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No New Coal

A SHIFT IN THE COMPOSITION OF CHINA'S OVERSEAS POWER PLANT PORTFOLIO?

BY DIEGO MORRO, ISHANA RATAN, JIAQI LU, KEVIN P. GALLAGHER

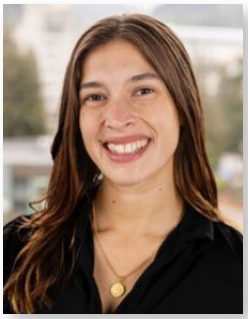
EXECUTIVE SUMMARY

In September 2021, Chinese leader Xi Jinping pledged that China would stop financing new overseas coal-fired power plants and instead pledged to ramp up support for renewable energy projects. This announcement marked an important shift in China's global energy policy, with potential to fill the glaring gaps in the financing necessary for the energy transition in developing countries.

An update to the China's Global Power (CGP) Database introduces new data on China's overseas power plant portfolio. This policy brief evaluates the implementation of China's 2021 pledge and offers both a recent and historical overview of China's overseas power plants in terms of capacity, carbon dioxide (CO_2) emissions, energy composition and investors.

The CGP Database tracks global power plants outside of China financed by foreign direct investment (FDI) and/or lending from China's two development finance institutions (DFIs): the Export-Import Bank of China (CHEXIM) and the China Development Bank (CDB). Managed by the Boston University Global Development Policy Center, the CGP Database also tracks and displays the deal types, Chinese investors and/or lenders, percentage of ownership by investor, amount of capacity in megawatts (MW), type of technology, operating status and the estimated annual CO_2 emissions of Chinese financed overseas power plants.

As promised, for the first time, the composition of Chinese overseas energy finance for both FDI and DFIs has shifted to green energy, and there has been no new investment in coal-fired power plants since 2021. However, this finding is complicated by two other key factors: first, the data shows an across-the-board downward trend in overall energy investment, and second, the overall stock



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remains heavily carbon intensive. New coal plants that were already in the pipeline before China made its pledge are still coming online and will emit carbon dioxide for decades going forward.

Key findings:

Recent trends: Post-2021 funding

- In 2022-2023, Chinese financiers committed nearly 5 GW of new capacity, mainly driven by greenfield investors (93 percent).
- New funding for coal has stopped. This shift indicates that Chinese DFIs, mergers and acquisitions (M&A) and greenfield investors are honoring Xi Jinping's 2021 pledge to halt financing for new coal-fired power plants abroad.
- However, new developments in coal power projects announced before 2021 suggest that coal may continue to represent a significant part of China's overseas power portfolio. Between 2022-2023, 8 GW of coal capacity became operational, with an additional 9 GW either planned or under construction, representing 19 percent of the capacity in the pipeline.
- Over 68 percent of overseas generation capacity funded in 2022 and 2023 was allocated to solar and wind renewable energy projects. In comparison, nearly 13 percent was directed towards solar and wind between 2000 and 2021.
- This shift does not represent a significant ramp-up in renewables, as the scale of financing remains relatively small—total renewable energy capacity funded between 2022 and 2023 is only 3 GW.

Overall trends: Cumulative capacity, emissions and investment profile

- **Capacity**: From 2000-2023, Chinese DFIs and investors backed 177 GW of power plant capacity, equal to roughly 6 percent of China's domestic electricity capacity. Seventy-five percent of this total capacity is already operational, while 25 percent is still under construction or in the planning stage. Financing is spread over 1,542 power units, representing 745 power plants in 96 countries.
- The overall stock of China's global power plants is still relatively carbon intensive, as fossil fuel projects represent 56 percent of cumulative operational capacity. Of this operational capacity, coal is the largest contributor at 36 percent. The next largest source is hydropower at 27 percent. Solar and wind total 14 percent while gas, nuclear, oil and other renewables (biomass, geothermal and waste) make up the remaining share.
- **Emissions**: In 2023, annual emissions from Chinese-funded power plants reached 287 million tons (Mt) of CO_2, which is roughly equivalent to the annual energy-related CO_2 emissions from the entire country of Malaysia or the United Arab Emirates (UAE).
- If plants currently under construction and planning come online, they will contribute an additional 53 Mt of CO_2 emissions, which would be analogous to the annual emissions of Austria.
- **Investment Profile**: From the launch of the Belt and Road Initiative (BRI) until the onset of the COVID-19 pandemic (2013-2019), Chinese investments averaged an annual capacity of approximately 16 GW, but this has fallen to 4 GW from 2020-2023. Both DFIs and investors have scaled back their involvement in overseas markets since reaching a peak in 2016.
- Chinese DFIs contributed 69 percent of the total coal power generation capacity and 40 percent of that of hydropower.
- Ninety-seven percent of wind and 96 percent of solar capacity financed by China came from FDI (greenfield and M&A).

- Greenfield and M&A portfolios are more diverse by energy source than DFIs, which are concentrated in coal and hydropower.
- Regionally, Asia receives the most Chinese funding in terms of capacity, primarily in coal power. The Americas and Africa follow, with hydropower as the most common energy source in both regions.
    - Wind and solar greenfield and M&A investments are heavily concentrated in the Americas (33 percent) and Asia (29 percent). Africa is only receiving 4 percent of the total renewable energy capacity contributed by Chinese firms.

China's global financing of electric power generation plays a key role in expanding global energy access and accelerating the transition to clean energy. The new update to the CGP Database holds three important insights that bring us closer to this goal.

First, while China has ceased funding for new coal projects, coal still accounts for 19 percent of the capacity in the pipeline. Redirecting or repurposing these projects towards cleaner energy sources could produce environmental benefits, potentially avoiding up to 41 Mt of additional annual CO_2 emissions.

Second, it highlights the need to prioritize decarbonization efforts in Asia. The region accounts for 71 percent of DFI-backed coal project capacity. Africa follows at 27 percent.

Finally, greenfield investments are not only the primary conduit for clean energy financing but also, between 2022-2023, lead power generation funding overall. To attract more investments that positively impact economic development, it is essential for host countries and China to identify projects with revenue potential, while adhering to high environmental, social and governance (ESG) standards. The Green Investment and Finance Partnership (GIFP) introduced by China in the 2023 Belt and Road Forum, serves as a platform to support Belt and Road Initiative (BRI) countries in

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developing green projects. By funding feasibility studies, risk analysis and technical support, the GIFP aims to build a robust pipeline of green projects for the future.

