The Landscape of Chinese Renewable Energy Investment Overseas — Q1 2026

Bingcai Liu, Zhengyun Zhou, Wei Shen
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International Institute of Green Finance (IIGF)
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About this Publication

This policy brief is produced by the International Institute of Green Finance (IIGF) at Central University of Finance and Economics (CUFE), Beijing, China, in collaboration with the Institute of Development Studies (IDS), Brighton, UK. It presents a quarterly update of the D-CORE (Database of Chinese Overseas Renewable Energy Investment), tracking project activities recorded in Q1 2026 (January–March 2026). The findings reflect those of the authors and do not necessarily represent the views of IIGF or IDS.

Data Note

This quarterly edition draws on a curated, conservatively filtered extract of the D-CORE database comprising 596 verified project records spanning January 2025 to March 2026. Unlike the broader dataset used in the full-period report, this extract applies stricter source-quality thresholds, retaining only records with confirmed project-level details and a valid numeric installed-capacity figure. Each record represents one distinct project with its primary Chinese implementing entity; projects with multiple Chinese participants are consolidated into a single record to avoid double-counting. The comparison period (Q1 2025: January–March 2025) is drawn from the same filtered extract. Financing-model data, if available, is presented separately and should be interpreted as indicative rather than comprehensive.

Key Findings

- **Chinese overseas renewable energy activity accelerated in Q1 2026.** Project count rose from 93 in Q1 2025 to 129 in Q1 2026 (+39%), with total contracted capacity increasing from 27.5 GW to 36.3 GW (+32%). This growth reflects both a broader geographic spread and a deepening pipeline across all technological segments.
- **Solar PV retained its position as the most active segment by project count** (50 projects, 14.8 GW in Q1 2026, up from 43 projects and 10.4 GW in Q1 2025). Integrated Energy systems delivered the highest average project size at 354 MW per project, confirming the continued rise of bundled generation-plus-storage solutions in commercially mature markets.
- **Western Asia led all subregions by contracted capacity (17.5 GW, 21 projects),** driven by Saudi Arabia (6.6 GW, 7 projects) and the UAE (5.6 GW, 3 projects). Southeast Asia recorded the highest project count (30 projects), reflecting continued demand breadth across ASEAN markets.
- **LDC engagement expanded markedly:** projects in Least Developed Countries grew from 11 in Q1 2025 to 23 in Q1 2026. Solar PV dominated in both LDC and Non-LDC contexts, though Integrated Energy activities retained a comparatively higher share in LDCs, consistent with the deployment of solar-plus-storage solutions in markets with weaker grid infrastructure.
- **Blended financing led among identifiable financing structures,** accounting for 24 of 60 projects with financing data (40%) and 12.9 GW. The prevalence of blended structures suggests continued multilateral co-financing support for Chinese-involved renewable projects in developing markets.
- **CEEC and PowerChina continued to dominate,** with CEEC involved in 41 Q1 2026 projects — by far the most active firm. Private firms including HyperStrong, Trina Storage, and Sany Group featured prominently in storage and wind segments.

The substantial growth in Chinese overseas renewable energy activity recorded in Q1 2026 needs to be situated within China's broader policy framework for the 15th Five-Year Plan (FYP) period (2026–2030). The 15th FYP has made the preliminary establishment of a clean, low-carbon, safe and efficient new energy system a core national priority. Within this overarching framework, the FYP explicitly encourages Chinese enterprises to expand green energy cooperation abroad, promote the integration of trade and investment, and guide an orderly cross-border layout of industrial and supply chains. The Q1 2026 figures includes129 projects and 36.3 GW of contracted capacity, representing year-on-year increases of 39% and 32% respectively, which offer an early empirical signal of the momentum aligned with the national agenda of international energy cooperation, particularly with the Global South. The nearly doubling of projects in Least Developed Countries (LDCs) during the same period is a powerful example of this trend. In the following analysis, the newly emerged 129 projects were unpacked from technological composition, geographical distribution, developmental stage, financing models, and main actors. We also handpicked two representative cases for a deeper assessment.

Technological Composition

Solar PV remained the most active technology in Q1 2026 with 50 projects and 14.8 GW of contracted capacity, up from 43 projects (10.4 GW) in Q1 2025. The 16% increase in project count and 43% increase in capacity reflect a broadening of solar procurement across both established BRI markets and newer destinations, including Romania, Angola, and South Korea.

Integrated Energy systems (combined generation and storage) recorded 29 projects (10.3 GW) in Q1 2026, compared with 18 projects (10.2 GW) in Q1 2025. The 61% increase in project count alongside near-stable aggregate capacity indicates that while smaller integrated systems are proliferating across a wider set of host countries, the very large multi-GW hybrid complexes characteristic of MENA pipelines were less prevalent this quarter.

Energy Storage recorded 21 projects in Q1 2026, up from 12 in Q1 2025 — a 75% increase in project count, which nonetheless confirms accelerating demand for dedicated storage deployments, particularly in South Africa, Zambia, and Southeast Asia.

Wind Power grew from 11 to 15 projects (+36%), with capacity rising from 4.2 GW to 7.6 GW (+81%), driven by large-scale tendering in Kazakhstan, Saudi Arabia, and Vietnam. Hydropower grew modestly from 6 to 7 projects, with capacity rising from 2.3 GW to 3.4 GW, concentrated in Laos and Pakistan.

Biomass continued its gradual expansion (2 to 6 projects), while **Geothermal & Waste Heat** projects remained marginal. Taken together, Solar PV and Integrated Energy confirmed their roles as the twin pillars of China’s overseas renewable portfolio, with Wind Power emerging as a faster-growing third pillar in Q1 2026.

