benefit from the structural growth drivers underpinning demand for traditional infrastructure, but with distinct and compelling growth and profit levers.

Figure 1: **Infrastructure adjacencies provide critical services to infrastructure assets**



Source: Macquarie Asset Management (March 2026).

Table 2 highlights the key similarities and differences of infrastructure-adjacent companies with the private equity and infrastructure asset classes. Similar to traditional infrastructure investments, infrastructure-adjacent companies operate in sectors characterised by visible, tangible long-term growth, driven by structurally recurring demand. These companies tend to be mission-critical, generate durable cash flows, and exhibit pricing power. These companies also have private equity-like value drivers including opportunities to accelerate growth through salesforce effectiveness, the launch of new partnership models, new market entry, new product or service development, and international expansion. They can also improve margins through operational improvements, the adoption of new technology, scale and strategic growth capex. M&A can be a material value driver, especially in fragmented markets or where smaller companies can be acquired at attractive valuations and increase the capabilities and scope of the platform business.

Figure 2: Comparison between infrastructure, infrastructure-adjacent strategies and private equity

	Infrastructure	Infrastructure-adjacent strategies	Private equity
Return drivers	A combination of yield and capital appreciation	Mostly capital appreciation	Capital appreciation
Asset type	Asset-heavy	Typically, asset-light	Asset-light
Average holding period	10-12 years	3-7 years	3-7 years
EBITDA growth	Typically, 5-10% per annum	10%+ per annum	10%+ per annum
EBITDA margin	30-50%	10-35%	10-35%
Entry EV/EBITDA multiple	The average entry multiples for the asset class ca.13-16x (Higher growth adjusted valuation)	Ranges based on growth and recurrence of revenue (8-20x+) (Lower growth adjusted valuation)	Ranges based on growth & recurrence of revenue (8-20x+) (Lower growth adjusted valuation)
Barriers to entry	High, often monopolies or monopolistic positions	High, due to critical services or products provided to infrastructure assets	Lower, dependent on business model and market
Cash flow characteristics	Stable and predictable inflation-linked cash flows	Consistent cash flows and/or pricing power	Dependent on business model and market
Structural trends	Digitalisation, demographics, energy transition	Digitalisation, ageing infrastructure replacement and maintenance, demographics, energy transition, reshoring, specialised outsourcing, safety and compliance	Various trends

Source: Macquarie Asset Management (March 2026).

As infrastructure systems become more complex, digitalised, and performance-driven, owners and operators are increasingly outsourcing non-core but mission-critical functions to specialist service and technology providers. This is driving sustained demand for asset maintenance, testing and inspection, data-driven software, environmental and compliance services, and outsourced operational solutions across energy, transport, utilities, digital and social infrastructure. As a result, infrastructure-adjacent businesses represent a scalable opportunity set with attractive growth potential alongside traditional infrastructure investments. We estimate the annual average deal flow at 1,224 deals in infrastructure-adjacent universe, based on the average between 2022 and 2025 (Figure 3). The relatively smaller scale of the infrastructure-adjacent universe (especially in comparison to other private equity buyout transactions) makes it particularly attractive (Figure 4), as it is often less actively pursued by other private market investors, creating greater scope for differentiated returns.

Figure 3: The deal flow in the infrastructure-adjacent universe is estimated at ~1,200 deals per year

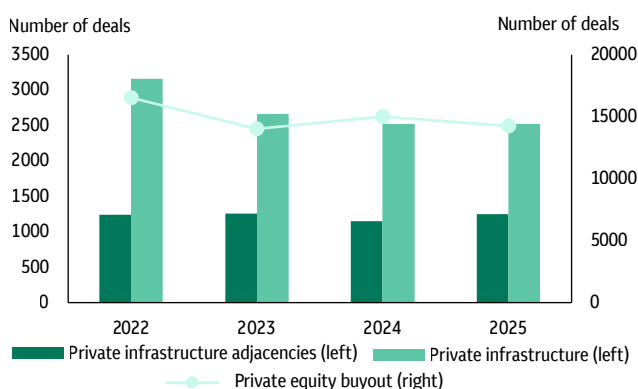
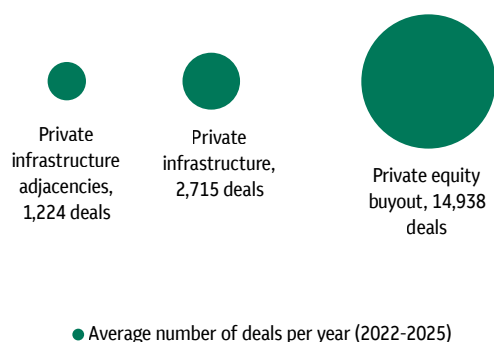


Figure 4: The relatively smaller scale of the universe often creates scope for differentiated returns



Source: Macquarie Asset Management analysis based on data from McKinsey, Infralogic, Pitchbook (March 2026).

# Aging grids requires investments beyond replacement and renewal costs



The global economy is undergoing a transformational shift in how energy is generated and used.