INTRODUCTION TO THE CHINA'S GLOBAL POWER DATABASE

China has financed electric power plants worldwide for several decades, and tracking such finance is increasingly important for understanding the social, economic and environmental impacts of China's overseas economic engagement. To better assess China's involvement, the Boston University Global Development Policy Center launched the China's Global Power (CGP) Database in 2020 and continues to update it biannually.

The CGP Database tracks power plants outside of China financed via foreign direct investment (FDI) and lending from China's two development finance institutions (DFIs): the Export-Import Bank of China (CHEXIM) and the China Development Bank (CDB). Power plants that are co-financed between DFI lending and FDI are included and classified accordingly. The database does not track power plant loans committed by Chinese commercial banks.

The CGP methodology integrates several distinct data sources to provide a comprehensive overview of China's role in the global power sector. First, power plants receiving loan commitments from China's DFIs are identified via the China's Overseas Development Finance (CODF) Database, which tracks loans from CDB and CHEXIM across all sectors worldwide.

Second, FDI data is obtained by identifying power plants owned by Chinese companies in the S&P Global World Electric Power Plants database. A list of Chinese companies is matched to firms recorded in the S&P data to identify Chinese ownership. The S&P dataset has key indicators such as power generation capacity (MW), project status, year of commission, fuel type and more. Investor and deal information is validated through online research. This provides CGP with greenfield power plant ownership data.

Third, the Dealogic platform is used to identify mergers and acquisitions (M&A) at both the company and power-plant level. Dealogic data, which does not provide detailed information about the power plants themselves (e.g. size, location), is cross-referenced with the S&P database. Only projects with more than 10 percent Chinese ownership are tracked. The database does not include investment amounts, as these figures are challenging to identify for each project. Additional methodological details can be found in the CGP Database Methodology note (Li et al. 2020) and in the Appendix.

This year's CGP Database update introduces a new feature: a power plant unit's year of funding. This variable represents the year that an equity investment[1] is made in the case of FDI (greenfield and M&A) and the year a loan is committed in the case of DFIs. This addition allows for temporal analysis of financial commitments, allowing researchers to track funding trends and evaluate the causal relationship between the time of financing, project completion and development outcomes.

RECENT TRENDS

Zero-Coal Pledge

In September 2021, Chinese leader Xi Jinping pledged to halt financing new coal-fired power plants abroad, promising to ramp up support for renewable energy projects in developing countries instead (Chinese Ministry of Foreign Affairs 2023). China's National Development and Reform Commission

[1] The year of equity investment is not always available, so researchers sometimes rely on publicly accessible proxy dates, such as project approval or the Memorandum of Understanding (MOU) signature dates for verified projects.

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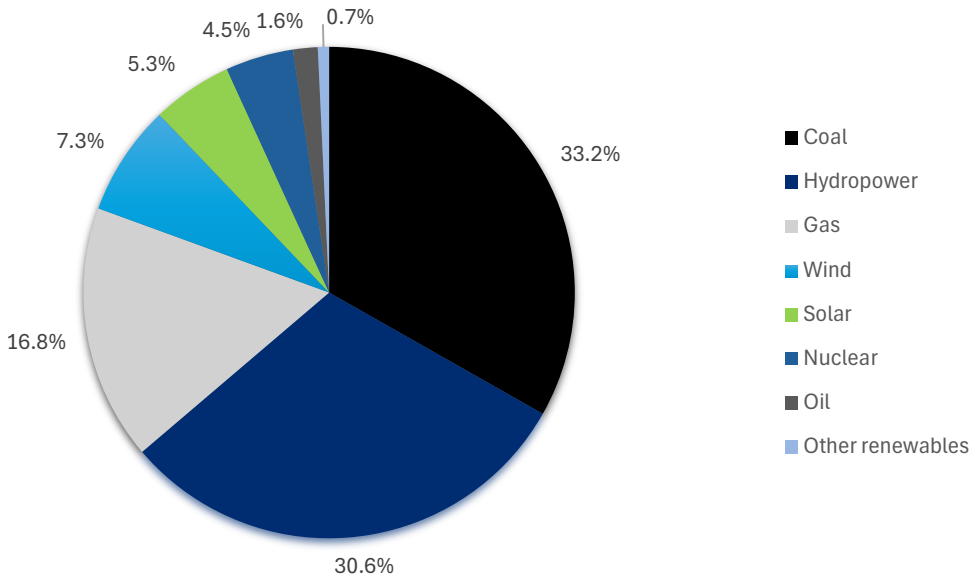
(NDRC) released subsequent guidelines explaining the details of the pledge in March 2022 (National Development and Reform Commission 2022). These rules indicated that China would not finance new coal power projects abroad, proceed "cautiously" with existing coal plants and encourage Chinese renewable energy companies to "go global."

This year's database update includes a methodological enhancement: the introduction of a power plant unit's year of funding, allowing for the analysis of funding trends since the 2021 pledge and historically. Between 2022-2023, Chinese financiers committed nearly 5 GW of capacity across different energy sources, mainly driven by greenfield investors (93 percent). Chinese DFIs, greenfield and M&A investors have not committed financing for new coal power plants in these past two years. This shift shows that both Chinese public institutions and private companies are aligned with Xi Jinping's 2021 coal pledge.