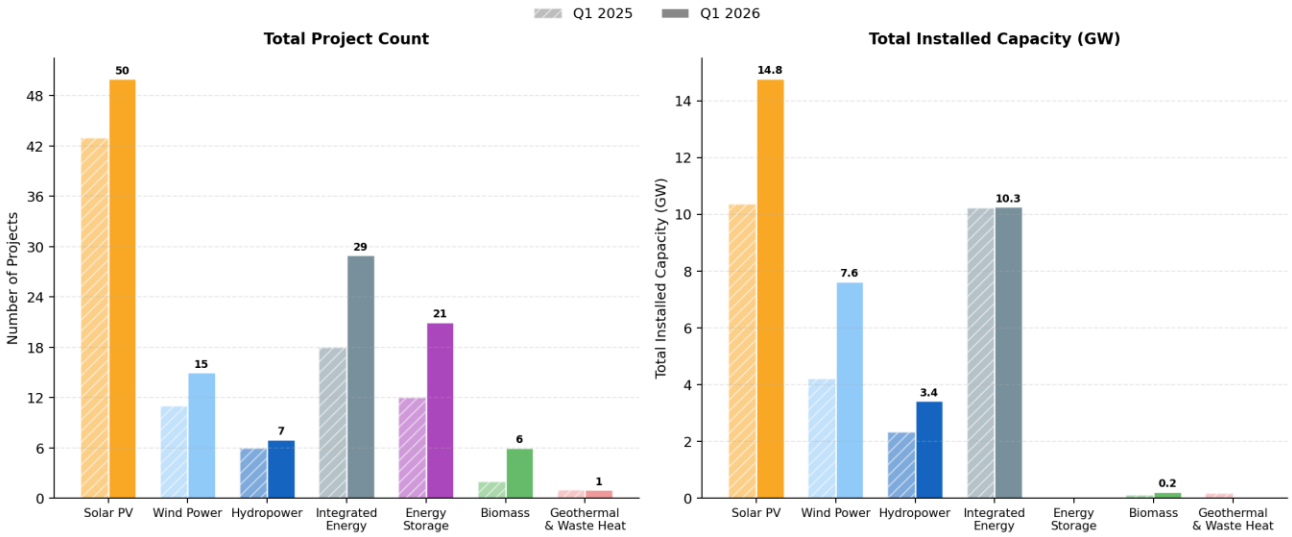


Figure 1. Chinese overseas renewable energy projects by total project count and installed capacity (GW) — Q1 2026 vs Q1 2025

Geographic Distribution

Southeast Asia led all subregions by project count in Q1 2026 with 30 projects, though its contracted capacity (5.1 GW) placed it second behind Western Asia. Vietnam (6 projects), Indonesia (5 projects), Malaysia (4 projects), and Thailand (5 projects) drove the region's expanding portfolio amid diverse procurement contexts. Laos retained its role as a major hydropower destination (2.5 GW across 5 projects).

Western Asia dominated by contracted capacity, reaching 17.5 GW across 21 projects. Saudi Arabia alone accounted for 6.6 GW across 7 projects, followed by the UAE (5.6 GW, 3 projects) and Kuwait (2.7 GW, 1 project). The scale of individual projects in the Gulf region reflects the continued deployment of large-scale solar and hybrid parks supported by sovereign off-takers and long-term PPA frameworks.

Central Asia recorded 13 projects (3.9 GW), led by Uzbekistan (5 projects, 1.0 GW) and Kazakhstan (3 projects, 2.3 GW). In this new edition, Central Asia's aggregate capacity is adjusted to reflect the new filtering system, which is now based on confirmed contracted figures rather than announced generation capacity.

Eastern Africa strengthened considerably, growing from 1 project in Q1 2025 to 9 projects in Q1 2026. Zambia (3 projects), and Tanzania featured prominently, indicating a deepening of Chinese renewable engagement across sub-Saharan Africa through modestly sized solar and storage deployments. Angola's 2.2 GW project stands out as an outlier in scale for the region.

