

Q3 2026

# ETF Outlook: resilience in a changing world



# Change is in the air

Profound changes are reshaping our world. From AI and geopolitical splintering to the growing economic sway of emerging nations, old certainties are fading fast.

For this quarterly update, we've focused on the potential winners from these seismic shifts, and specifically assets that may offer long-term resilience in an increasingly unpredictable market environment.

1. Our first article explores the outlook for **clean energy** amid heightened focus on energy security, and offers examples of how specific companies in the sector are adapting to meet the needs of today's global energy landscape
2. The second article delves deeper into clean energy by zooming in on the **battery value chain**, and how investors can aim to capture the full breadth of the theme
3. Finally, we turn to **emerging market debt**, examining the structural reasons behind its resilience amid recent geopolitical upheaval, and how this could change its role in portfolio construction

All three articles take truly significant global themes as their starting point and work through the practical implications for investors. I found it fascinating to see the various connections between these themes, and I hope you find these insights useful in your conversations with clients.



**Elena Cardella,**  
Head of Index & ETFs Investment Specialists

# Geopolitics, AI and electrification: three forces driving clean energy growth

Renewables should be set to benefit from a range of tailwinds, from today’s focus on energy sovereignty to a long-term shift towards electrification.

Elisa Piscopiello, Index & ETFs Investment Specialist - Equity & Alts

### Key takeaways:

- The Iran conflict is driving investment not only in renewables, but also in grid modernisation, energy storage and supply chain diversification.
- The share of power consumed by data centres is expected to double by 2030, driving additional electricity demand.
- Energy supply composition is undergoing a long-term structural shift towards electrification, with renewables increasingly the most economical source.



### Present: Iran conflict reinforcing energy security dynamics

Recent geopolitical tensions, particularly the conflict involving Iran, have reinforced the importance of energy security and acted as an additional catalyst for the clean energy transition.

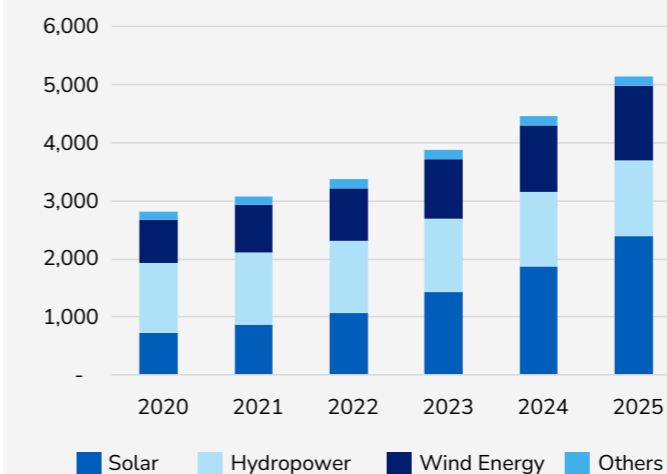
While the episode underscores that oil remains a critical pillar of the global energy system – including the unprecedented release of 400 million barrels from emergency reserves – it also highlights the vulnerabilities associated with concentrated energy supply chains. Unlike previous shocks, however, the current environment is characterised by a more resilient power system in which renewable energy plays a significantly larger role.

This has helped limit the immediate impact of volatility, with countries that have higher renewable penetration proving more resilient to energy price shocks. Renewable energy accounted for close to 50% of global electricity capacity in 2024, reflecting the

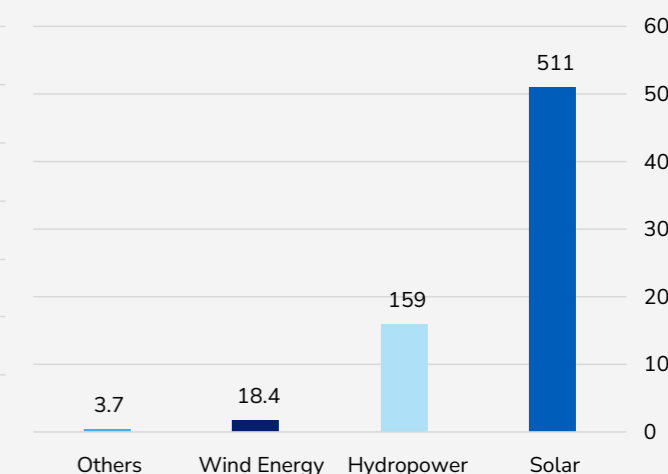
growing role of low-carbon sources in the energy mix. At the same time, electrification is becoming central to modern energy security, supported by investments in grid infrastructure, storage, and digital technologies. Importantly, renewables provide locally sourced energy once infrastructure is established, reducing reliance on geopolitically sensitive supply chains.