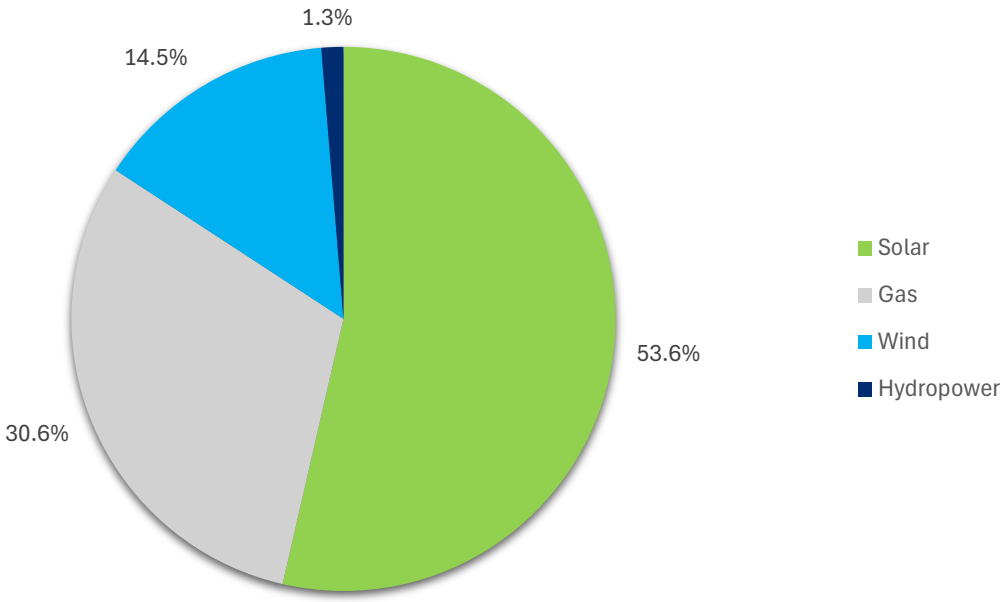
Figures 1 and 2 compare the capacity breakdown by energy source between 2000-2021 and 2022-2023. While Figure 1 indicates that historical power generation was dominated by coal, Figure 2 shows that investments in China's overseas power generation portfolio are less carbon intensive. Nevertheless, this is not a total pivot away from fossil fuels. In 2022, a Chinese fund invested in the Syrdarya power plant in Uzbekistan (Silk Road Fund 2022), representing 31 percent of total Chinese funded capacity in 2022-2023.

Figure 1: Chinese FDI and DFI Capacity by Energy Source, 2000-2021



Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

Figure 2: Chinese FDI and DFI Capacity by Energy Source, 2022-2023



Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

The share of renewable energy in China's portfolio has increased significantly. Solar and wind power dominate projects from 2022-2023 with a collective 68 percent of total capacity, a sharp contrast to just 13 percent of capacity between 2000-2021. The share of solar has increased from a mere 5 percent of capacity funded in the earlier period to 54 percent in 2022-2023. The share of wind has also risen, totaling 15 percent of 2022-2023 capacity. This shift does not represent a significant ramp-up, however, as the scale of financing remains small—total renewable energy capacity funded between 2022-2023 is only 3 GW.

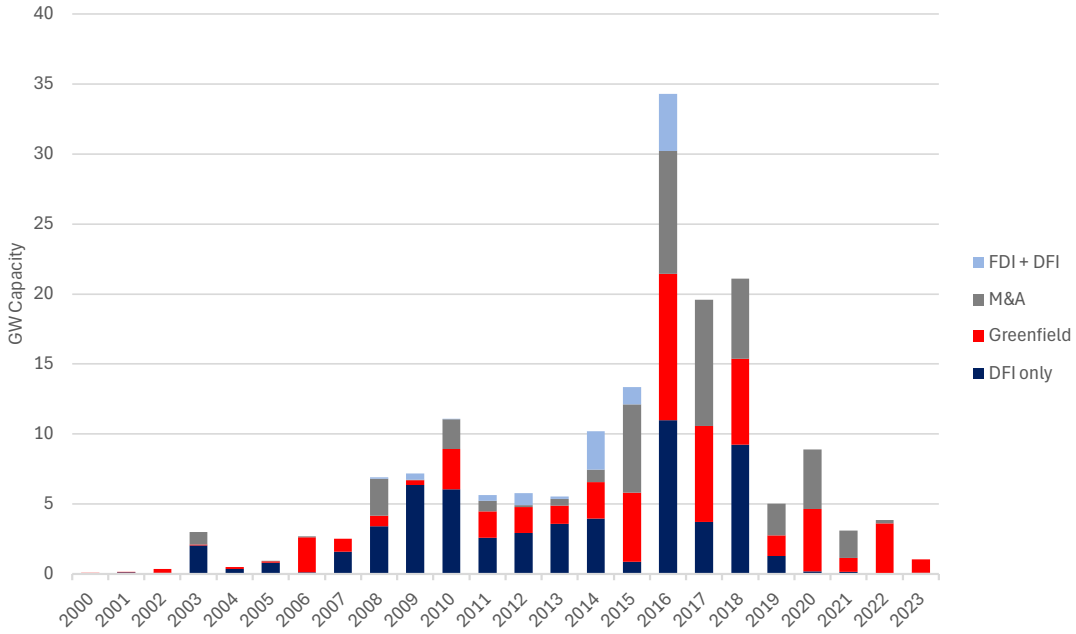
Hydropower takes a much less prominent role with only one project funded, accounting for just 1 percent of the post-2021 funded capacity. This project, a CHEXIM-funded hydropower plant in Madagascar, has a capacity of 64 MW, which is considerably smaller than the 'size' of the average hydropower plant (222 MW) funded between 2000-2021. The focus on smaller scale energy projects suggests that the 'small is beautiful' approach is beginning to shape Chinese overseas lending in the power generation sector. This approach, introduced by Xi Jinping in 2022, calls for smaller projects that promote beneficial environmental and social outcomes (Ray 2023).

This trend also indicates that Chinese actors are beginning to align with other international financial institutions in their pivot away from large-scale hydroelectric power due to growing environmental concerns, social movements and biodiversity impacts (Asian Development Bank 2023). While hydropower generation itself does not produce direct CO_2 emissions, hydropower reservoirs can lead to net greenhouse gas emissions (carbon dioxide and methane) if they submerge vegetation and organic matter (Fearnside 2016; Ocko and Hamburg 2019).

As shown in Figure 3, there has been a notable decline since 2018 in the amount of overseas capacity owned and funded by Chinese firms and DFIs. From the launch of the Belt and Road Initiative (BRI)

until the onset of the COVID-19 pandemic (2013-2019), Chinese investments averaged an annual capacity of approximately 16 GW. Between 2020-2023, annual capacity has declined to 4 GW.

Figure 3: Chinese DFI and FDI Capacity by Deal Type, 2000-2023



Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

Figure 3[2] illustrates that this reduction applies to DFIs and investors alike, as both have scaled back their involvement in overseas markets since reaching a peak in 2016. There are several factors that explain this overall reduction, including travel restrictions and limitations imposed by the pandemic, China's own domestic economic woes and in the case of DFIs, loan recipient countries' increasing indebtedness and rising interest rates (Engel et al. 2024).