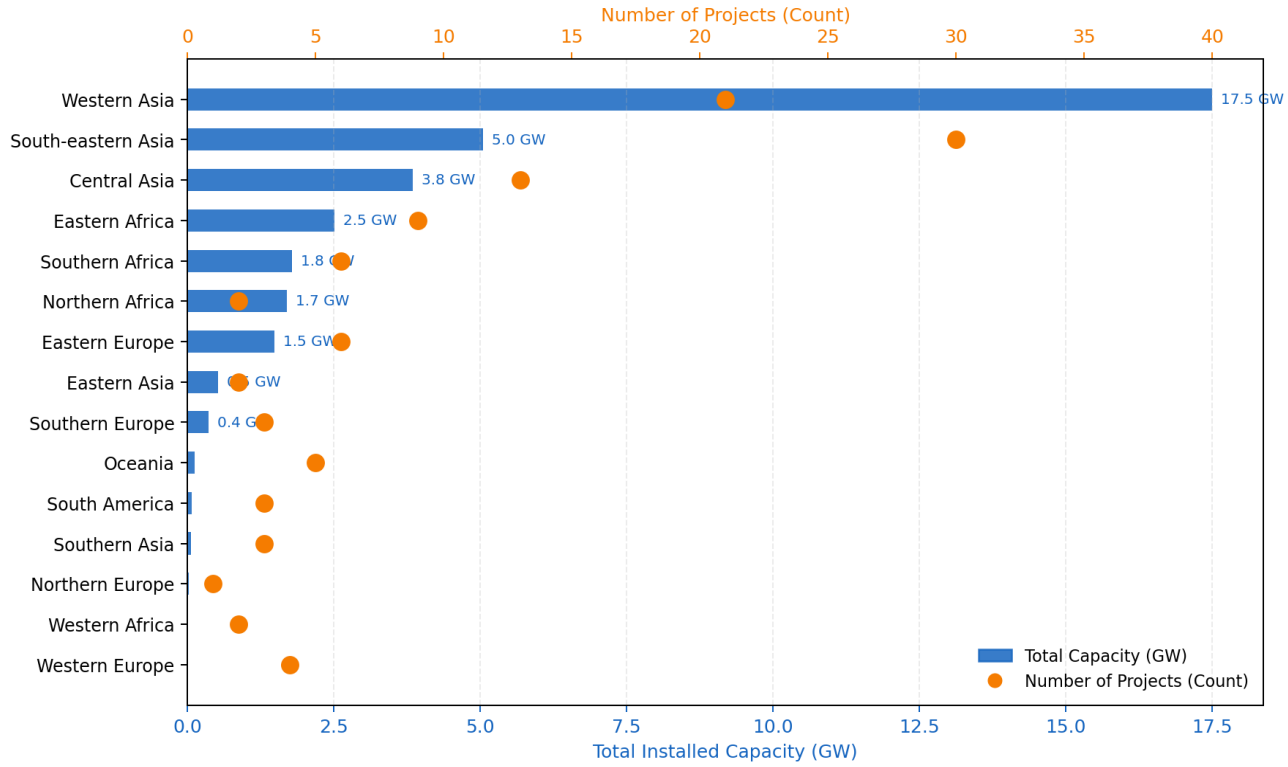


Figure 2. Total installed capacity (GW) and project count by subregion, Q1 2026

Among top individual host countries, Saudi Arabia (6.6 GW), the UAE (5.6 GW), and Kuwait (2.7 GW) lead by contracted capacity. Vietnam (6 projects) and Saudi Arabia (7 projects) led by project count.

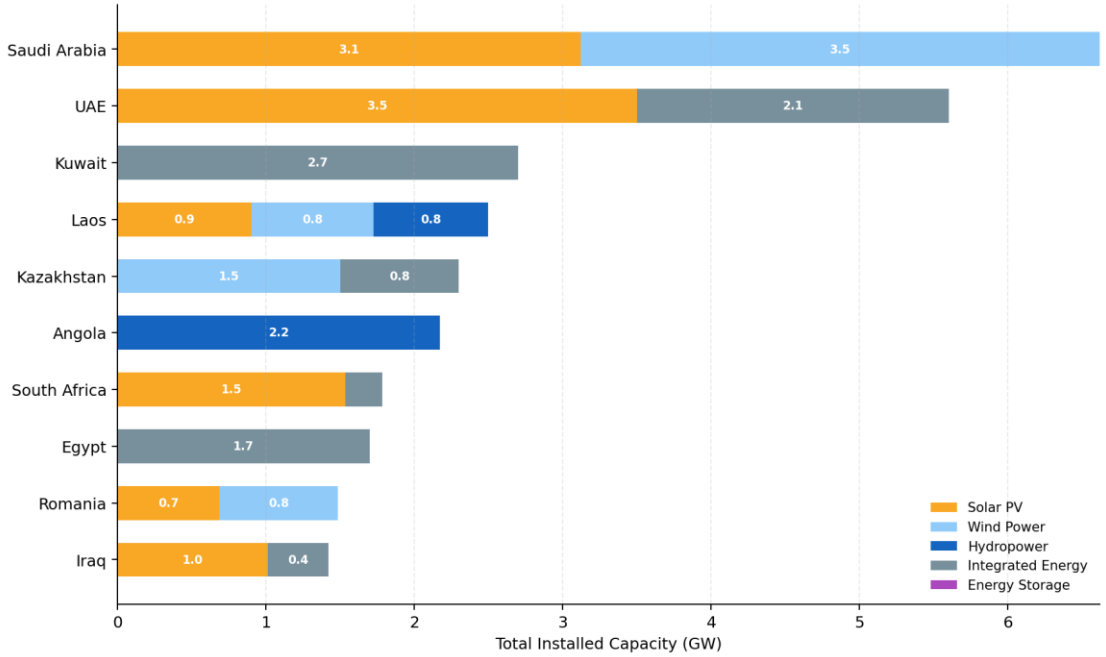


Figure 3. Top 10 countries by total installed capacity (GW) and energy category, Q1 2026

Development Stage: LDCs vs. Non-LDCs

Of the 129 projects recorded in Q1 2026, 23 were located in Least Developed Countries (LDCs), representing a significant expansion from 11 LDC projects in Q1 2025. This near-doubling in LDC engagement suggests that Chinese firms are increasingly active in lower-income markets, even as the bulk of contracted capacity remains concentrated in middle-income and high-income contexts.

Solar PV dominated in LDC markets, accounting for 9 of 23 LDC projects (39%), followed by Integrated Energy (7 projects, 30%) and Wind Power and Hydropower (3 projects each, 13% each). The notably high share of Integrated Energy in LDC contexts reflects the growing deployment of solar-plus-storage solutions in markets with weaker grid infrastructure, including Zambia, Tanzania, and Cambodia.

In Non-LDC markets, Solar PV also remained dominant (41 of 106 projects, 39%), with a stronger presence of Energy Storage (20 projects, 19%), which reflecting more developed grid environments and commercial off-take structures. Integrated Energy was also significant (22 projects, 21%), while Biomass activity was exclusively concentrated on Non-LDC markets (6 projects).

The technology differentiation between LDC and Non-LDC contexts is broadly consistent with the pattern identified in the previous D-CORE report (2022-2025): Chinese firms adapt their technology supply to host-countries' grid readiness and financing environment. Hydropower and hybrid solutions anchor the LDC portfolio, while more commercially driven markets attract a broader technological mix including dedicated storage and biomass.