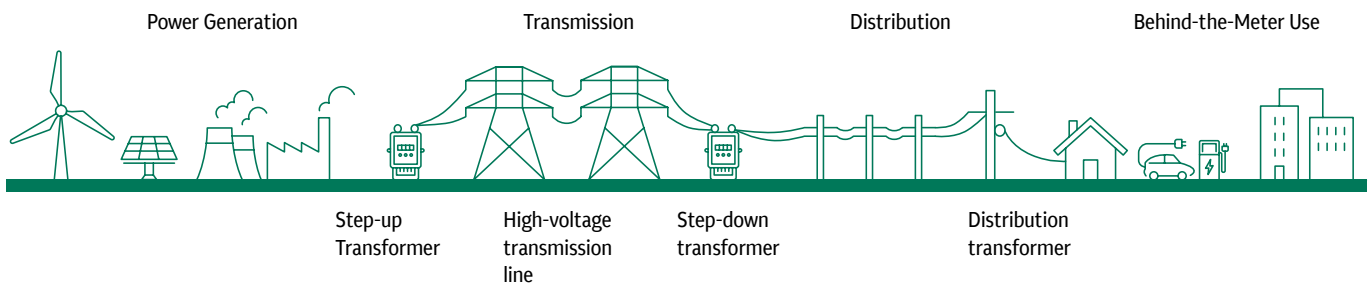
Expansion of power generation from both conventional and renewable sources are required to meet expected increases in power demand. A significant portion of the electric grid in many countries is decades old and needs replacement and renewal to improve reliability. Beyond expansion and replacement of the grid, there is a significant need to invest in grid resilience. Intermittent renewable generation, new pockets of energy usage, and increasing distributed generation require grid flexibility and better load management solutions to manage fluctuating supply/demand of energy.

### United States: Aging infrastructure requires grid hardening and new technologies

Many components of the U.S. electric grid are 40 to 70 years old<sup>1</sup> — beyond their intended lifespan. While the grid has seen expansions and upgrades over time, much of the core infrastructure remains outdated, including:

- **Transmission Lines:** Originally designed for a smaller, less energy-intensive population, many lines are now under stress to handle increased loads. 70% of transmission lines are approaching the end of their typical 50-80-year lifecycle.<sup>2</sup>
- **Power Transformers:**<sup>3</sup> The average age of large power transformers—responsible for managing 90% of U.S. electricity flow—is over 40 years.<sup>4</sup> As transformer malfunctions tend to escalate after 40 years,<sup>5</sup> significant investment in grid hardening will be needed in the coming years and decades.

Figure 5:  
Illustration of the Electric Grid System



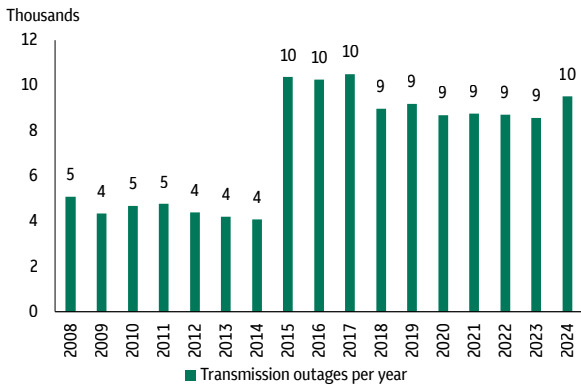
Sources: Macquarie Asset Management (March 2026).

Data from the North American Electric Reliability Corp (NERC) points to a significant increase in outages<sup>6</sup> of the electricity transmission network between 2015 and 2024 compared to the previous decade (Figure 6). The duration of the outages per customer has also increased in recent years. U.S. electricity customers experienced an average of 11 hours of electricity interruptions in 2024, or nearly twice as many as the annual average experienced in the decade before, as shown in Figure 7.<sup>7</sup> Since most electricity is transmitted and distributed through above-ground infrastructure—transformers, transmission lines, and utility poles, the grid is exposed to extreme weather events. To address these challenges and relieve stress on the grid, the following solutions are required:

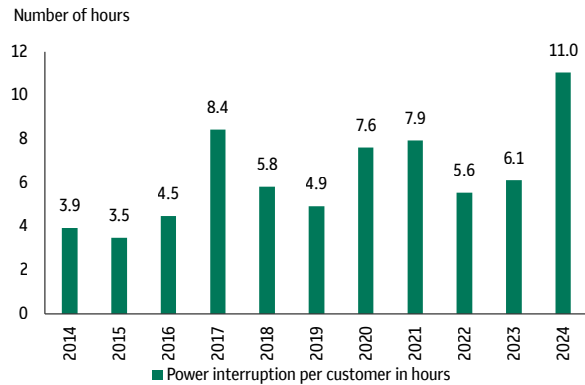
- **Grid Hardening:** These include measures to fortify the grid against damage, such as tree trimming along power lines, covering conductors with insulating materials,<sup>8</sup> burying overhead transmission lines,<sup>9</sup> and strengthening the foundations, as well as replacing the parts of the aging grid infrastructure such as wooden poles with steel or concrete.
- **Smart Grid Technologies:** These include sensors that enable operators to monitor grid stability and provide consumers with real-time information about outages.