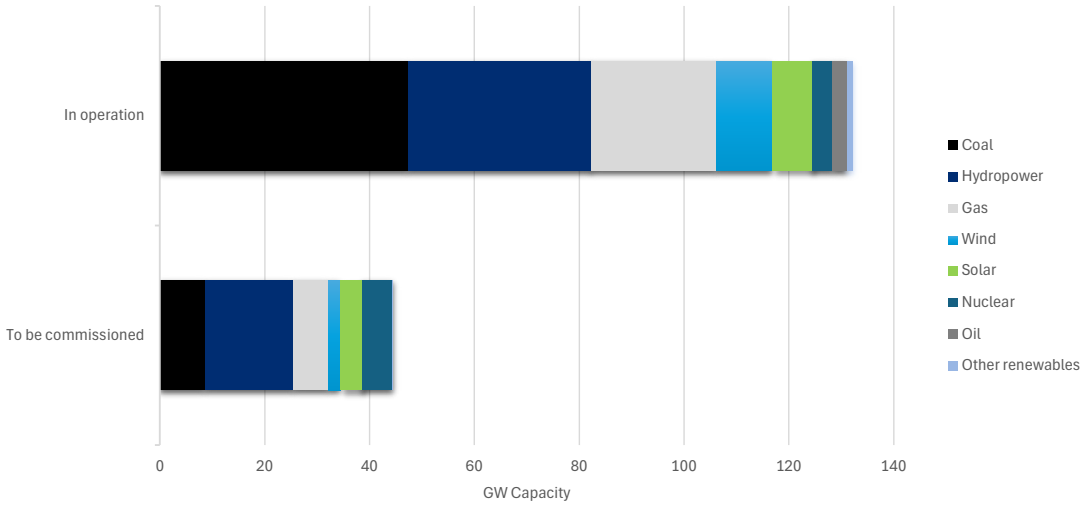
[2] Funding years were retrieved for 98 percent of all units (amounting to 98 percent of total capacity) in the database so year-by-year totals do not sum precisely to the total Chinese backed capacity (177 GW) due to limited missing data.

OVERALL TRENDS

Between 2000-2023, Chinese DFIs and investors backed 177 GW of power plant capacity, the equivalent of roughly 6 percent of China's domestic electricity capacity (Reuters 2024). Seventy-five percent of the capacity is operational, while 25 percent is under construction or under planning. This financing is spread across 1,542 power units, representing 745 power plants in 96 countries.

Figure 4 illustrates the energy mix of overseas power plant capacity financed by Chinese investors and DFIs, including plants under operation and to be commissioned (under construction/planning). Coal and hydropower dominate operational capacity, contributing 36 and 27 percent, respectively. Solar and wind total 14 percent while remaining energy sources, including gas, nuclear, oil and other renewables (biomass, geothermal and waste), make up the rest.

Figure 4: Energy Composition of Chinese DFI and FDI Capacity by Status, 2000-2023



Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

China's overseas power plant portfolio mainly consists of fossil fuel projects, representing 56 percent of operational capacity. However, fossil fuels only comprise 34 percent of capacity yet to be commissioned. Low-carbon energy sources, including hydropower, nuclear, wind, solar and other renewables, represent the majority of upcoming projects, comprising 66 percent. Among all these projects, hydropower leads with 38 percent of the capacity, followed by coal at 19 percent.

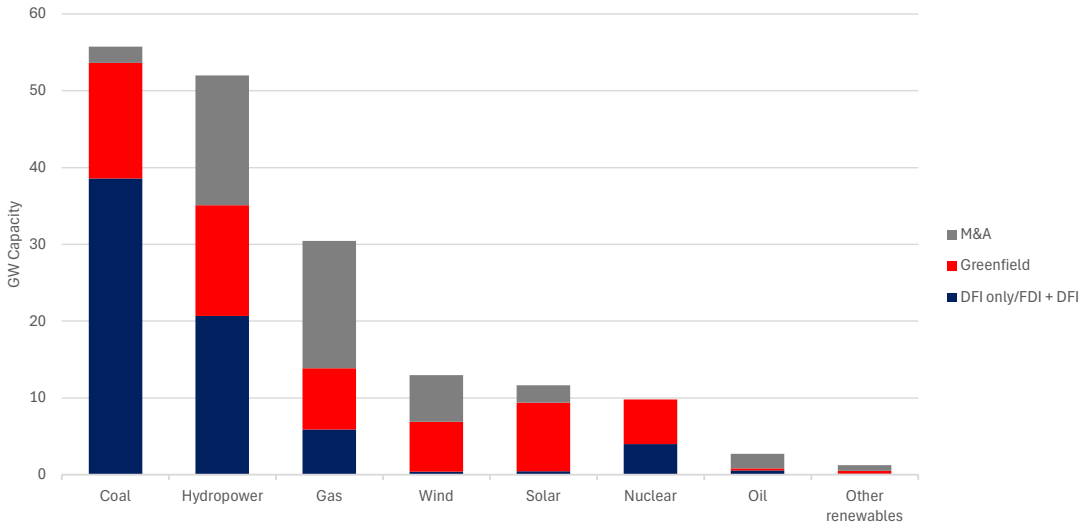
As of 2023, the annual emissions from these power plants reached 287 million tons (Mt) of CO_2, which is roughly equivalent to the annual energy-related CO_2 emissions from the entire country of Malaysia or the United Arab Emirates (UAE) (Energy Institute 2024). If the remaining plants end up being commissioned, they will contribute an additional 53 Mt of CO_2 emissions, roughly equivalent to the annual emissions of Austria (Energy Institute 2024). These projections are likely to be underestimating given that emissions from hydro-electric power plants, which can indirectly and directly trigger carbon emissions, are not included (Ocko and Hamburg 2019).

Investment Profile

FROM DEBT FINANCE TO EQUITY INVESTMENTS

Chinese DFIs have historically played a significant role in funding coal projects overseas, accounting for 69 percent of Chinese overseas financed coal power generation capacity. Figure 5 below illustrates capacity by energy source and deal type. Of these coal projects, CHEXIM financed 48 percent of capacity, CDB contributed 45 percent and 7 percent was co-financed by both institutions. DFI-backed coal projects are largely concentrated in two regions, with Asia receiving the majority (71 percent of capacity) and Africa following with 27 percent. The top three recipients of coal power loans are Indonesia (28 percent of capacity), South Africa (25 percent) and Vietnam (20 percent).