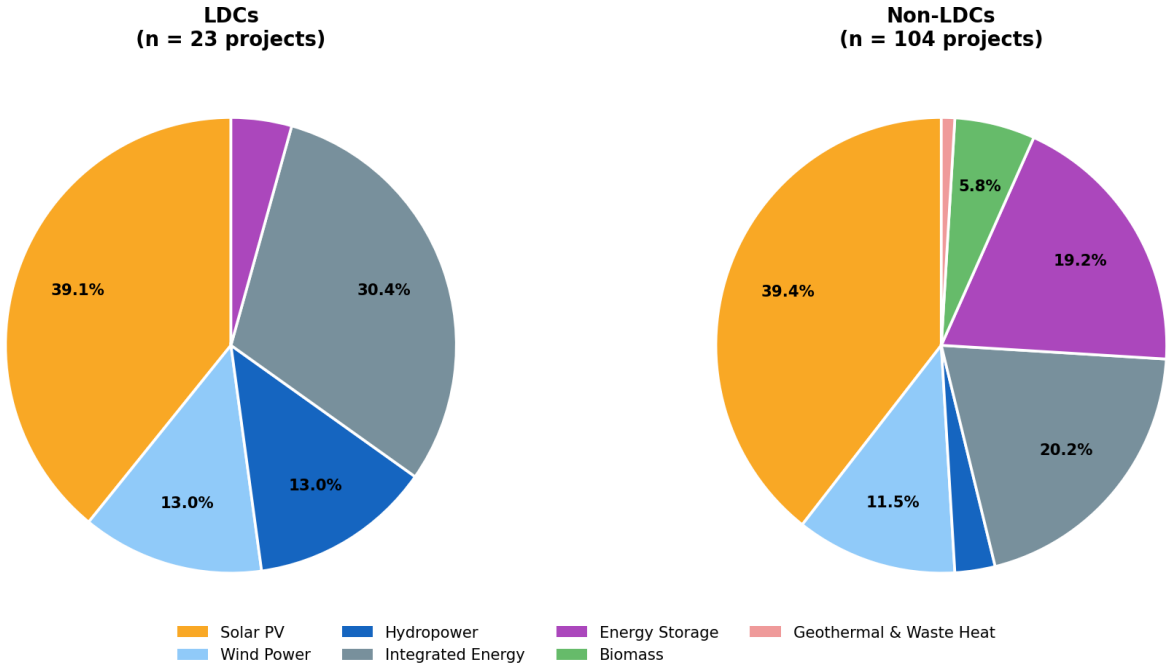


Figure 4. Project count by energy category: LDCs vs. Non-LDCs, Q1 2026

Financing Landscape

Financing-model data is available for 60 of 596 project records in the full dataset (approximately 10%), which should be treated as indicative of trends rather than a comprehensive account. This is mainly because financial information is often unavailable at earlier stages of project development. The low coverage of financing data reflects the broader challenges of tracing deal-level financial structures in Chinese overseas energy investment, as noted in the full-period report. However, three financing categories are identified from the available data: Blended Financing, Export Credit Financing, and Equity Financing.

Blended Financing was the most frequently recorded model with 24 projects and 12.9 GW of associated capacity. These projects typically involve co-financing between Chinese policy banks or development finance institutions (DFIs) and multilateral development banks (MDBs) or regional development banks (RDBs), often in markets where dubious sovereign creditworthiness or currency risk requires additional de-risk arrangement. Solar PV (10 projects) and Wind Power (5 projects) were the most common technology segments under blended arrangements.

Export Credit Financing covered 19 projects (5.7 GW), primarily Solar PV (8 projects) and Wind Power (4 projects). These transactions typically involve sovereign borrowing or/and concessional lending from Chinese policy banks (Exim Bank or CDB) to host governments or state utilities, with the Chinese EPC contractor receiving payment from the loan proceeds.

Equity Financing was recorded for 17 projects (2.0 GW), with a lower average project size than the other two categories. Equity-financed projects were distributed across Solar PV (7 projects), Wind Power (3 projects), and Biomass (1 project), concentrated in markets with more stable regulatory frameworks such as South Africa, Romania, and Australia. This is consistent with the previous finding that equity participation by Chinese firms increases in markets with transparent and predictable legal frameworks and bankable PPAs.

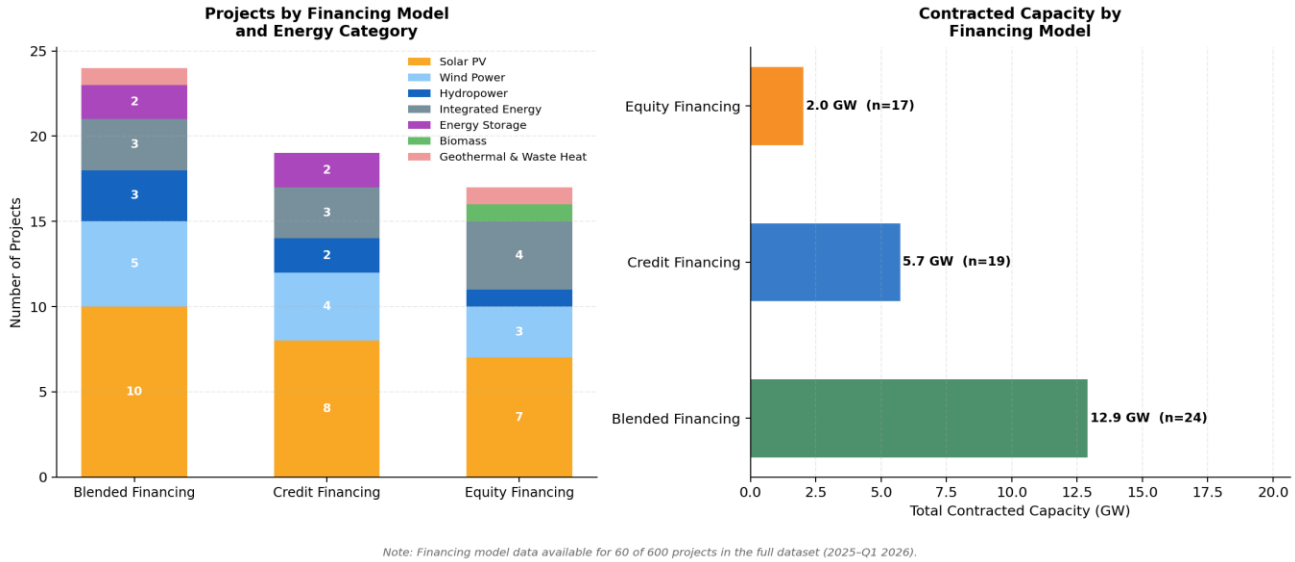


Figure 5. Financing model distribution by project count and energy category, and contracted capacity by financing model (full dataset, 2025–Q1 2026)

Key Actors Involved and Project Stages

Project Stage Distribution

Signed contracts were the most common project stage in Q1 2026 (57 projects, 44%), followed by those In Operation (26 projects, 20%) and just Awarded (24 projects, 19%). The high share of Signed and Awarded projects confirms an active contracting period, with a significant pipeline moving from tendering to execution. The 26 In Operation projects underscore the continued commissioning of projects contracted in prior periods.

