Renewable energy rises with renewed vigour

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Key Takeaways

- Interest rates: falling yields have reignited financing and restored market confidence.
- Data centres: the artificial intelligence (AI) power boom is fuelling demand for sustainable, ‘always-on’ energy.
- Storage innovation: advances in solid-state and grid-scale batteries are changing the game.
- China: policy support and global demand are propelling Chinese clean energy stocks.
- Investment opportunity: the fundamentals never went away but markets are now paying attention.

Thematic investing can seem challenging when market moves are against you. If the underlying structural trend remains intact, it gives investors the courage to stand by their convictions in the hope that markets will eventually pay attention.

That is exactly what seems to have happened in renewable energy. After a couple of challenging years, the theme is back in favour with renewed vigour in 2025. And when you look at the underlying trends, you might wonder what caused markets to look away in the first place.

This blog highlights why renewable energy is soaring again and why markets are paying close attention.

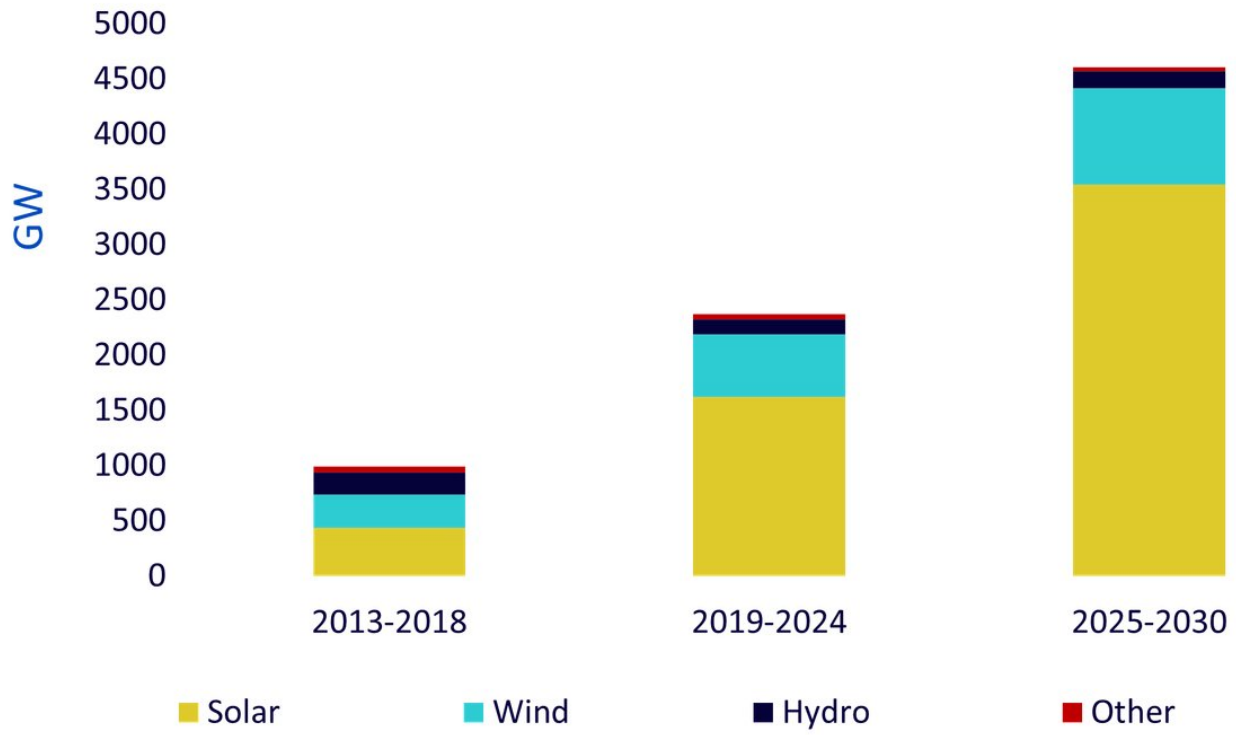
The world is rapidly deploying renewable energy

These are the structural tailwinds that matter. According to the International Energy Agency’s (IEA) October 2025 renewables report, global renewable power capacity is expected to double by 2030. For a market that has already expanded considerably over the past decade, that is significant growth. Solar power is expected to drive around 80% of the increase, followed by wind (see Figure 1).

Among the main drivers highlighted by the IEA for this swift adoption – particularly for solar – are falling costs, faster permitting and growing social acceptance. Wind power has faced challenges due to higher costs given the capital-intensive nature of projects, but has still recorded meaningful expansion.

Now, with central banks cutting rates and financing costs on the decline, some of those headwinds are easing. Lower interest rates have become a key catalyst for the theme’s revival this year.