Figure 5: Energy Composition of Chinese DFI and FDI Capacity, 2000-2023



Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

While DFI financing is heavily concentrated in coal and hydropower, equity investors maintain a more diverse portfolio of energy projects. Among greenfield investments, projects are distributed across coal (25 percent), hydropower (24 percent), solar (15 percent), gas (14 percent) and wind (11 percent). M&A investment is similarly varied, balanced across hydropower (36 percent), gas (36 percent) and wind (13 percent). M&A investments feature a high share of gas that is not observed in DFI's lending portfolio. China prefers M&A in the natural gas sector because it has limited natural gas reserves, and acquisitions facilitate ensuring stable supply for domestic consumption (Sandalow et al. 2018).

FDI has been the driver behind nearly all of China's overseas wind and solar projects. Chinese greenfield and M&A investments together account for 97 percent of wind and 96 percent of solar power capacity. Wind and solar investments are heavily concentrated in the Americas (33 percent) and Asia (29 percent). Africa is only receiving 4 percent of the total renewable energy capacity contributed by Chinese firms.

Solar investments are primarily led by specialized solar companies such as Jinko Solar, Risen Energy and Trina Solar, though traditional power generation firms are increasingly expanding into the sector. Notably, over the past three years, China Three Gorges Corporation has shifted its focus to solar and wind projects, with no new investments in international hydropower plants.

CONCLUSION AND FUTURE OUTLOOK

Global financing of electric power generation has significant development implications, as increased electrification rates can drive economic growth and expand energy access. At the same time, power plants have substantial environmental impacts, particularly due to the emissions and pollution caused by fossil fuel combustion. China's overseas financing plays an important role in addressing global energy access challenges and is a key topic in the ongoing shift to clean energy. China's global energy financing is increasingly aligned with the green transition, with the next focus being a return to scale.

As these data show, the overall stock of China's overseas power plant portfolio is still heavily concentrated in fossil fuel projects, representing 56 percent of operational capacity, with coal being the largest contributor at 36 percent. The emissions from Chinese-funded power plants are significant: In 2023, annual emissions from these power plants reached 287 Mt of CO_2, which is roughly equivalent to the annual energy-related CO_2 emissions from the entire country of Malaysia or the UAE (Energy Institute 2024).

In 2021, Xi Jinping pledged to halt financing new coal-fired power plants abroad, promising to ramp up support for renewable energy projects instead. China's NDRC issued subsequent guidelines, indicating that China would not finance new coal power projects abroad, proceed "cautiously" with existing coal plants and encourage Chinese renewable energy companies to "go global" (National Development and Reform Commission 2022).

Since this announcement, China's overseas power plants portfolio has shifted to cleaner energy sources: new funding for coal has ceased, and 2023 saw no new financing for fossil fuels. Financiers are pivoting away from large-scale hydro investments, with 68 percent of capacity funded in 2022-2023 being directed towards being directed toward wind and solar energy.

However, new developments in coal power projects announced before 2021 suggest that coal may continue to represent a significant part of China's overseas power portfolio. Between 2022-2023, 8 GW of coal capacity became operational, with an additional 9 GW either planned or under construction, representing 19 percent of the capacity in the pipeline. If these projects move forward, they are estimated to add 41 Mt of annual CO_2 emissions. While it remains uncertain whether more projects will be delayed, some analysts note that Chinese-backed coal projects that are yet to be commissioned have continued to progress, advancing into construction or pre-permitting phases, suggesting China is likely to follow through with some of these plans (Centre for Research on Energy and Clean Air 2022).

The level of clean energy financing does not yet amount to the "strong support" for green energy in developing countries that Xi Jinping referenced in his 2021 speech (Chinese Ministry of Foreign Affairs 2023). Indeed, the scale of financing remains relatively modest, with only 3 GW of total renewable energy capacity funded between 2022-2023. Moreover, this funding is heavily concentrated in Asia and the Americas, while Africa—despite being the only region with declining electrification rates (Adjei 2024)—received a mere 4 percent of this total. Notably, Chinese greenfield investors have largely avoided the continent, limiting renewable energy expansion where it is most needed.

For Africa, the recent pledge at the 9th Forum on China-Africa Cooperation (FOCAC) could mark a shift, as Xi Jinping committed $51 billion to support Africa's development over the next three years, including the construction of 30 new clean energy projects (Wu 2024). Many African countries face significant debt pressures, making them less likely to borrow from CHEXIM or CDB for large-scale power plants. However, new DFI commitments could still play a role, particularly through

smaller-scale projects that align with the "small is beautiful" approach, focusing on wind, solar or even small hydropower—such as CHEXIM's 2023 commitment to fund the 64 MW Ranomafana Hydropower Plant in Madagascar.

While the full impact of the FOCAC pledge remains to be seen, China has already begun developing the infrastructure framework to facilitate the implementation of the forum's green agenda. For instance, in the 2023 Belt and Road Forum, China unveiled the Green Investment and Finance Partnership (GIFP) (Zhang and Gallagher 2023). Such initiatives hold the potential to advance sustainable development, helping developing countries achieve their green energy objectives.

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APPENDIX

Updates to the China's Global Power Database Methodology

The initial methodology used to create the China's Global Power (CGP) Database is described in the CGP Database Methodology Note published in 2020 (Li et al. 2020). The updated dataset includes not only new entries but also revisions to existing data as new information becomes available. This ensures that the dataset reflects the most up to date information, building from CGP Database, 2022. This update follows the same basic approach, with some updated source data and minor methodological adjustments, noted below.

We used an updated version of the S&P Global World Electric Power Plants database (WEPP) through December 2023 that is used to identify project physical attributes. We followed the same methodology for estimating annual CO_2 emissions. The capacity factor by fossil fuel type used relies on data from International Energy Agency (IEA) World Energy Outlook scenarios (IEA 2019). The assigned capacity factor for coal-, gas- and oil-fired power generators are 56 percent, 39 percent and 23 percent, respectively. For emissions factor, the matrix used (Tong et al. 2018) provides region-specific emissions factors for coal, gas and oil power plants while taking into account different steam types, sizes of the plant and qualities of fuel. The table below details the matrix estimates.

Table A1: Emission factor (g/KWh) by Region and Fuel Type

	Emission factor (g/KWh)		
Region	**Oil**	**Gas**	**Coal**
China	211	455	864
India	1099	456	1,668
US	1323	487	1,015
Europe	782	453	1,237
Russia	1171	713	1,418
Rest of Asia	657	566	959
Latin America	660	464	889
Canada	660	464	889
Africa	869	535	1,273
Middle East	869	535	1,273
Rest of World	1248	505	1,157
Global	788	527	1,044

Source: Tong et al. 2018.