Compared to Q1 2025, the share of In Operation projects grew meaningfully (from approximately 15% to 20%), suggesting that projects initiated during the 2022–2024 pipeline expansion are now reaching completion. Construction-stage projects (Construction Started + Under Construction) remained steady at around 15% of the quarterly total.

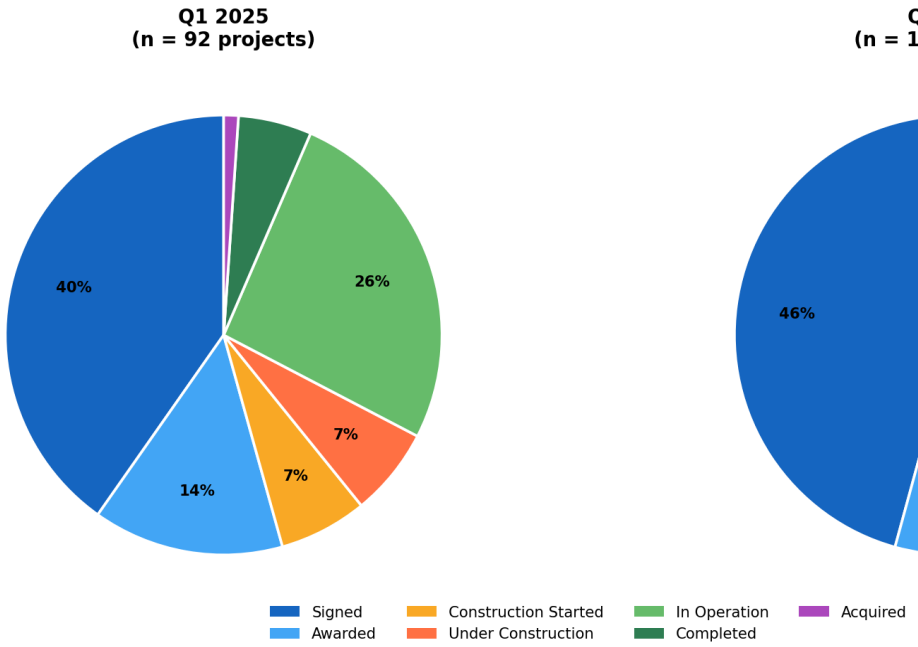


Figure 6. Project stage distribution: Q1 2025 (left) vs Q1 2026 (right)

Leading Chinese Companies

CEEC (China Energy Engineering Group) dominated Q1 2026 with 87 project involvements, consolidating its position as the pre-eminent Chinese firm in overseas renewable energy delivery. CEEC's leadership is mainly secured by its projects in Southeast Asia and Africa.

Among private firms, Hyper Strong (Haibo) emerged as the top-ranked storage specialist with 8 records, reflecting the rapid growth of Chinese battery storage deployment in markets such as Oman and South Africa. CHINT Group (7 records) and Sany Group (3 records) reinforced the presence of private-sector players in solar and wind equipment supply chains.

Whereas central SOEs still maintain the structural dominance, the growing footprint of private specialists in storage, solar modules, and wind equipment suggests a gradual broadening of the Chinese actor landscape in overseas renewable energy markets.

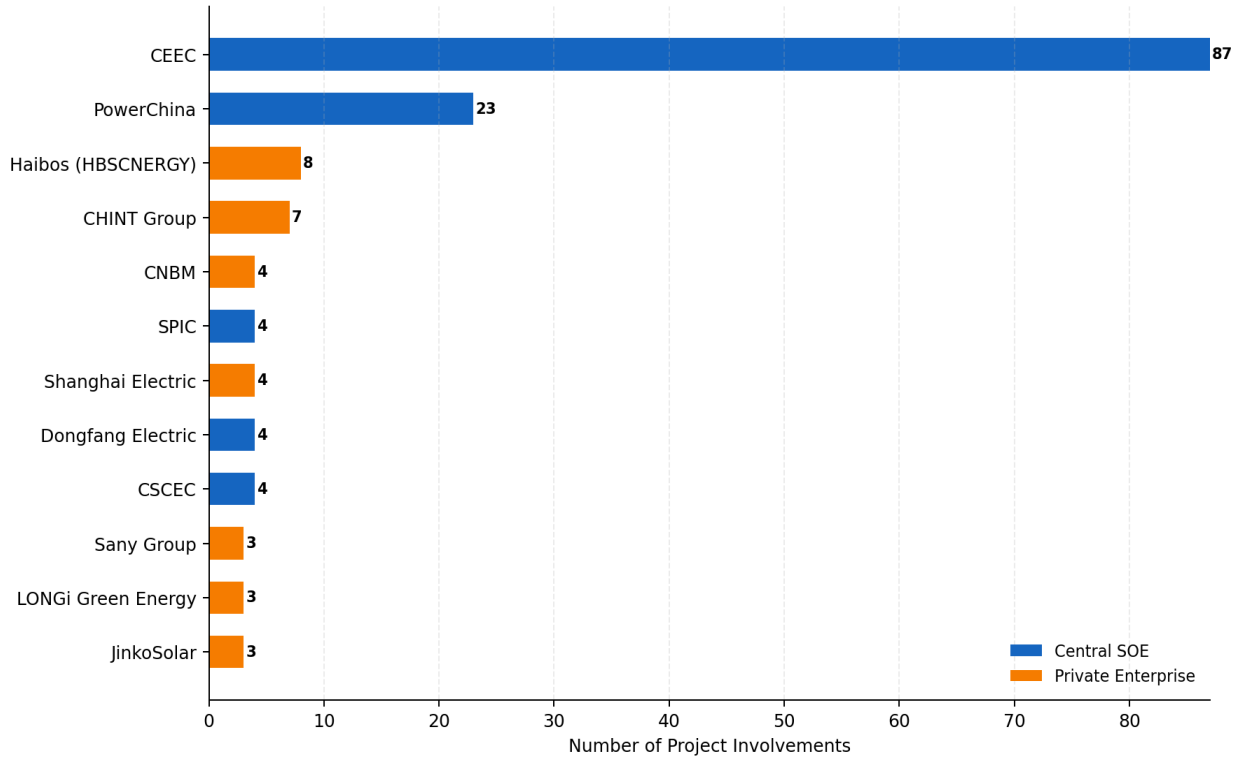


Figure 7. Top Chinese companies by number of projects, Q1 2026 (blue = Central SOE; orange = Private Enterprise)

EPC contracts continued to dominate Chinese involvement in Q1 2026, accounting for 49% of all involvement records (126 out of 257). This dominance is broadly consistent with the previous report (60% between 2022-2025), yet it is notably dwindling as blended and equity-linked roles expanded.