Figure 1: Global Renewable Energy Capacity Addition



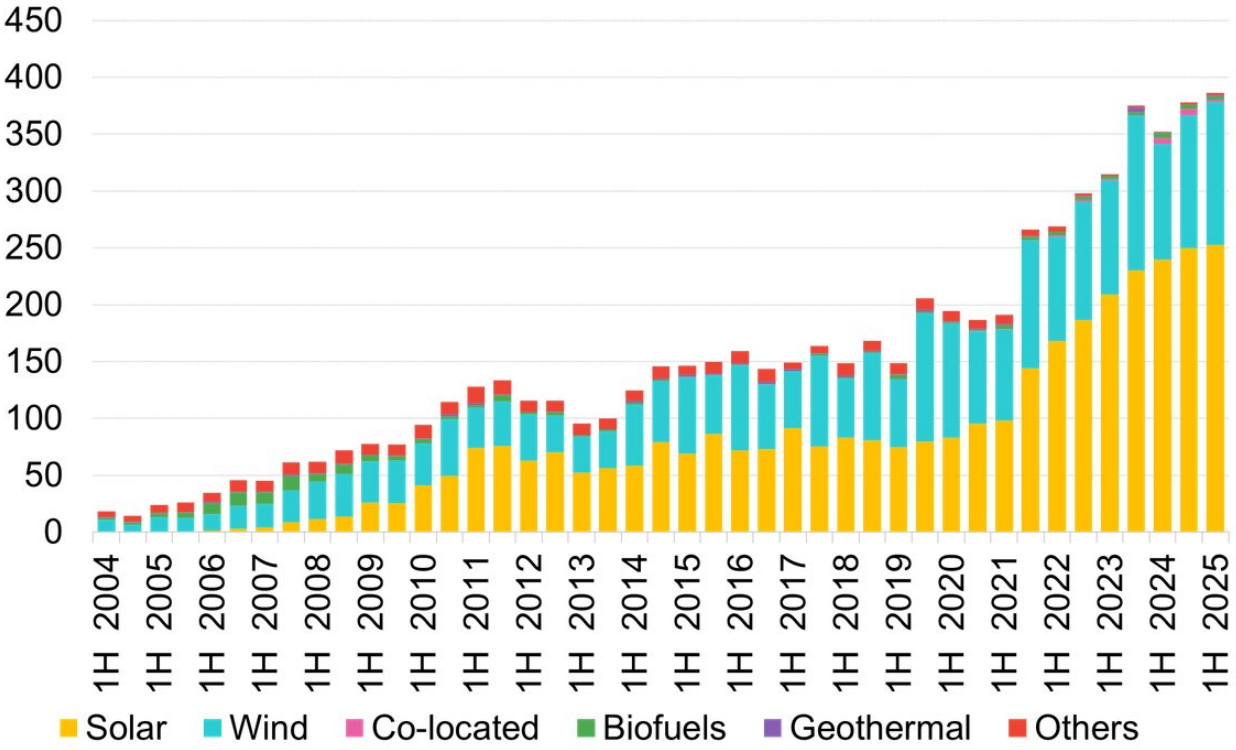
Renewable energy funding remains strong

Despite the pressure from high interest rates and steep financing costs for capital-intensive projects, funding for renewable energy has continued to rise. Much of this strength comes from solar, driven by both commercial and residential adoption.

In the first half of 2025, global investment in renewable energy reached $386 billion, up 10% compared to the same period in 2024[1]. This growth occurred even as US investment slowed, demonstrating how other regions, notably China and Europe, have picked up the pace.

Once again, the data contrasts sharply with the weak market performance seen in the previous two years. It was perhaps the early signs of falling rates that restored confidence that renewable energy investment will be sustained, and that shift now appears to be firmly underway.

Figure 2: Global investment in renewable energy $ billion



The data centre narrative is kicking in

The world is rapidly building a vast network of data centres that require enormous amounts of energy. The challenge now is to power these facilities sustainably, with uninterrupted electricity that doesn't harm the environment or inflate costs. Localised sources of 'always-on' energy are increasingly being favoured to reduce dependence on the grid and give data centres the energy independence they need.

Over the past year, we have seen a wave of bold announcements from technology companies securing nuclear energy for their data centres. While nuclear may become a core solution, it is likely to be complemented by other innovations such as hydrogen fuel cells.

In February 2025, Bloom Energy Corp struck a deal with Equinix, a global data centre developer, to deploy fuel cells across more than 19 sites with over 100 MW of capacity. These fuel cells offer near-zero emissions and 24/7 power - a cleaner and more resilient alternative to diesel generators. Their modular design also allows for easy configuration and scaling based on demand. Since the announcement, Bloom Energy's share price has risen sharply, showing how markets are endorsing the connection between data centres and hydrogen fuel cells.

For this reason, we at WisdomTree believe renewable energy should not be viewed narrowly as solar and wind, but as a broader ecosystem that includes emerging technologies capable of powering the digital world sustainably.

Advances in battery technology support renewable adoption

Renewable energy adoption is inextricably linked to progress in battery technology. After all, what happens when the sun isn't shining, and the wind isn't blowing? Better storage enables renewable power to be used more widely and reliably.

There are three particularly interesting developments in the battery space.