The Iran conflict therefore reinforces a key structural lesson: energy security increasingly depends on reducing the reliance on a single source. This is accelerating investment not only in renewable generation, but also in grid modernisation, energy storage, and supply chain diversification – particularly in Western markets seeking to reduce dependence on both fossil fuels and concentrated manufacturing hubs. As a result, clean energy is no longer solely an environmental theme but is increasingly positioned as a core pillar of long-term economic and energy resilience.

Renewable power capacity growth (GW)



Capacity added in 2025 (GW)



Source: IRENA, April 2026.

### Mid-term: adding net-positive AI to net-zero emissions

AI and data centres are emerging as powerful demand drivers for electricity, reinforcing the investment case for grid infrastructure and energy systems. The sector benefits from structural growth linked to the rapid expansion of AI workloads, with a clear rotation into energy storage and grid infrastructure as investors increasingly focus on power availability, reliability and speed of deployment.

Electricity consumption from AI-focused data centres grew by 50% in 2025. While data centres currently represent around 1.5% of global electricity demand, the International Energy Agency expects this to double by 2030, highlighting a significant incremental demand impulse.<sup>1</sup>

<sup>1</sup> Source: BofA, April 2026.

<sup>2</sup> Source: [Statistical-Review-of-World-Energy-2025.pdf](#) (p52)

Beyond demand growth, AI is also improving the efficiency and resilience of electricity networks. Advanced analytics and machine learning are being deployed to optimise grid operations in real time, improving demand forecasting, balancing supply and demand, and enhancing the integration of intermittent renewable energy sources such as solar and wind. AI also enables predictive maintenance by identifying potential faults before they occur, reducing outages and improving system reliability.

More broadly, digitalised grid infrastructure – supported by smart sensors and real-time data – enhances visibility across networks and allows for faster, more adaptive responses to shifts in supply and demand. This evolution is expected to coincide with

a substantial increase in global grid investment, reflecting the need to modernise infrastructure to support both electrification and AI-driven demand.

From a company perspective, Vertiv\* represents a direct beneficiary of this trend. The company provides critical digital infrastructure to data centres, including power systems, thermal management (such as liquid cooling), UPS solutions, and services, making it a key enabler of AI infrastructure deployment.

Quanta Services\*, meanwhile, is an EPC provider for grid and energy infrastructure. Its electric segment delivers end-to-end solutions across transmission, distribution, and renewable generation, positioning it to capture the long-duration investment cycle in grid expansion and modernisation.

\* For illustrative purposes only. Reference to a particular security is on a historic basis and does not mean that the security is currently held or will be held within an L&G portfolio.

The above information does not constitute a recommendation to buy or sell any security.

**Long term: energy transition and grid build-out**

The global energy system is electrifying at pace, with electricity generation expanding across all sources except oil. In 2024, generation from low- and zero-carbon sources exceeded 40% of total global electricity production<sup>2</sup>, marking a structural shift in the composition of energy supply.

At the same time, the cost of clean energy has declined steadily, making renewables significantly more competitive relative to fossil fuels. This cost deflation has supported continued investment across the clean energy value chain, particularly among traditional component suppliers,

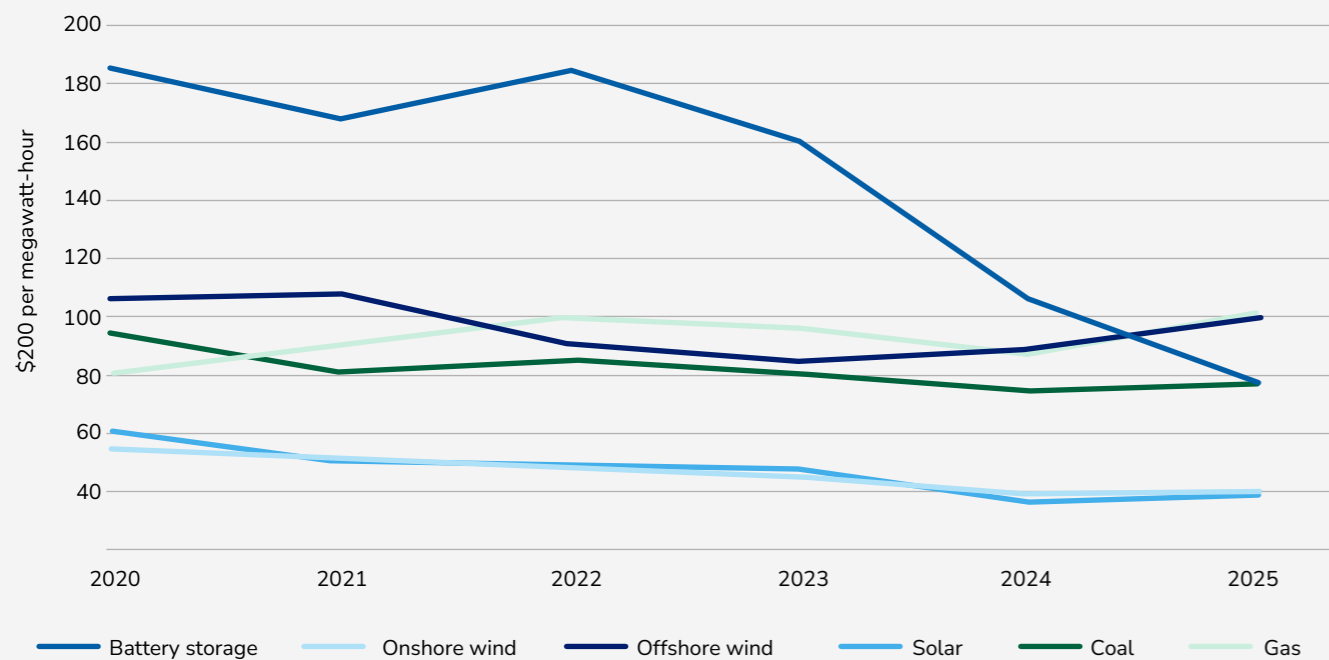
original equipment manufacturers (OEMs), and independent power producers (IPPs), which remain at the core of the energy transition.