1. University of Wisconsin–Madison, “Aging Electric Infrastructure in the United States” (May 2025).  
 2. US Department of Energy, “What does it take to modernize the U.S. electric grid?” (October 2023).  
 3. A transformer is an electrical device which transfers electrical energy from one electric circuit to another without changing the frequency.  
 4. Reuters, SPECIAL REPORT “Creaky U.S. power grid threatens progress on renewables, EVs” (May 2022).  
 5. Swiss RE, “Large Power Transformers Operation, Protection & Maintenance” report (2021).  
 6. North American Electric Reliability Corporation database (March 2026).  
 7. US Energy Information Administration (December 2025).  
 8. U.S. Department of Energy Grid Deployment Office, “Low-Cost Grid Resilience Projects” (January 2024).  
 9. U.S. Department of Energy Grid Deployment Office, “Undergrounding Transmission and Distribution Lines” (September 2024).

**Figure 6: Major US transmission power outages: A significant increase over the past decade**



**Figure 7: US power interruptions duration: More than doubled between 2014 and 2024**



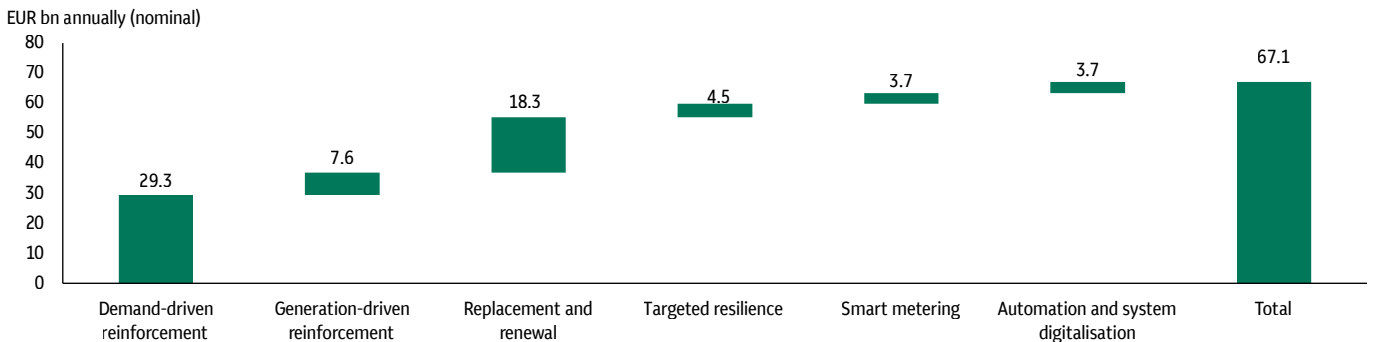
Sources: North American Electric Reliability Corporation database (March 2026), US Energy Information Administration (December 2025).

### Europe: EUR 11.9 billion annually needed for grid resilience, smart meters and automation

Across Europe, 30% of the grid is more than 40 years old on average, with some assets significantly older.<sup>10</sup> While reinforcement, replacement and renewal will be essential, advanced monitoring (including smart meter data) and maintenance data, combined with predictive algorithms and digital twins (virtual replicas of physical grid systems to simulate, stress-test and optimise grid systems), can help enhance asset health and performance. In other words, critical investments are needed both in grid replacement and in modern monitoring and maintenance services.

To achieve the EU’s policy plan to accelerate European independence from Russian energy and transition to decarbonised energy sources, a total of EUR 67.1 billion in annual investment is required, on average, between 2025 and 2050.<sup>11</sup> Figure 8 below shows different investment categories for stabilising, reinforcing or modernising the European grid. Targeted resilience, smart metering and automation and system digitalisation - which account for EUR 11.9 billion of investments required - typically fall under infrastructure-adjacent strategies, which support the broader grid ecosystem and leverage the same structural trends. Spending in these three areas is typically driven by non-discretionary utility capex, which are capitalised into the rate base<sup>12</sup> and therefore contribute to earnings. Cash flows from these investments are generally linked to stable counterparties and often indexed to inflation, though this linkage may be less explicit than in traditional infrastructure strategies.