As many power plants have multiple generating units, some of which may be built or operationalized across different years, with different financing sources, the CGP Database is disaggregated at the power generating unit level. When the breakdown by unit is unavailable, the power plant in its entirety is used. The capacity noted in each row corresponds to the capacity of an individual unit which may or may not be part of a larger plant.

The projects in the database have various degrees of Chinese participation. For projects with Chinese FDI, Chinese investor's ownership ranges from 10 percent to 100 percent. The common threshold for FDI is 10 percent of voting shares, as this allows for significant influence over the management of a target company. The list of Chinese companies investing in power generation overseas was updated with target companies acquired by Chinese companies identified in Dealogic. Additional Chinese companies were added to the list by supplemental research.

The updated downloadable data now has a CGP ID column which serves as the primary key or unique identifier of each row in the dataset. In addition, there is a BU ID to facilitate merging plant units with lending data from other databases managed by the Boston University Global Development Policy Center (GDP Center), such as the China's Overseas Development Finance (CODF) Database, the China's Global Energy Finance (CGEF) Database or the Chinese Loans to Africa (CLA) Database. Some units or projects that are DFI financed will have more than one BU ID (separated by a comma) because certain power plants have been financed by one or more loans.

A new column called 'funding year' has been created. It was retrieved from manual verification and cross-checking with the China Overseas Finance Inventory (COFI) Database, which tracks Chinese equity and debt investments in the power-generation sector in BRI countries (Zhou et al. 2022). This variable represents the year that an equity investment is made in the case of FDI (greenfield and M&A) and the year a loan is committed in the case of DFIs. The year of equity investment is not always available, so researchers sometimes rely on publicly accessible proxy dates, such as project approval or the Memorandum of Understanding (MOU) signature dates for verified projects. This addition allows for temporal analysis of financial commitments, allowing researchers to track funding trends and evaluate the causal relationship between the time of financing, project completion and development outcomes.

For units involving Chinese development finance, the CODF Database is referenced. For units involving FDI, the effort focused on providing one Chinese source and one international source. The GDP Center Database Methodology Guidebook has more information on double verification and source prioritization (2023).

Analysis of Differences from the China's Global Power Database, 2022

Table A2 shows how the 2025 database release compares with the previous release across a variety of metrics. 162 entries were removed, and 281 entries were added. Table A3 lists the removed entries. The entries that were added and changed with new attribute information are available upon request.

Table A2: Comparison of CGP Database 2022 and 2025 versions

Metric	2022 Version	2025 Version
Total Capacity (MW)	171595	176643
Number of Power Projects	1423 units (648 plants)	1542 units (745 plants)
Number of Countries	92	96
Annual CO_2 Emissions from Operating Units (Mt)	245	287
Coal Capacity Share (%)	34	32
Solar and Wind Capacity Share (%)	12	14

Source: China's Global Power Database, Boston University Global Development Policy Center, 2022 and 2025.

Table A3: Entries Removed from the CGP Database in the 2025 Update

Unit Name	Capacity (MW)	Year of Commission	Technology	Country	Deal type
Antu Newen Solar Plant (20 MW)	20	2022	Solar	Argentina	M&A
Blue Grass Solar Plant (200 MW)	200	2020	Solar	Australia	M&A
Talinga Gas Plant (5 MW)	4	2021	Gas	Australia	Greenfield
Carmody's Hill Wind Farm (270 MW)	270	Pending	Wind	Australia	Greenfield
Clarke Creek Solar Plant (400 MW)	400	Pending	Solar	Australia	Greenfield
Meghnaghat Pendekar Gas Plant Unit 1 (150 MW)	150	2016	Gas	Bangladesh	M&A
Meghnaghat Pendekar Gas Plant Unit 2 (150 MW)	150	2016	Gas	Bangladesh	M&A
Meghnaghat Pendekar Gas Plant Unit 3 (150 MW)	150	2016	Gas	Bangladesh	M&A
Chapai Nawabganj Oil Plant (100 MW)	100	2017	Oil	Bangladesh	Greenfield
Kushiara Gas Plant Unit 1 (109 MW)	109	2018	Gas	Bangladesh	Greenfield
RPCL Gazipur Oil Plant Unit 2 (100 MW)	100	2019	Oil	Bangladesh	Greenfield
Nilphamari Solar Plant (100 MW)	100	Pending	Solar	Bangladesh	Greenfield
Lagoa Do Mato Wind Farm (4 MW)	4	2017	Wind	Brazil	M&A
Santa Rosa-Mundo Novo Wind Farm (122 MW)	122	2023	Wind	Brazil	Greenfield
Morrinhos Wind Farm (30 MW)	30	Pending	Wind	Brazil	M&A
Pereira Barreto Solar Plant (199 MW)	199	Pending	Solar	Brazil	Greenfield
Long Lake Gas Plant Unit 1 (85 MW)	85	2007	Gas	Canada	Greenfield
Long Lake Gas Plant Unit 2 (85 MW)	85	2007	Gas	Canada	Greenfield
Busanga Hydropower Plant Unit 1 (60 MW)	60	2023	Hydropower	Democratic Republic of Congo	Policy bank only
Busanga Hydropower Plant Unit 2 (60 MW)	60	2023	Hydropower	Democratic Republic of Congo	Policy bank only
Busanga Hydropower Plant Unit 3 (60 MW)	60	2023	Hydropower	Democratic Republic of Congo	Policy bank only
Busanga Hydropower Plant Unit 4 (60 MW)	60	2023	Hydropower	Democratic Republic of Congo	Policy bank only
Guanaco Solar Plant (57 MW)	57	2020	Solar	Chile	M&A
La Cruz Solar Plant (58 MW)	58	2020	Solar	Chile	M&A
Uribe Solar Plant (57 MW)	57	2020	Solar	Chile	M&A
Djoum Solar Plant (0.5 MW)	0	2018	Solar	Cameroon	Policy bank only
Tarapoa Refinery Gas Plant Unit 1 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 10 (7 MW)	7	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 2 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 3 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 4 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 5 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 6 (3 MW)	3	2000	Gas	Ecuador	Greenfield