Company examples highlight how this structural trend is being embedded across the industry.

- ERG\* is a renewable IPP with strong wind and solar exposure, having transitioned from its origins as an oil refiner (pre 2008) into a pure wind and solar business model by 2023. The company is now focused on consolidating its portfolio, with particular emphasis on wind repowering and battery energy storage systems.
- SMA Solar\*, a German manufacturer of solar inverters and storage solutions, operates across residential, commercial and utility-scale markets. It is currently undergoing a restructuring programme aimed at improving profitability, with its Home & Business Solutions division showing signs of recovery in early 2026 after a challenging 2025.
- Nordex\*, a German onshore wind turbine manufacturer, plays a key role in the European wind build-out. Following its integration with ACCIONA Windpower\*, it combines strong regional exposure with a high-margin service business.

**Most clean power is now cheaper than fossil fuels**

Levelised cost of electricity by source



Source: BloombergNEF  
 Note: Battery storage covers four hours. Gas burned in combined cycle plant.

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# From cell to system: the crucial role of the battery value chain

The outlook for battery markets isn't just about EVs anymore. We explore how the battery value chain plugs into structural changes in global power markets.

Mo Mahmoud, Index & ETFs Investment Specialist - Equity & Alts



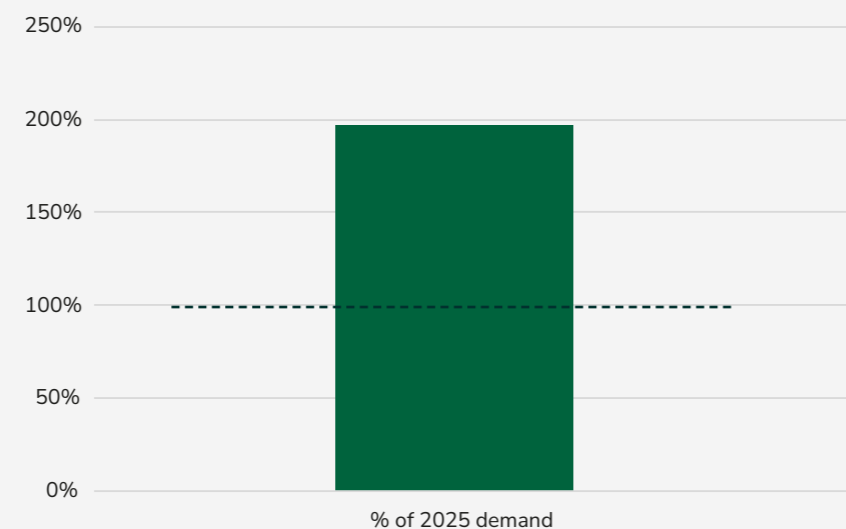
The current geopolitical backdrop reinforces the strategic value of batteries. As the previous article explained, Middle East tensions and broader fossil-fuel price volatility have highlighted the importance of a resilient energy supply chain, and higher fuel-price volatility can strengthen the case for electrification, renewables and storage in fossil-fuel-importing economies.

This background provides structural support for the battery value chain, but selectivity matters. BloombergNEF estimates global battery cell manufacturing capacity at around 197% of 2025 demand.<sup>4</sup> That creates pricing pressure for weaker manufacturers, but it also accelerates affordability and supports downstream adoption across a wider range of markets and applications.

## Key takeaways:

- With energy security in focus, battery storage has increased strategic significance.
- AI-related data-centre growth is adding another source of demand for resilient power infrastructure, including battery-based backup systems.
- Different components of the battery value chain have very different market sensitivities, making a diversified<sup>3</sup> approach particularly important.

Battery cell manufacturing capacity vs 2025 demand



Source: BloombergNEF, Energy Transition Supply Chains Outlook 2026, May 2026. Battery ratio uses risk-adjusted manufacturing capacity as of end-2025 divided by 2025 demand.

<sup>3</sup> It should be noted that diversification is no guarantee against a loss in a declining market.