**Figure 8: European average annual grid investment required by type (2025-2050)**



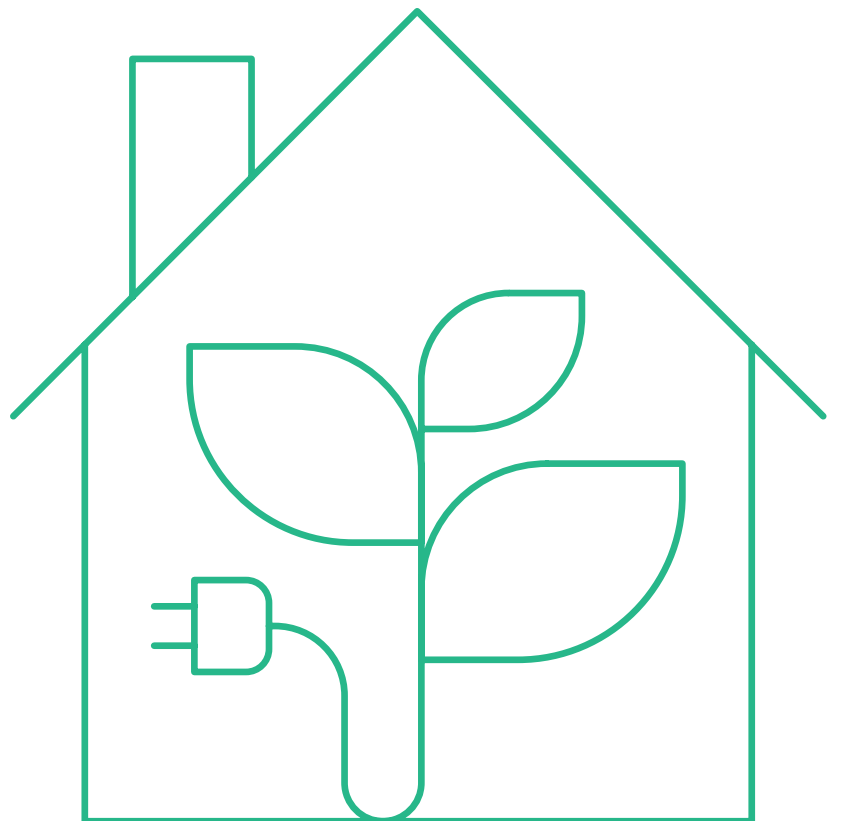
Source: Eurelectric, EY, “Grids for Speed” (May 2024).

10. Eurelectric, EY, “Grids for Speed” (May 2024).

11. Eurelectric’s Decarbonisation Speedways report, REPowerEU scenario is closely aligned to REPowerEU policy plan and the latest targets to accelerate both European independence from Russian energy and transition to decarbonised energy sources. This results in higher electrification and decarbonisation in 2030 and a partial relaxation of the decarbonisation pace between 2030 and 2050, reaching net zero in 2050. Refers to EU27+Norway.

12. Inflation is incorporated into the Regulated Asset Base (RAB) formula for regulated utilities by adjusting the asset base value to reflect changes in the price level, ensuring that the RAB maintains its real value over time.

# Renewables services: The growing market of independent service providers



Renewables O&M services is an attractive recurrent demand market directly tied to power demand growth.

Renewables are critical – and often the lowest cost and fastest to deliver – sources of power generation, and renewables owners are heavily incentivised to ensure their existing infrastructure is operating effectively and generating attractive returns.

As renewable energy portfolios expand and mature, operations and maintenance (O&M) strategies continue to evolve. Historically, the wind sector’s O&M market was dominated by original equipment manufacturers (OEMs). However, increasing demand for operational flexibility have opened the door to innovative service packages tailored to specific asset needs. Consequently, some large asset owners (e.g. the Italian utility Enel)<sup>13</sup> are developing in-house O&M capabilities, while others are turning to independent service providers (ISPs) to maximise performance, minimise downtime, and enhance long-term profitability.

At the same time, modern renewable assets increasingly rely on advanced technologies like artificial intelligence (AI) for predictive maintenance and digital twins for asset management. These innovations require specialised, technology-driven maintenance approaches, which ISPs often adopt, further reshaping the competitive landscape of the O&M market.

### Wind farm servicing: The O&M service market changes as turbines age

A growing number of turbines are reaching the end of their design lifetime of 20 years, particularly in some of the earliest wind markets across Europe like Spain and Germany, and Texas and California in the US (Figure 9). To maximise the value of aging assets and delay decommissioning costs, project owners may choose to operate their aging fleet past its original planned lifetime and invest in repowering projects to improve power generation. As these assets age, owners invest more in O&M to continue to drive a return on their assets, driving revenue potential growth on the existing base. New wind investments further add to the install base over time. Bloomberg New Energy Finance (BNEF) predicts over 90,000 turbines totalling 140 Gigawatt (GW) will reach 20 years of operation between 2025 and 2030. Markets with more older projects tend to have more ISPs, who have more expertise maintaining legacy models. Half of renewal contracts signed in BNEF’s Wind O&M Price Index between 2020 and 2024 were signed with ISPs (Figure 10).<sup>14</sup>

Figure 9: Average operational wind turbine age: Many markets approaching design lifetime of 20 years

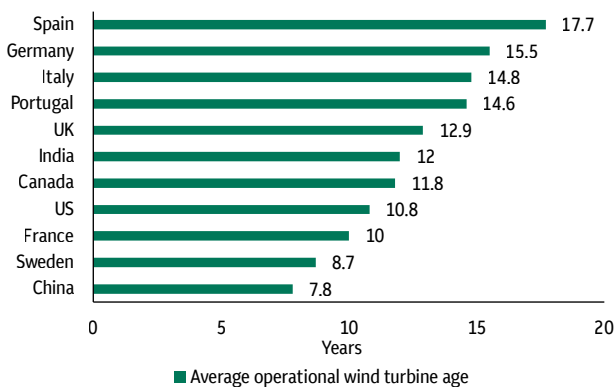
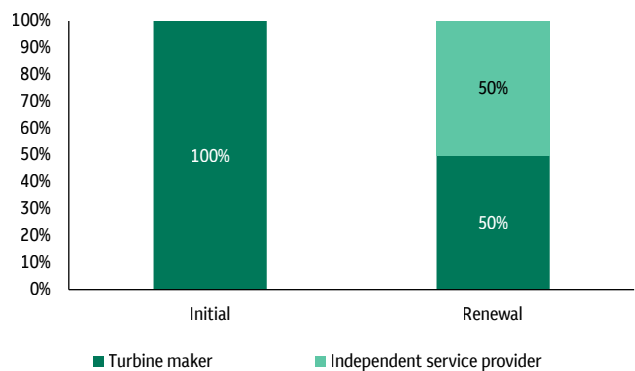


Figure 10: ISPs have much larger share of the market at contract renewal



Sources: BNEF (August 2024).