The most notable shift compared with Q1 2025 is the rise of combined EPC + Equity/Debt arrangements, from 2 records (0.9%) to 20 records (7.8%). This suggests that a growing subset of Chinese firms are layering financial participation on top of their traditional construction role, rather than limiting exposure to build-and-hand-over contracts, particularly those operating in markets with bankable PPAs and stable regulatory frameworks.

Pure Equity/Debt involvement remained steady at around 10% (25 records), while Equipment Supply edged down slightly from 66 to 60 records. BOT/BOOT arrangements (9 records) remained a small but persistent component, concentrated in hydropower and large solar concessions in South and South-east Asia.

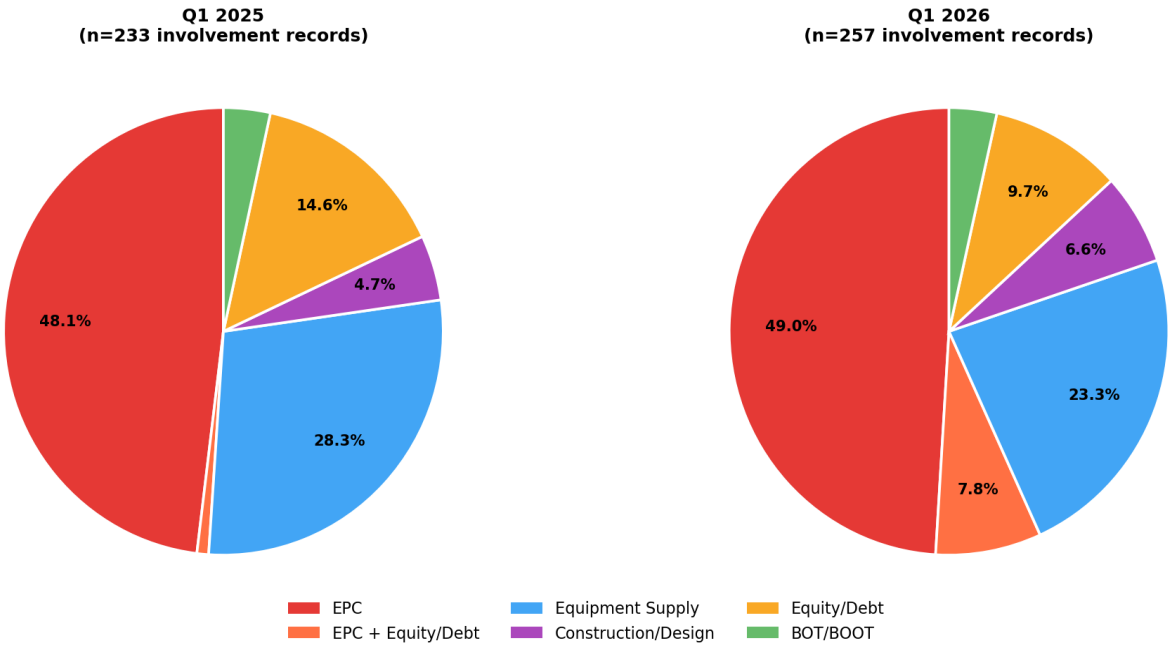


Figure 8. Project distribution by Chinese involvement type — Q1 2025 (left) vs Q1 2026 (right)

Representative Projects

Uzbekistan Jizzakh 500MW Solar Photovoltaic Power Plant

Executive Overview

The Jizzakh 500MW Solar PV Project, situated in the Forish District of the Jizzakh Region, represents a cornerstone of Uzbekistan's national strategy to diversify its energy mix and transition toward a low-carbon economy[1]. As one of the largest utility-scale solar installations in Central Asia, the project was developed under a investment framework led by Chinese SOEs, marking a significant milestone in the energy cooperation between China and Uzbekistan within the Belt and Road Initiative (BRI).

The project is particularly notable for reflecting the "**investment-construction-operation integration**" (投建营一体化) model that Chinese power enterprises are increasingly adopting overseas. By shifting from a pure EPC role to a full lifecycle investor and operator, Chinese firms are securing long-term, stable cash flows while deepening their participation in host countries' energy system.

Investment and Stakeholder Structure

The project was spearheaded by China Huadian, in partnership with China Electrical Equipment Group (CEEG). These entities jointly established the project company, Huadian Jizzakh Solar Power LLC, to oversee the investment and long-term operation of the asset. The EPC was executed by China State Construction Engineering Corporation (CSCEC), demonstrating a high degree of vertical integration from investment to infrastructure delivery.

Total direct investment in the project amounts to approximately 2.08 billion Chinese yuan (around USD 290 million). The project is structured as a pure equity investment by the Chinese consortium, with no publicly disclosed participation from MDBs as of the latest available information. This distinguishes it from other renewable projects in the region often financed by international lending syndicates.

Bankability of the Off-Taker Uzenergosotish

A critical enabler of the project's financial viability is the creditworthiness of the state-owned power purchaser, Uzenergosotish JSC. The ability of this entity to enter into a credible 25-year Power Purchase Agreement (PPA) is supported by several layers:

- **Sovereign credit linkage**: Uzenergosotish's credit profile is directly tied to the sovereign rating of Uzbekistan. In July 2025, Fitch upgraded Uzbekistan's long-term foreign-currency issuer default rating to BB (Stable), with Uzenergosotish receiving a corresponding upgrade.