<sup>4</sup> BloombergNEF, Energy Transition Supply Chains Outlook 2026, May 2026. Battery ratio uses risk adjusted manufacturing capacity as of end-2025 divided by 2025 demand.

## Beyond EVs: stationary storage set to surge

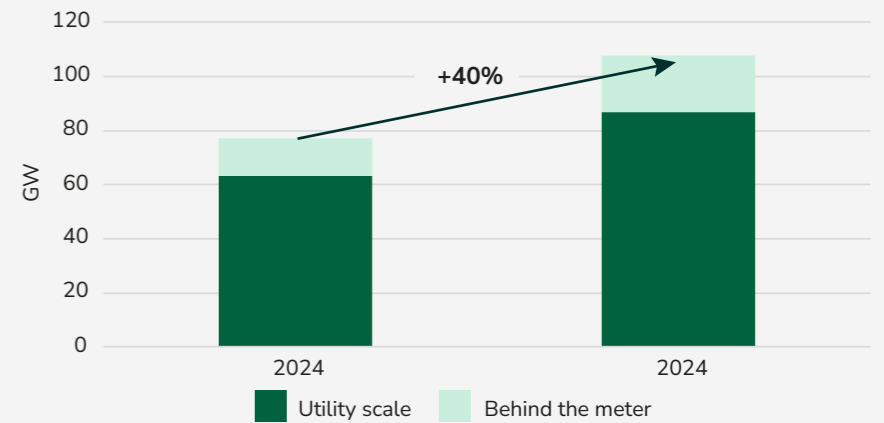
The next leg of demand is increasingly tied to stationary storage. BloombergNEF estimates that non-EV batteries accounted for 29% of overall lithium-ion battery imports/shipments in 2025, growing 64% year-on-year, compared with 3% growth for EV-related lithium-ion battery trade.<sup>5</sup>

EVs remain the largest battery demand pool, but stationary storage is becoming an important incremental driver as grids absorb higher shares of solar and wind, data centres require more resilient power infrastructure, and energy-importing economies seek greater energy security.

The IEA describes battery storage as the fastest-growing power technology today, with 108GW of new battery storage power capacity deployed globally in 2025, 40% more than in 2024.<sup>6</sup> Around 80% of those additions were utility-scale, but the rapid rise in 'behind the meter' storage reflects the deployment of battery storage in commercial and domestic settings.

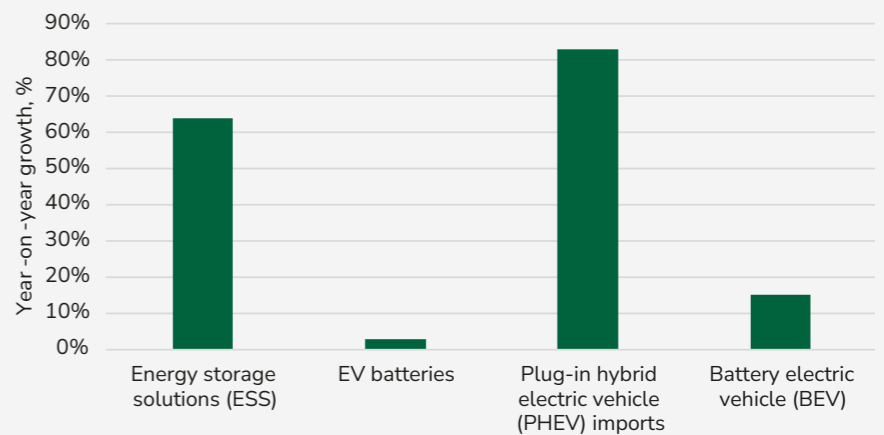
For AI and data centres, batteries are part of the reliability stack: the IEA estimates battery-based uninterruptible power supply (UPS) additions, primarily in data centres, rose 30% to 45GW in 2025.<sup>7</sup>

Global battery storage capacity additions



Sources: IEA, Global Energy Review 2026, technology: battery storage; BloombergNEF, Energy Transition Supply Chains Outlook 2026, May 2026.