13. Source: BloombergNEF (August 2024).

14. Source: BloombergNEF (August 2024).

## Global solar O&M market is expected to grow

While the average price on solar O&M contracts per megawatt has been steadily falling over the past decade (Figure 11), the overall O&M solar market has been expanding and is expected to do so over the coming years (Figure 12). This is due to solar capacity growth, maturing assets needing long-term care, and a shift from standard contracts to more comprehensive, data-driven services, driving demand for professional expertise in monitoring, analytics, and specialised labour. Total annual O&M spend on utility-scale solar projects reached \$US 5.9 billion in 2023 based on BNEF’s O&M benchmark price. BNEF expects the global spend on solar O&M to exceed \$20 billion by 2030 for utility-scale solar through to the end of the decade.<sup>15</sup>

Figure 11:  
While the average price of a solar O&M contract has been coming down in per MW terms ...

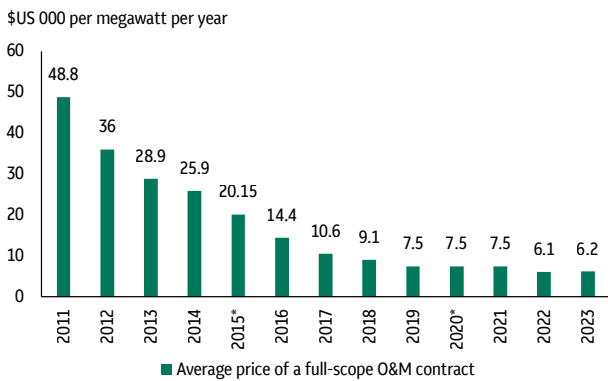
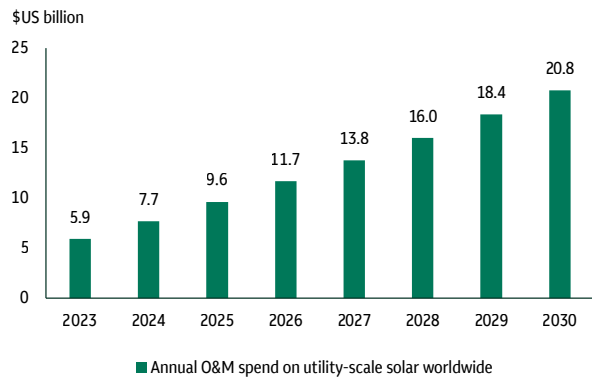


Figure 12:  
... annual O&M spend on utility-scale solar is expected to increase at a 16.7% CAGR out to 2030



Sources: BNEF (December 2024).

## Modern renewable O&M market is being re-shaped by technology

New technologies like AI, Internet-of-Things (IoT) / sensors, drones, digital twins (DTs), and augmented and virtual reality (AR/VR) are re-shaping the O&M market by shifting it from reactive fixes to predictive strategies, boosting efficiency, and creating new service models focused on automation and real-time analytics for asset optimisation. For ISPs that focus on specific technologies, offering deep expertise, we see significant growth opportunities across:

- **AI and predictive maintenance:** Algorithms analyse data to anticipate equipment failures, enabling proactive maintenance and reducing downtime and costs. For example, modern technologies such as infrared thermography combined with AI can provide an efficient solution to detect rain erosion on operational wind turbine blades, minimising the impact on O&M costs.<sup>16</sup>
- **Drones for inspection:** Replacing rope-access inspection<sup>17</sup> of wind turbines with drones can help reduce costs by up to 70% and decrease revenue lost due to down-time by up to 90%.<sup>18</sup>
- **Digital twins:** DTs can simulate the performance and behaviour of the physical object under different conditions and situations, allowing for predicting failures in wind turbine components and determining their remaining useful life.<sup>19</sup>
- **IoT and sensor technology:** The IoT and Wireless Sensor Networks (WSNs) -based monitoring of wind turbines uses sensors to track environmental factors such as temperature, vibration, and rotational speed, providing essential data for the knowledge of the health and performance of each wind turbine through constant monitoring.<sup>20</sup>
- **Augmented and Virtual Reality:** AR and VR technologies enhance maintenance procedures and training by providing access to instructions and realistic simulations.