First, solid-state batteries. QuantumScape, a leading manufacturer of solid-state batteries, has garnered attention this year with notable progress in demonstrating the effectiveness of its technology. A solid-state battery replaces the liquid electrolyte in a lithium-ion cell with a solid one, giving it higher energy density. Although initially designed for electric vehicles to deliver longer ranges and shorter charging times, the technology could ultimately have much broader storage applications. For now, the excitement surrounding solid-state breakthroughs is helping lift sentiment across the clean energy space.

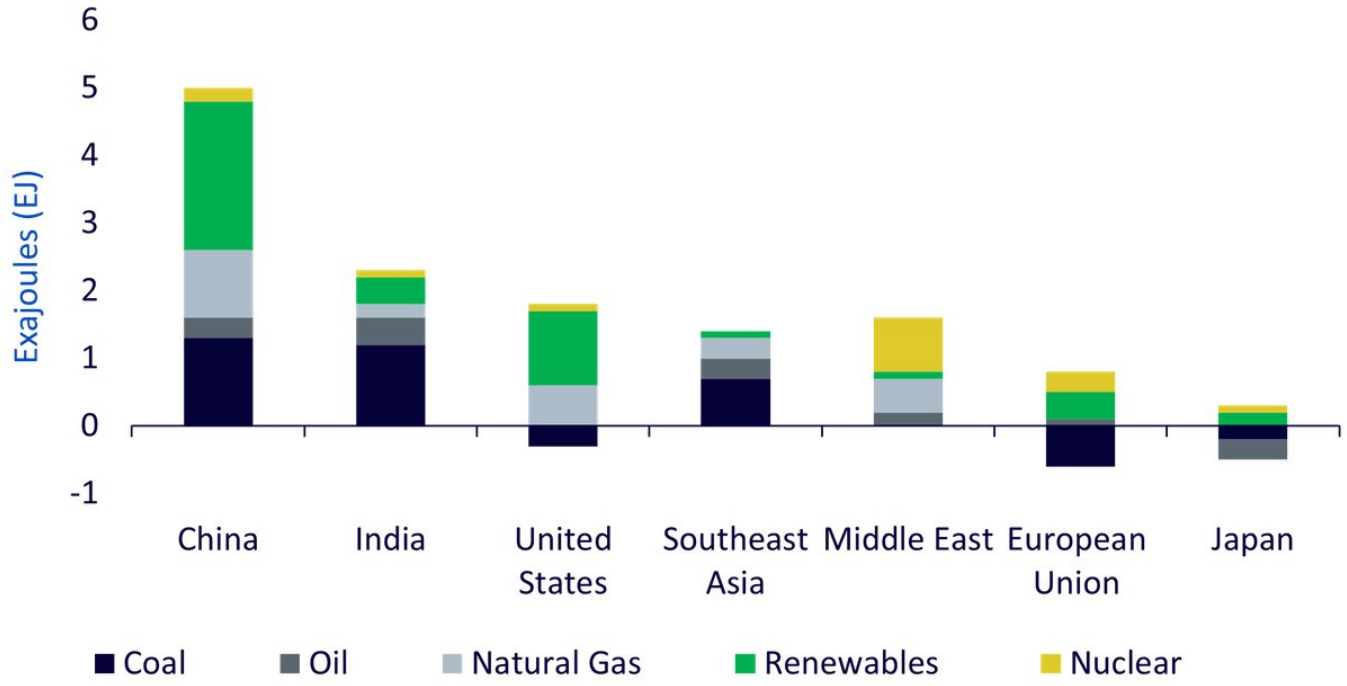
Second, LFP (lithium iron phosphate) batteries use iron phosphate as the cathode material instead of nickel or cobalt, making them safer, longer lasting and more affordable, albeit with slightly lower energy density. LFPs are becoming increasingly vital for both electric vehicles and grid storage due to their stability and cost efficiency. Innovations are improving their performance and density, with EVE Energy, Guoxuan High-Tech and Farasis Energy among the leaders driving development.

Third, industrial-scale lithium-ion systems. Companies such as GS Yuasa are developing large-scale, high-performance energy storage systems for factories, data centres, and renewable sites. These systems offer rapid response, long cycle life, and stable output to balance grids and provide backup power. Advances in safety, thermal management and modular scalability are now driving adoption across industrial and utility sectors worldwide.

Chinese stocks are on the charge

China is, without question, a leading frontier in both renewable energy and battery technology. Any investment strategy seeking to capture the full dynamics of these markets will naturally have meaningful exposure to China.

Figure 3: Change in energy demand in selected regions



The broader recovery in Chinese equities this year has certainly helped. But additional momentum has come from Beijing's renewed push for clean energy – including major investments in grid upgrades and energy storage – as well as global demand for low-cost solar panels, many of which are produced by Chinese companies.

Conclusion

Renewable energy kept advancing - and global deployment continued – even when markets were looking away. This year, falling interest rates have unlocked record funding, the data centre energy demand narrative has gathered pace, innovation in storage has taken centre stage, and Chinese stocks have bounced back, bringing renewable energy firmly into the spotlight once again.

For investors who had lost interest, now could be the time to revisit this theme.

[1]Bloomberg New Energy Finance, August 2025.

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