Clean transport and lithium-ion battery trade growth, 2025 vs. 2024

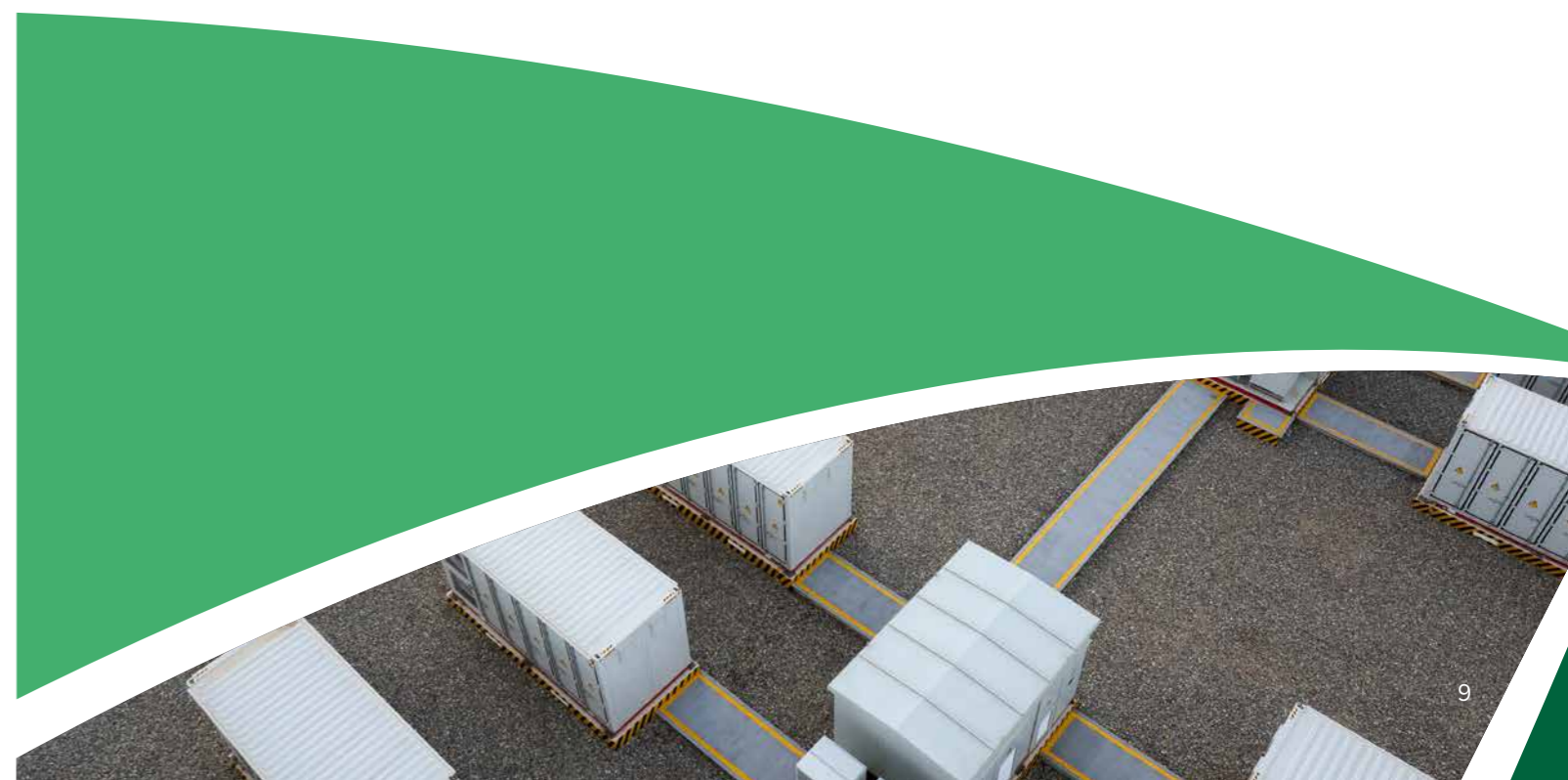


Sources: IEA, Global Energy Review 2026, technology: battery storage; BloombergNEF, Energy Transition Supply Chains Outlook 2026, May 2026.

<sup>5</sup> Source: BloombergNEF, Energy Transition Supply Chains Outlook 2026, May 27, 2026, Executive Summary and Figures 5/6/23/24.

<sup>6</sup> Source: IEA, Global Energy Review 2026, Technology: Battery storage. <https://www.iea.org/reports/global-energy-review-2026/technology-battery-storage>

<sup>7</sup> ibid.