15. Source: BNEF “Solar Operations & Maintenance Index 2024: Inflation Toll” (December 2024).

16. Wind Tech International, “Thermographic Inspection of Wind Turbines with Artificial Intelligence” (April 2023).

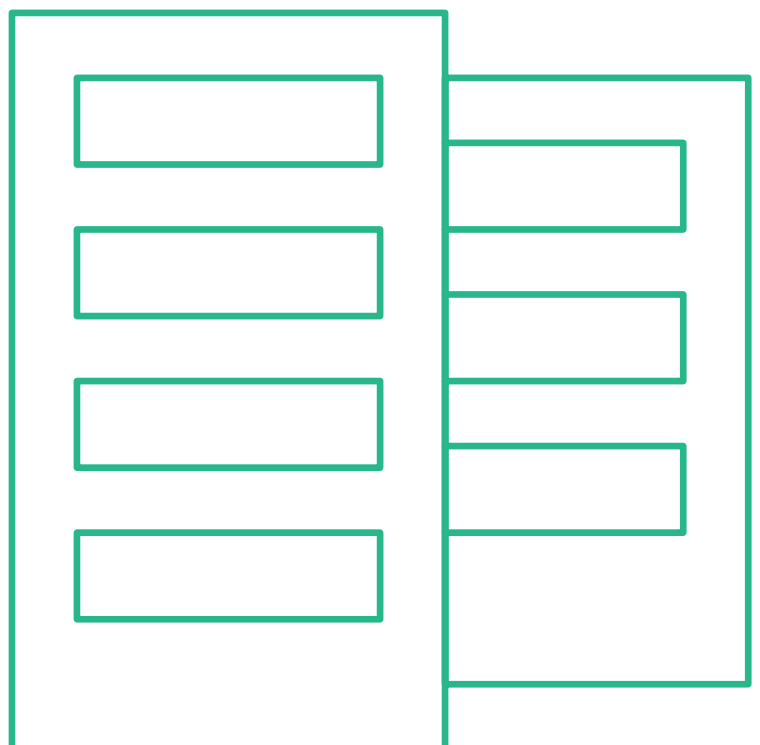
17. Rope access inspection uses ropes, harnesses, and specialized rigging to allow technicians to reach and inspect wind turbines.

18. “Estimating the impact of drone-based inspection on the Levelised Cost of electricity for offshore wind farms”, Results in Engineering, Volume 9, March 2021, 100201.

19. “Digital twin technology in wind turbine components: A review”, Intelligent Systems with Applications, Volume 26, June 2025, 200535.

20. “Machine Learning-enhanced IoT and Wireless Sensor Networks for predictive analysis and maintenance in wind turbine systems”, International Journal of Intelligent Networks, Volume 5, 2024, Pages 133-144.

# Data centres: Capacity growth and rising complexity drives demand for specialist services



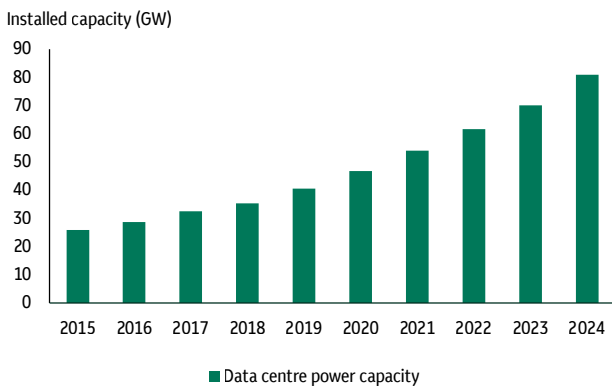
Global data centre capacity expanded materially, increasing from 26 GW in 2015 to 81 GW in 2024, primarily by rapid advances in cloud computing and artificial intelligence (Figure 13).

As capacity has scaled and operational complexity has intensified, demand has grown for a broad spectrum of specialist services including design, construction, commissioning, ISP (inside plant) fibre integration, advanced cooling solutions, and comprehensive operations & maintenance capabilities. The providers of these services represent second- and third-order beneficiaries of the data centre market growth.

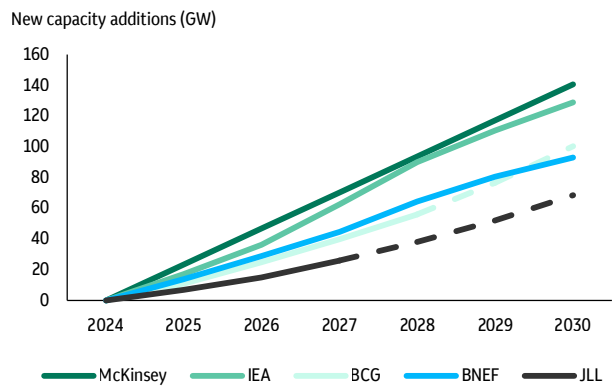
Looking ahead, cumulative new capacity additions are forecasted to reach 69–141 GW by 2030, representing 85–174% growth relative to 2024 installed capacity (Figure 14).<sup>21</sup> The actual pace of growth depends on both demand-side drivers (including the extent to which new AI applications emerge, driving inference demand) and supply-side constraints (including power availability and equipment supply chains).

Critically, the value of many data centre service models is not exclusively tied to new construction activity. Demand is also driven by the growing installed base of operational facilities, which require ongoing optimisation, upgrades, and retrofits to meet evolving performance, reliability, and regulatory requirements. Together, these dynamics support a structurally expanding market for data centre services across the full asset lifecycle.