- **Standardized PPP framework**: Uzbekistan has developed internationally recognised PPA terms, including take-or-pay clauses and government support letters, which have been validated through multiple successful renewables projects with international sponsors such as Masdar, ACWA Power, and EBRD.

These mechanisms collectively ensure that financiers can accept Uzenergosotish as a bankable off-taker, with default risk considered equivalent to that of the Republic of Uzbekistan itself.

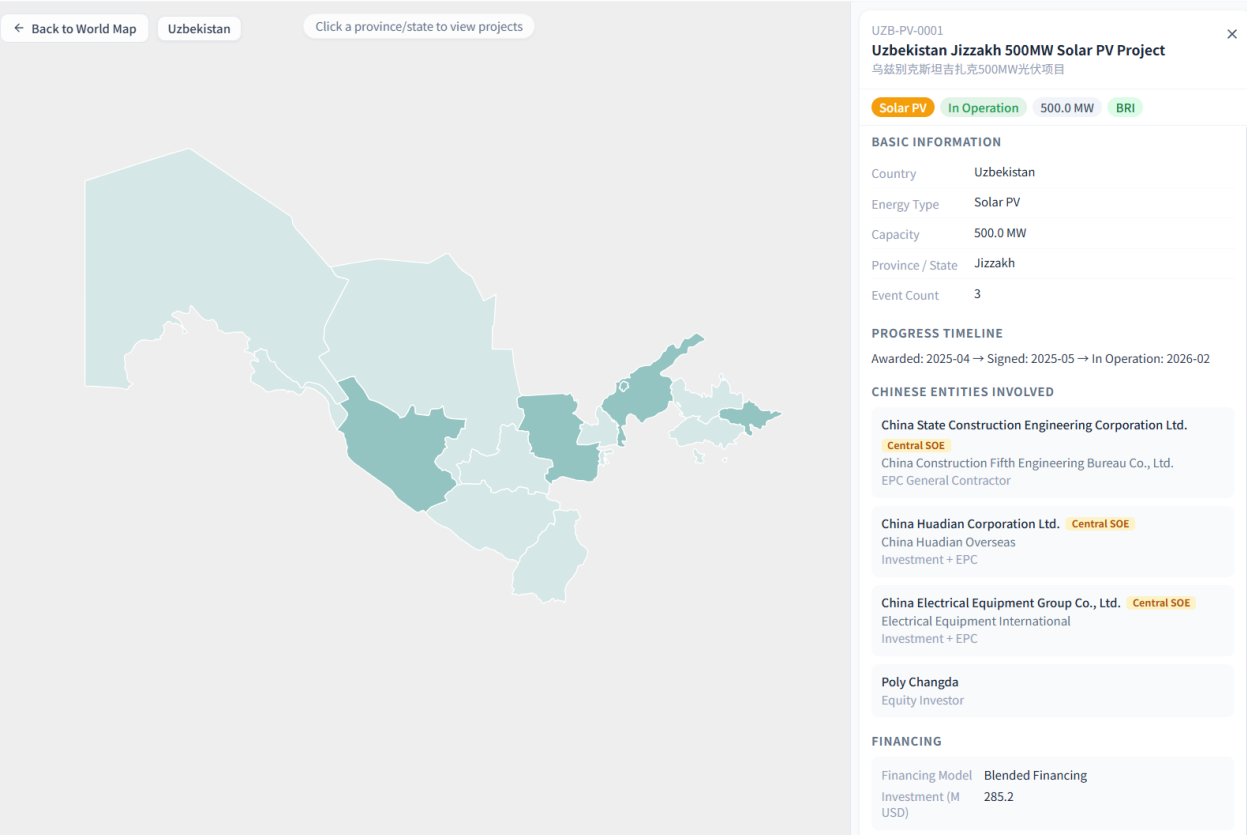
[1] https://guangfu.bjx.com.cn/news/20260104/1477709.shtml

Development Timeline and Operational Status

- **Strategic Inception**: The project was formalized in May 2023 during the inaugural China-Central Asia Summit, where a memorandum of cooperation was signed between China Huadian and the Ministry of Energy of Uzbekistan.
- **Contractual Finalisation**: Following the signing of the 25-year PPA with the National Electric Grid of Uzbekistan, the investment agreement was signed in April 2025.
- **Grid Connection**: The facility achieved its first phase of grid connection on December 5, 2025, attended by President Shavkat Mirziyoyev.
- **Full Commercial Operation**: The project reached full-capacity commercial operation on March 31, 2026, supplying approximately 1.1 billion kWh of clean electricity annually to the national grid.

The construction period of approximately 8.5 months (from first pile driving to full grid connection) exemplifies the incredible efficiency and execution capability, enabled by integrated investment-construction ownership and standardised Chinese solar PV supply chains.

According to the D-CORE database, there are altogether 5 projects with 0.96 GW capacity in the pipeline.



Ethiopia Aysha-II 120MW Wind Power Plant

Executive Summary

The Aysha-II Wind Power Project is a vital utility-scale renewable energy asset situated in the Aysha District of the Somali Regional State, Ethiopia. Located strategically near the borders of Djibouti and Somalia, the 120MW facility is a key component of the Ethiopian Electric Power (EEP) strategy to leverage the country's vast wind resources to diversify its hydro-dominant energy mix. The project reached full commercial operation on January 31, 2026, marking a significant milestone in East Africa's regional energy integration.

Stakeholder and Technical Framework

The project was executed under an Engineering, Procurement, and Construction (EPC) framework led by Dongfang Electric Corporation (DEC), one of China's leading power equipment manufacturers. The facility comprises 48 wind turbines, each with a capacity of 2.5MW, specifically engineered to withstand the high-temperature and high-wind-speed environment characteristic of the Aysha region. Ownership and operational control reside with the EEP.