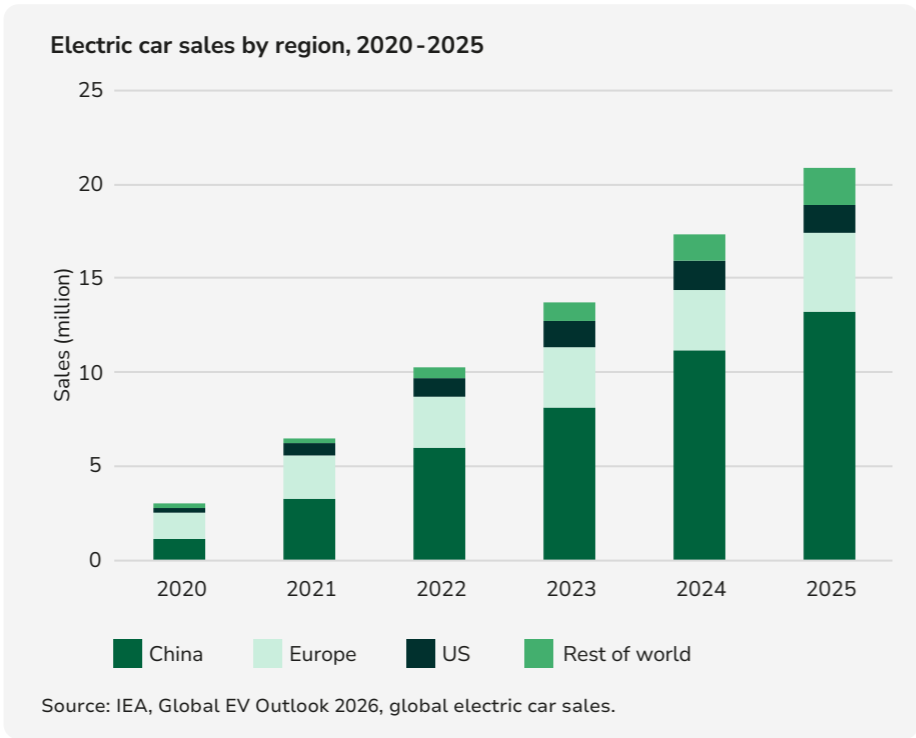


**Batteries are at the heart of electrification**

Falling renewable power costs, decarbonisation targets, energy-security concerns and efficiency gains are all pushing more parts of the economy toward electricity.

Batteries sit at the centre of that shift: they enable electric mobility, support renewable integration, provide flexibility to power grids, and help improve the resilience of increasingly digital electricity systems.

EVs remain the largest and most visible source of battery demand. The IEA estimates that EV battery deployment reached 1.2TWh in 2025, an increase of almost 30% compared with 2024 and more than seven times the 2020 level.<sup>8</sup> Electric car sales exceeded 20 million in 2025, representing one-quarter of global new car sales, and are expected to reach around 23 million in 2026, equal to 28% of total car sales.<sup>9</sup>



**Why the value-chain lens matters**

Battery markets are no longer a single-end-market story: EV adoption remains central, but the incremental narrative is expanding toward grid storage, renewable integration, AI and data-centre resilience, and energy security.

For investors assessing the theme, a value-chain lens matters, in our view, because the drivers of risk and return differ meaningfully between mineral producers, component suppliers, cell manufacturers, system integrators and end-market infrastructure providers.

The battery value chain spans many sub-sectors, as shown in the table. That breadth matters: miners

Critical minerals	Cell components	Cells and packs	Systems and software	End markets
Li, Co, Ni, Mn, graphite	Cathode, anode, electrolyte, separators	Cell manufacturing, pack assembly	BMS, power conversion, charging infrastructure	EVs, grid storage, data centres

Sources: IEA Global EV Outlook 2026; IEA Global Energy Review 2026; BloombergNEF 2025 Lithium-Ion Battery Price Survey; BloombergNEF Energy Transition Supply Chains Outlook 2026.

are exposed to commodity cycles, manufacturers to scale and pricing dynamics, and storage companies to power-infrastructure demand.

By adopting a diversified<sup>10</sup> approach, investors can seek to capitalise on

the long-term structural growth of the theme while mitigating the heterogeneous factors influencing each sub-sector.

<sup>10</sup> It should be noted that diversification is no guarantee against a loss in a declining market.

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**Average battery pack prices, 2025**

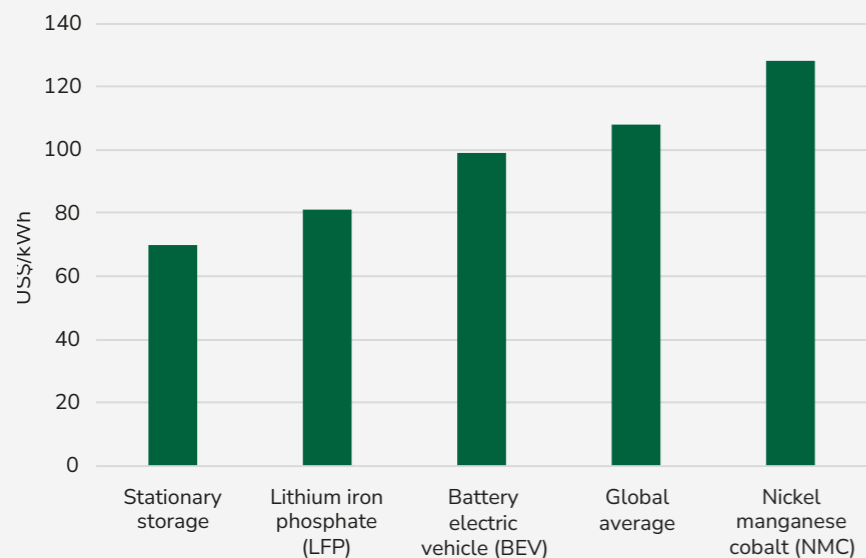


Chart source: BloombergNEF, 2025 Lithium-Ion Battery Price Survey, December 2025. Supporting context: IEA, Global EV Outlook 2026, Chapter 5, battery industry trends.