**Figure 13:**  
The installed power capacity of data centres globally reached 81 GW in 2024...



**Figure 14:**  
...while new capacity additions are forecasted to be between 69 GW and 141 GW in 2030.



Sources: Bloomberg New Energy Finance (BNEF), “Data Center Market Overview”, June 2025, IEA (April 2025); JLL (January 2025); BCG (January 2025); McKinsey (October 2024); Macquarie Asset Management analysis. Dotted lines represent capacity additions extrapolated with the assumption of the same compound annual growth rate (CAGR) as the forecasted period; the derived values do not imply endorsement by the original data providers.

## Growing complexity of data centre operations drives demand for specialised expertise

As AI and high-performance computing workloads drive up power densities, increasingly sophisticated systems are required. There is fast-growing demand for high-density (Figure 15), liquid-cooled data centres designed to support AI workloads across both training and inference (Figure 16). Liquid cooling is significantly more efficient than air cooling, enabling higher rack power densities and reducing data centre power consumption by approximately 10%.<sup>22</sup> However, liquid cooling introduces a step-change in complexity, requiring greater technical sophistication across designers, contractors, and service providers throughout the asset lifecycle.

While demand for services scales with capacity growth, value creation is increasingly also driven by rising complexity per MW, supporting attractive growth, economic moats, and pricing power for specialist providers.

21. Based on Bloomberg New Energy Finance (BNEF), “Data Center Market Overview”, June 2025, IEA (April 2025); JLL (January 2025); BCG (January 2025); McKinsey (October 2024).

22. BNEF, “US Data Center Outlook” (April 2025).

Figure 15: Rack densities are increasing to support AI workloads...

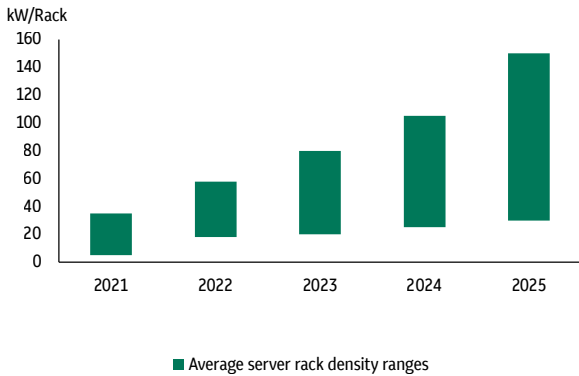
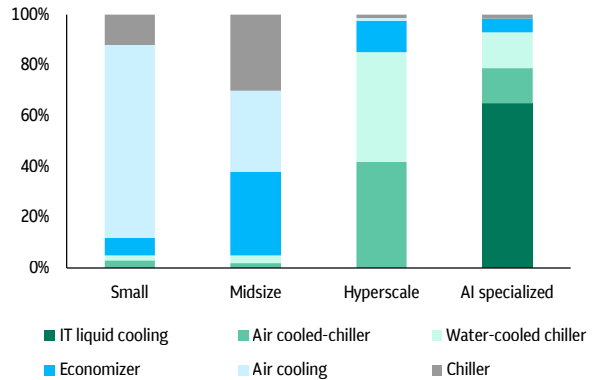


Figure 16: ...as well as the sophistication of cooling technologies.



Sources: Macquarie Asset Management, Cushman & Wakefield, “The Era of High-Performance Computing: How Are Data Centers Evolving?” (January 2025), BNEF, “US Data Center Outlook” (April 2025).

### Higher downtime costs elevate the importance of uptime assurance

The economic cost of downtime continues to rise, prompting operators to invest more in uptime assurance and monitoring systems. Most large-scale US and European data centres are designed to Tier III or Tier IV specifications, corresponding to target availability of 99.982% and 99.995% (Figure 17), respectively. Even AI training facilities, which may be somewhat more tolerant of downtime, face significant economic penalties given the high cost of AI hardware.<sup>23</sup> Uptime Institute survey data indicate that approximately 20% of reported outages in 2024 cost upwards of US\$1 million, a 4% increase year-on-year.<sup>24</sup>

Effective data centre management increasingly requires specialised expertise to coordinate power, cooling, redundancy, and incident response in real time. Even routine operational tasks like cleaning take on added complexity, since most work in the data hall is performed in a “live” environment, making such tasks well-suited for third-party specialist providers.

Figure 17: Most US and European data centres are Tier III and Tier IV facilities with strict uptime requirements

	Tier I	Tier II	Tier III	Tier IV
Redundancy	No guarantee of redundancy	Some cooling and power redundancies	N+1	2N or N+1
Required uptime	99.671%	99.741%	99.982%	99.995%
Annual downtime	28.8 hours	22 hours	1.6 hours	26.3 minutes
Customer	Small businesses and startups	Small to medium-sized business	Large companies that need high reliability and efficiency	Government organizations or enterprises with mission-critical servers

Sources: BNEF, “US Data Center Outlook” (April 2025).

The regulatory environment governing data centre operations has tightened materially. In the EU, the Digital Operational Resilience Act (DORA), effective since January 2025, established strict requirements for incident reporting, testing, and third-party risk management for data centres hosting financial workloads.<sup>25</sup> In the US, regulatory momentum is increasing at the state level. For example, Oregon’s Power Act (August 2025) establishes special electricity rates for large power consumers, incentivising efficiency and grid-friendly load profiles.<sup>26</sup> Data centres are also increasingly supplementing grid connectivity with behind-the-meter generation. These trends raise the cost of operational failure and thus the importance of specialist capabilities across design, commissioning, compliance, monitoring, and operations.