Unit Name	Capacity (MW)	Year of Commission	Technology	Country	Deal type
Tarapoa Refinery Gas Plant Unit 7 (3 MW)	3	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 8 (7 MW)	7	2000	Gas	Ecuador	Greenfield
Tarapoa Refinery Gas Plant Unit 9 (7 MW)	7	2000	Gas	Ecuador	Greenfield
Abuela Santa Marta Wind Farm (37.5 MW)	38	2007	Wind	Spain	Greenfield
Abanilla Solar Plant (4 MW)	4	2020	Solar	Spain	M&A
Argamasilla Solar Plant (0.5 MW)	0	2020	Solar	Spain	M&A
Benahadux Solar Plant (11 MW)	11	2020	Solar	Spain	M&A
Calzada De Oropesa Solar Plant (15 MW)	15	2020	Solar	Spain	M&A
Carmona Solar Plant (4 MW)	4	2020	Solar	Spain	M&A
Castelnou Solar Plant (4 MW)	4	2020	Solar	Spain	M&A
Ecija GA Solar Plant (1 MW)	1	2020	Solar	Spain	M&A
El Viso Solar Plant (3 MW)	3	2020	Solar	Spain	M&A
Fuente Alamo Solar Plant Unit 1 (26 MW)	26	2020	Solar	Spain	M&A
Fuente Alamo Solar Plant Unit 2 (8 MW)	8	2020	Solar	Spain	M&A
Hernansancho Solar Plant (0.5 MW)	0	2020	Solar	Spain	M&A
Jerez Solar Plant (2 MW)	2	2020	Solar	Spain	M&A
La Robla Solar Plant (13 MW)	13	2020	Solar	Spain	M&A
Lorca Zarcilla Solar Plant (386 MW)	386	2020	Solar	Spain	M&A
Moraleja Solar Plant (0.5 MW)	0	2020	Solar	Spain	M&A
Ochandauri Solar Plant (0.5 MW)	0	2020	Solar	Spain	M&A
Olivenza Solar Plant (1 MW)	1	2020	Solar	Spain	M&A
Osa de la Vega Solar Plant (30 MW)	30	2020	Solar	Spain	M&A
Pulpi Solar Plant (1 MW)	1	2020	Solar	Spain	M&A
Solfuture Solar Plant (2 MW)	2	2020	Solar	Spain	M&A
Torrebelena Solar Plant (0.5 MW)	0	2020	Solar	Spain	M&A
Villanueva de Alcardete Solar Plant (2 MW)	2	2020	Solar	Spain	M&A
Turroneros Solar Plant Unit 1 (35 MW)	35	2020	Solar	Spain	M&A
Turroneros Solar Plant Unit 1 (15 MW)	15	2020	Solar	Spain	M&A
Zarapicos Solar Plant (12 MW)	12	2020	Solar	Spain	M&A
Renesola Caravaca Solar Plant (12 MW)	12	2023	Solar	Spain	Greenfield
Groix-Belle Wind Farm (29 MW)	28	2024	Wind	France	Greenfield
Coryton Gas Plant Unit 1 (240 MW)	240	2011	Gas	United Kingdom	M&A
Coryton Gas Plant Unit 2 (240 MW)	240	2011	Gas	United Kingdom	M&A
Coryton Gas Plant Unit 3 (295 MW)	295	2012	Gas	United Kingdom	M&A
Rocksavage Gas Plant Unit 1 (240 MW)	240	2011	Gas	United Kingdom	M&A

Unit Name	Capacity (MW)	Year of Commission	Technology	Country	Deal type
Rocksavage Gas Plant Unit 2 (240 MW)	240	2011	Gas	United Kingdom	M&A
Rocksavage Gas Plant Unit 3 (260 MW)	260	2011	Gas	United Kingdom	M&A
Spalding Gas Plant Unit 1 (250 MW)	250	2011	Gas	United Kingdom	M&A
Spalding Gas Plant Unit 2 (250 MW)	250	2011	Gas	United Kingdom	M&A
Spalding Gas Plant Unit 3 (340 MW)	340	2011	Gas	United Kingdom	M&A
Moray East Offshore Wind Farm (313 MW)	314	2022	Wind	United Kingdom	Greenfield
Indramayu Coal Plant Unit 1 (330 MW)	330	2011	Coal	Indonesia	Policy bank only
Indramayu Coal Plant Unit 2 (330 MW)	330	2011	Coal	Indonesia	Policy bank only
Indramayu Coal Plant Unit 3 (330 MW)	330	2011	Coal	Indonesia	Policy bank only
Rembang Coal Plant Unit 1 (316 MW)	316	2011	Coal	Indonesia	Policy bank only
Rembang Coal Plant Unit 2 (316 MW)	316	2011	Coal	Indonesia	Policy bank only
Tanjung Kasam Coal Plant Unit 1 (65 MW)	65	2012	Coal	Indonesia	Policy bank only
Tanjung Kasam Coal Plant Unit 2 (65 MW)	65	2012	Coal	Indonesia	Policy bank only
Cilacap Sumber Coal Plant (660 MW)	660	2019	Coal	Indonesia	Policy bank only
Meulaboh Coal Plant Unit 1 (200 MW)	200	2024	Coal	Indonesia	Greenfield
Meulaboh Coal Plant Unit 2 (200 MW)	200	2024	Coal	Indonesia	Greenfield
Data Dian Hydropower Plant (1200 MW)	1200	Pending	Hydropower	Indonesia	Greenfield
Lumbis Ogong Hydropower Plant (600 MW)	600	Pending	Hydropower	Indonesia	Greenfield
Stung Atay 1A Hydropower Plant Unit 1 (10 MW)	10	2013	Hydropower	Cambodia	Greenfield
Stung Atay 1A Hydropower Plant Unit 2 (10 MW)	10	2013	Hydropower	Cambodia	Greenfield
Stung Atay 1B Hydropower Plant Unit 1 (25 MW)	25	2013	Hydropower	Cambodia	Greenfield
Stung Atay 1B Hydropower Plant Unit 2 (25 MW)	25	2013	Hydropower	Cambodia	Greenfield
Stung Atay 1B Hydropower Plant Unit 3 (25 MW)	25	2013	Hydropower	Cambodia	Greenfield
Stung Atay 1B Hydropower Plant Unit 4 (25 MW)	25	2013	Hydropower	Cambodia	Greenfield
Sinan Solar Plant (24 MW)	24	2008	Solar	South Korea	Greenfield
Nanjido-Ri Solar Plant (8 MW)	8	2016	Solar	South Korea	Greenfield
Xeset 2 Hydropower Plant Unit 1 (38 MW)	38	2009	Hydropower	Laos	Policy bank only
Xeset 2 Hydropower Plant Unit 2 (38 MW)	38	2009	Hydropower	Laos	Policy bank only
Nam Ngum 3 Hydropower Plant Unit 1 (180 MW)	180	2021	Hydropower	Laos	Policy bank only
Nam Ngum 3 Hydropower Plant Unit 2 (180 MW)	180	2021	Hydropower	Laos	Policy bank only
Nam Ngum 3 Hydropower Plant Unit 3 (180 MW)	180	2021	Hydropower	Laos	Policy bank only
Nam Phay Hydropower Plant (86 MW)	86	Pending	Hydropower	Laos	Policy bank only
Dapein 2 Hydropower Plant (168 MW)	168	Pending	Hydropower	Myanmar	Greenfield
Wukyonejie Hydropower Plant (60 MW)	60	Pending	Hydropower	Myanmar	Greenfield
Amgalan Coal Plant (348 MW)	348	2014	Coal	Mongolia	Policy bank only