Cost deflation remains central to the long-term case. BloombergNEF's 2025 Lithium-Ion Battery Price Survey showed average battery pack prices falling 8% year-on-year to a record low of \$108/kWh, despite higher battery-metal costs. Lower battery costs help reinforce the economics of electrification by making EVs more affordable and improving the business case for storage and other battery-enabled applications.

For investors, the key point is that electrification creates demand across multiple parts of the battery value chain, not just vehicle batteries. Mineral producers, component suppliers, cell manufacturers, pack assemblers, battery-management systems, charging infrastructure, storage integrators and recyclers each have different sensitivities to commodity prices, technology shifts, competition and end-market adoption.



<sup>8</sup> IIEA, Global EV Outlook 2026, Chapter 5, Electric vehicle battery deployment. <https://www.iea.org/reports/global-ev-outlook-2026/electric-vehicle-batteries>

<sup>9</sup> IEA, Global EV Outlook 2026, Executive Summary and Chapter 1. <https://www.iea.org/reports/global-ev-outlook-2026>

# Emerging market debt: resilience in a fragmenting world

Recent market behaviour suggests emerging market debt (EMD) has entered a new phase – one defined not by fragility, but by structural resilience.

Ryan Clatworthy, Index & ETFs Investment Specialist - Fixed Income  
 Seraj Baraky, Index & ETFs Investment Specialist - Fixed Income

### Key takeaways:

- Unlike in previous periods of geopolitical upheaval, EMD has shown broad-based resilience amid the oil shock.
- This resilience reflects a move away from reliance on external debt in favour of the stability offered by domestic investors.
- Returns in EMD are increasingly driven by country-specific fundamentals rather than broad market sentiment, making targeted exposure key.

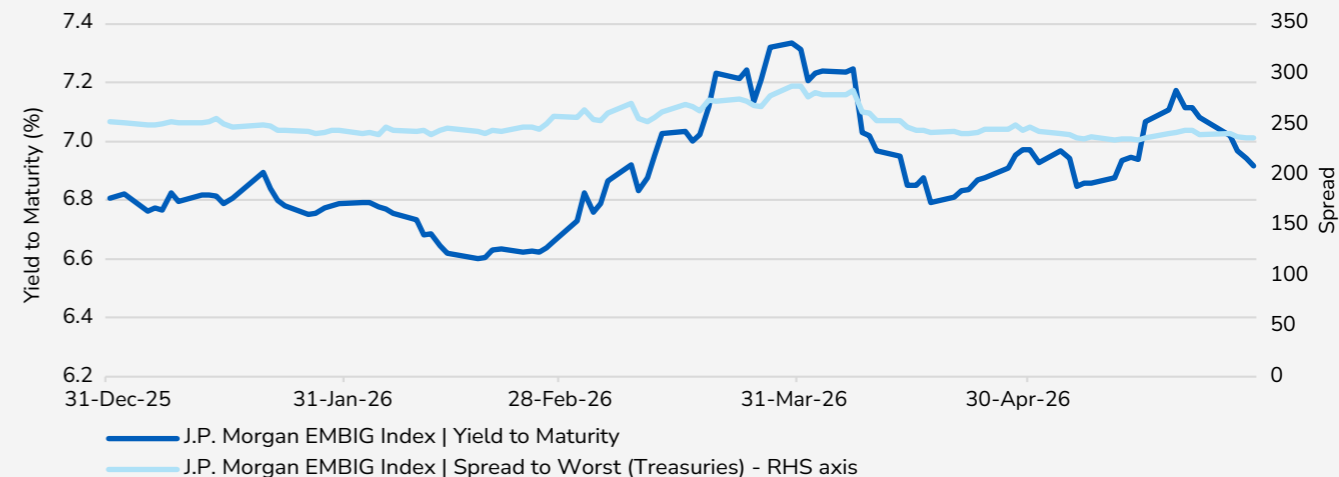
The escalation in Middle East tensions – and specifically the Iran conflict – has provided a real-time stress test for global fixed income markets. Historically, geopolitical shocks have triggered broad risk-off moves and acute drawdowns across EMD.

Yet the experience in 2026 has been markedly different. The defining feature of the asset class has been resilience – both in market behaviour and in the structural evolution underpinning emerging economies themselves.

### A measured market response

Initial market reactions were notably contained. Hard currency spreads widened modestly at the onset of the conflict before partially retracing as markets reassessed the risk of escalation. This response looks particularly benign in historical context: EM hard currency spreads are currently around 240 basis points (bps) – levels that compare favourably to c.750bps during the Global Financial Crisis, c.630bps during COVID-19, and c.550bps following Russia's invasion of Ukraine.<sup>11</sup>

Emerging markets - hard currency, yield & spread evolution



Source: L&G, J.P. Morgan, as at 2 June 2026.

Since the start of the Iran War, yields moved higher in parallel, reflecting a temporary repricing of risk rather than a systemic shift in sentiment.