23. BNEF, “US Data Center Outlook” (April 2025).

24. Data Center Dynamics, “Uptime Institute: Outages in 2024 less frequent and severe but more expensive” (May 2025).

25. European Insurance and Occupational Pensions Authority (EIOPA). Regulation refers to EU-based data centres that host workloads for financial entities.

26. Oregon Governor’s Office, Press Release (August 2025).

## Investment opportunities for specialist service providers

The structural trends described above create a range of investable service business models across the data centre lifecycle. The following categories represent the most attractive opportunity areas, in our view:

 <p>Design &amp; Engineering Services</p>	<p>Specialist services providing MEP (mechanical, electrical, plumbing) engineering, architectural design, and power/cooling system design for data centres. This area benefit from rising design complexity driven by higher power densities and liquid cooling adoption. Attractive characteristics include early lifecycle positioning (which creates downstream specification influence), high barriers to entry via credentialing and reference projects, and repeat engagement as clients scale across geographies.</p>
 <p>Construction, Commissioning &amp; Testing</p>	<p>General and specialty contractors focused on data centre construction, as well as commissioning agents and testing services that validate facility readiness. The commissioning and testing segment is characterised by its mission-critical nature, high barriers to entry (requiring deep technical expertise and certifications), and relatively asset-light business models. As data centres increase in scale and complexity, and operators demand more rigorous validation before go-live, these services may command premium pricing.</p>
 <p>Inside Plant (ISP) Fibre &amp; Connectivity Infrastructure</p>	<p>Providers of structured cabling, fibre optic installation, cross-connects, and cable management within data centres. ISP fibre is essential infrastructure that must be installed during construction and upgraded or expanded over the facility's life as tenant density and bandwidth requirements grow. This segment can offer repeat revenue characteristics tied to the growing installed base, and benefits from the increasing connectivity demands of AI workloads.</p>
 <p>Advanced Cooling Solutions</p>	<p>Liquid cooling system design, installation, and maintenance services, including direct-to-chip and immersion cooling technologies. This segment is among the fastest-growing within data centre services given the rapid shift from air to liquid cooling. Providers with proprietary technology or deep integration expertise benefit from high switching costs once installed, creating sticky customer relationships and strong pricing power.</p>
 <p>Operations &amp; Maintenance (O&amp;M)</p>	<p>Third-party providers delivering ongoing facility management, preventive and predictive maintenance, monitoring, and incident response services. O&amp;M is the most clearly recurring service category, with multi-year contracts tied to the growing installed base of operational facilities. Value proposition strengthens with facility complexity, as operators of liquid-cooled, high-density environments are more likely to outsource to specialists. Adjacent services include critical environment cleaning, which requires specialised protocols for live data hall environments.</p>
 <p>Compliance, Monitoring &amp; Energy Management</p>	<p>Software and services companies providing real-time monitoring, DCIM (data centre infrastructure management), regulatory compliance reporting, and energy optimisation. With tightening regulations and rising power costs, operators are investing in tools and third-party expertise to manage compliance, optimise PUE (power usage effectiveness), and integrate behind-the-meter generation.</p>

### Important information

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Infrastructure companies may be subject to a variety of factors that may adversely affect their business or operations, including high interest costs, high leverage, economic slowdowns, surplus capacity, increased competition, commodity prices, regulatory and political developments, difficulty raising capital, and terrorist acts or political actions, and general changes in market sentiment.

The global financial crisis (GFC) refers to the period of extreme stress in global financial markets and banking systems between mid-2007 and early 2009.

Inflation is the rate at which the general level of prices for goods and services is rising, and, subsequently, purchasing power is falling. Central banks attempt to stop severe inflation, along with severe deflation, in an attempt to keep the excessive growth of prices to a minimum.

Stagflation occurs when persistent high inflation is combined with high unemployment and stagnant demand in a country's economy.

The **Bloomberg Global Aggregate Total Return Index** measures the performance of global investment grade fixed income securities. This index is widely used as a benchmark for fixed income securities.

The **Cambridge Associates Infrastructure Index** represents a horizon calculation based on data compiled from 232 infrastructure funds, including fully liquidated partnerships, formed between 1994 and 2024. The Developed Markets sub-index comprises 199 funds; the Emerging Markets sub-index comprises 27 funds.

The **US Consumer Price Index (CPI)** is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.

The **INREV Global Real Estate Fund Index (GREFI)** measures net asset value weighted performance of non-listed real estate funds on a quarterly basis.

The **MSCI World Index** represents large- and mid-cap stocks across 23 developed market countries worldwide. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **S&P 500 Index** measures the performance of 500 mostly large-cap stocks weighted by market value and is often used to represent performance of the US stock market.

The **S&P Global Infrastructure Index** is composed of 75 of the largest publicly listed companies in the global infrastructure industry. The index has balanced weights across three distinct infrastructure clusters: energy, transportation, and utilities. The “net total return” index reinvests regular cash dividends after the deduction of applicable withholding taxes.

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# Pathways

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