Development Timeline and Financial Restructuring

Initiated in late 2015 with construction starting in 2017, the project faced extraordinary delays due to systemic risks including COVID-19, the Tigray War, and a sovereign credit crisis. After

external financing was withdrawn, EEP completed the project using its own revenues. On the inauguration ceremony, leaders from Ethiopia, Djibouti and Somalia all attended, acknowledging the regional value of the project and DEC's persistence through nearly a decade of compounded challenges.

A Testament to Chinese Long-Termism and Local Commitment

The completion of Aysha-II stands as a powerful testament to Chinese enterprises' long-termism and deep-rooted local execution capacity. For nearly a decade, Dongfang Electric Corporation (DEC) remained engaged in the project despite circumstances that would have driven many international contractors to withdraw. Even when financing stalled and payment flows became highly uncertain, DEC continued to maintain a presence on the ground, preserving the project's technical continuity and signalling as solid commitment to Ethiopia's energy aspiration. This persistence and endurance for short-term difficulties for long-term partnership is a defining characteristic of Chinese SOEs' approach to infrastructure development in frontier markets.

The Hard Realities of Project Delivery in an LDC

However, the Aysha-II story is equally a story of extraordinary difficulty, and an exemplary case study in the systemic barriers that confront infrastructure development in LDCs. What was originally conceived as a straightforward EPC project with a projected timeline of 2 or 3 years ultimately took nearly nine years to reach completion. This protracted journey reveals the harsh realities that lie beneath optimistic project planning.

Political Risk was the most volatile and destructive force. The outbreak of the Tigray War in November 2020, and its subsequent spread to the Afar region adjacent to the project site, directly threatened the security of personnel, equipment, and supply routes. For any infrastructure project, such conflict-induced uncertainty is the kiss of death for timely completion.

Currency and Exchange Rate Risks added another layer of systemic pressure. Ethiopia suffers from a chronic shortage of foreign currency, a classic feature of LDC macroeconomics. For a project heavily dependent on imported equipment (turbines, electrical systems, and specialized components sourced from China), securing foreign exchange to pay for imports was a persistent challenge.

Sovereign Credit Risk proved to be another obstacle. The financing package has been altered several times, and EEP ultimately stood up to complete Aysha-II using its own internally generated revenues.

Systemic Risks in Interplay

What makes the Aysha-II case so instructive is the interplay of these systemic challenges. Political risk (the war) exacerbated sovereign credit risk (as lenders recoiled from an unstable country), which in turn magnified currency risk (as EEP struggled to access foreign exchange amid disrupted capital flows). No single factor alone explains the nine-year delay; rather, it was the cascading combination of war, debt distress, and currency scarcity that turned a routine EPC project into a marathon.

A Conditional Success

Ultimately, the project's completion is a conditional success. It demonstrates that Chinese EPC contractors, with their high tolerance for delay and their willingness to remain committed through

political and financial turmoil, can serve as anchors of stability in fragile states. But it also reveals the outer limits of that model. As such, the project stands as a cautious achievement of persistence and partnership amid multiple uncertainties that plague the poorest countries in the age of polycrisis. Infrastructure delivery is never a purely technical exercise, but a continuous struggle against systemic volatility.

According to the D-CORE database, Aysha-II is the only project in the pipeline in 2026.

Conclusion:

The Q1 2026 data from the curated D-CORE extract reveals three structural signals that both reinforce and refine the findings of the full-period report.

First, the acceleration in project count (+39% year-on-year) is striking and suggests that Chinese overseas renewable activity is entering a new phase of scale. Whether this reflects a genuine step-change in deal flow or a pipeline catch-up effect from the 2023–2024 contracting surge will become clearer as subsequent quarters are added. The breadth of active host countries — spanning Sub-Saharan Africa, South-east Asia, Central Asia, and Europe — confirms that this is not a geographically narrow phenomenon.

Second, the LDC engagement story is evolving. The near-doubling of LDC project count in Q1 2026 coincides with a notable Integrated Energy presence (30% of LDC projects) in these markets, departing somewhat from the hydropower-centric LDC pattern documented for the 2022–2025 period. This may reflect the maturation of solar-plus-storage mini-grid procurement frameworks in East and Southern Africa, where Chinese firms with storage integration capabilities are increasingly competitive.

Third, the financing data — limited though it is — points to an important structural feature: blended financing structures are the most common identifiable model, consistent with an increasing role for MDB co-financing in enabling Chinese firm participation. This aligns with recent policy guidance encouraging Chinese enterprises to engage with multilateral financing platforms as part of the ‘high-quality BRI’ agenda. The relative scarcity of pure equity financing reflects the persistent caution of Chinese SOEs toward long-term balance-sheet exposure in markets with FX and regulatory risks.

Finally, behind the aggregate landscape lies a sharp divergence in delivery models on the ground: IPP-style investment in bankable middle-income markets (e.g., Uzbekistan) versus traditional, risk-exposed EPC contracting in LDCs (e.g., Ethiopia). The former aligns with 'high-quality BRI'; the latter remains vulnerable to the cascading risks of war, currency collapse, and sovereign default, and yet represents tremendous regional value for the most vulnerable economies amid multiple global crises. Retreating from LDCs at this moment is neither geopolitically wise nor developmentally just.

Looking ahead, the Q1 2026 data raises two critical questions about whether the strong project count growth will translate into equivalent capacity delivery, given that a significant share of projects remains at the early stages.

First, monitoring the transition from contracting to commissioning, and the financing structures that underpin it, will be central to understanding the real-world impact of Chinese overseas renewable energy investment in the Global South.

Second, the war on Iran will be a defining variable in the coming period. The Gulf states, including Saudi Arabia, the UAE, and Qatar are not only China's largest markets for renewable energy development but also its most strategic partners. A major escalation in the Gulf region would disrupt global energy prices, shipping routes, cross-border payment, and the security calculus for large-scale infrastructure projects across the Middle East. Any sustained conflict would therefore have cascading effects on project finance, supply chains, and risk premiums for Chinese-backed renewables far beyond the immediate theater, extending from Central Asia to East Africa. Whether Chinese overseas renewable activity can maintain its momentum in the face of such geopolitical turbulence will be a key test of the model's resilience.

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