Crucially, this behaviour contrasts with previous episodes, where EMD experienced indiscriminate sell-offs. Instead, the recent period has been defined by differentiation, with dispersion across countries and sectors rather than broad-based weakness.

At the same time, developed market bonds remain under pressure from structurally higher yields and fiscal concerns. Against this backdrop, EMD is increasingly behaving not as a high-beta extension of global risk assets, but as a differentiated and fundamentally supported asset class.

### Resilience by design: deeper local markets and stronger fundamentals

The key driver of this resilience is a structural shift in how emerging markets fund themselves. Over the past decade, EM sovereigns have moved away from reliance on external debt towards local currency issuance, supported by deeper domestic capital markets and more stable investor bases.

This shift has materially reduced exposure to currency mismatches and capital outflows that historically amplified EM crises. It has also reshaped the asset class itself. While hard currency indices such as the JPM EMBI represent a ~\$1-1.5 trillion market, they are now complemented by a significantly larger multi trillion local currency universe, captured by the GBI EM.

Importantly, this is not just about scale. Local markets are increasingly anchored by domestic investors – including banks, pension funds and insurers – providing a more stable demand base. Evidence suggests that countries with deeper domestic investor bases exhibit more stable yields and liquidity during periods of global stress.<sup>12</sup>

Across regions, this structural resilience is clear. Countries such as Brazil, Mexico, Indonesia, South Africa, Poland and Malaysia combine well-developed local bond markets with improving macro fundamentals, forming the backbone of the GBI EM universe. Within this broader framework, large markets such as China and India provide an additional layer of stability through deep domestic savings pools.

The result is a fundamentally different EM landscape: one where local markets act as shock absorbers rather than amplifiers of volatility.

<sup>11</sup> Source: L&G, J.P. Morgan, as at 2 June 2026.

<sup>12</sup> Source: <https://www.imf.org/-/media/files/publications/gfsr/2025/october/english/ch3.pdf>

### Commodities and dispersion: from vulnerability to support

Commodity dynamics have also reinforced resilience. Higher energy prices – traditionally a source of stress – are now supporting fiscal balances and external accounts across key exporters such as Brazil, Mexico, Malaysia and Indonesia, which together account for a meaningful share of the GBI EM index.

This has driven a clear divergence within the asset class, with commodity exporters outperforming more oil-dependent importers. Importantly, this reinforces a broader structural trend: returns in EMD are increasingly driven by country-specific fundamentals rather than broad market sentiment.

The combination of commodity exposure and domestic market depth highlights the multi-dimensional nature of resilience across EM.

### Resilient performance in practice

Performance trends reinforce this narrative. Following an initial sell-off in March (EM hard currency -3.3%, EM local currency -5.6%), EMD rebounded strongly in April, with both segments posting gains (EM hard currency +2.9%, EM local currency +2.8%).<sup>13</sup>

Year-to-date returns remain positive at +2.6% for hard currency and +1.3%

for local currency, demonstrating the asset class's ability to recover quickly from periods of stress.<sup>14</sup>

More broadly, EMD has continued to hold up comparatively well despite heightened geopolitical volatility, supported by strong carry and improving underlying fundamentals.

### Positioning for resilience: a selective approach

In this environment, resilience is not uniform – it requires targeted exposure, in our view.

- EM corporates (USD) offer a balance between credit and duration, supported by improving credit quality and a strong investment-grade base. Their shorter duration profile provides a buffer against rate volatility.
- Short-duration hard currency (one to five years) provides a defensive entry point, limiting sensitivity to higher US yields while maintaining attractive carry – offering interest-rate protection alongside resilient spreads.
- Local currency EMD (GBI EM) increasingly represents the core of the resilience story. Broad-based across regions, these markets benefit from domestic funding and reduced

reliance on external capital. Within this, countries such as India and China further anchor the asset class through deep local investor bases and evolving policy frameworks.

- Structural developments – such as China's efforts to promote renminbi-denominated commodity trade – also point towards a gradual shift to a more multi-currency global system, reducing dependence on USD liquidity over time.

### Outlook: resilience as a structural feature

Looking ahead, geopolitical risk is likely to remain elevated. However, recent market behaviour suggests that EMD has entered a new phase – one defined not by fragility, but by structural resilience.

Improved policy frameworks, stronger balance sheets, deeper domestic markets, and greater dispersion across countries mean the asset class is potentially better equipped to absorb shocks.

Combined with attractive yields and potential diversification<sup>15</sup> benefits, EMD – across corporates, short-duration hard currency and local currency markets – could offer a compelling allocation for investors seeking stability in an increasingly uncertain world.

<sup>13</sup> Source: JPM EMBI and GBI EM indices via Bloomberg as at 2 June 2026.

<sup>14</sup> Source: *ibid.*

<sup>15</sup> It should be noted that diversification is no guarantee against a loss in a declining market.

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### Key risks

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