Unit Name	Capacity (MW)	Year of Commission	Technology	Country	Deal type
Bajio Gas Plant Unit 1 (150 MW)	150	2011	Gas	Mexico	M&A
Bajio Gas Plant Unit 2 (150 MW)	150	2011	Gas	Mexico	M&A
Bajio Gas Plant Unit 3 (150 MW)	150	2011	Gas	Mexico	M&A
Bajio Gas Plant Unit 4 (150 MW)	150	2011	Gas	Mexico	M&A
Campeche Gas Plant (275 MW)	275	2011	Gas	Mexico	M&A
La Rosita Gas Plant Unit 1 Turbine 1 (160 MW)	160	2016	Gas	Mexico	M&A
La Rosita Gas Plant Unit 1 Turbine 2 (160 MW)	160	2016	Gas	Mexico	M&A
La Rosita Gas Plant Unit 1 Turbine 3 (160 MW)	160	2016	Gas	Mexico	M&A
La Rosita Gas Plant Unit 2 Turbine 1 (160 MW)	160	2016	Gas	Mexico	M&A
San Ignacio Solar Plant (18 MW)	18	2019	Solar	Mexico	Greenfield
Los Llanos Solar Plant (150 MW)	150	2020	Solar	Mexico	M&A
Jimah Coal Plant Unit 1 (753 MW)	752	2016	Coal	Malaysia	M&A
Jimah Coal Plant Unit 2 (753 MW)	752	2016	Coal	Malaysia	M&A
Olorunsogo Gas Plant Unit 1 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 2 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 3 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 4 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 5 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 6 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 7 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Olorunsogo Gas Plant Unit 8 (38 MW)	38	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 1 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 2 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 3 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 4 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 5 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 6 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 7 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Omotosho 1 Gas Plant Unit 8 (42 MW)	42	2007	Gas	Nigeria	Policy bank only
Geregu 1 Gas Plant Unit 1 (145 MW)	145	2013	Gas	Nigeria	M&A
Geregu 1 Gas Plant Unit 2 (145 MW)	145	2013	Gas	Nigeria	M&A
Geregu 1 Gas Plant Unit 3 (145 MW)	145	2013	Gas	Nigeria	M&A
Maasstroom Gas Plant (428 MW)	428	2011	Gas	Netherlands	M&A
Rijnmond Gas Plant Unit 1 (260 MW)	260	2011	Gas	Netherlands	M&A
Rijnmond Gas Plant Unit 2 (260 MW)	260	2011	Gas	Netherlands	M&A

Unit Name	Capacity (MW)	Year of Commission	Technology	Country	Deal type
Rijnmond Gas Plant Unit 3 (260 MW)	260	2011	Gas	Netherlands	M&A
Valenzuela Solar Plant (9 MW)	8	2015	Solar	Philippines	Greenfield
Guddu Gas Plant Unit 1 (256 MW)	256	2017	Gas	Pakistan	Policy bank only
Guddu Gas Plant Unit 2 (256 MW)	256	2017	Gas	Pakistan	Policy bank only
Suki Kinari Hydropower Plant Unit 1 (235 MW)	234	2023	Hydropower	Pakistan	FDI + Policy bank
Suki Kinari Hydropower Plant Unit 2 (235 MW)	234	2023	Hydropower	Pakistan	FDI + Policy bank
Suki Kinari Hydropower Plant Unit 3 (235 MW)	234	2023	Hydropower	Pakistan	FDI + Policy bank
Suki Kinari Hydropower Plant Unit 4 (235 MW)	234	2023	Hydropower	Pakistan	FDI + Policy bank
Quaid-e-Azam Solar Plant Unit 1 (100 MW)	100	2015	Solar	Pakistan	Greenfield
Karachi Coal Plant (660 MW)	660	Pending	Coal	Pakistan	Greenfield
Emba Hunutlu Coal Plant Unit 1 (660 MW)	660	2022	Coal	Turkey	FDI + Policy bank
Emba Hunutlu Coal Plant Unit 2 (660 MW)	660	2022	Coal	Turkey	FDI + Policy bank
Osmaniye Solar Plant (19 MW)	19	2017	Solar	Turkey	Greenfield
Akhangaran Hydropower Plant Unit 1 (10 MW)	10	2010	Hydropower	Uzbekistan	Policy bank only
Duyen Hai Coal Plant 1 Unit 1 (622 MW)	622	2015	Coal	Vietnam	Policy bank only
Duyen Hai Coal Plant 1 Unit 2 (622 MW)	622	2015	Coal	Vietnam	Policy bank only
Duyen Hai Coal Plant 2 Unit 1 (600 MW)	600	2021	Coal	Vietnam	Greenfield
Duyen Hai Coal Plant 2 Unit 2 (600 MW)	600	2021	Coal	Vietnam	Greenfield
Vinh Tan 1 Coal Plant Unit 1 (620 MW)	620	2018	Coal	Vietnam	FDI + Policy bank
Vinh Tan 1 Coal Plant Unit 2 (620 MW)	620	2018	Coal	Vietnam	FDI + Policy bank
Thai Binh 2 Coal Plant Unit 1 (600 MW)	600	2021	Coal	Vietnam	Policy bank only
Thai Binh 2 Coal Plant Unit 2 (600 MW)	600	2021	Coal	Vietnam	Policy bank only
Astro Hongseong Solar Plant (2 MW)	2	2016	Solar	South Africa	Greenfield
Chavuma Falls Hydropower Plant (14 MW)	14	Pending	Hydropower	Zambia	Greenfield

Source: China's Global Power Database, Boston University Global Development Policy Center, 2025.

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