

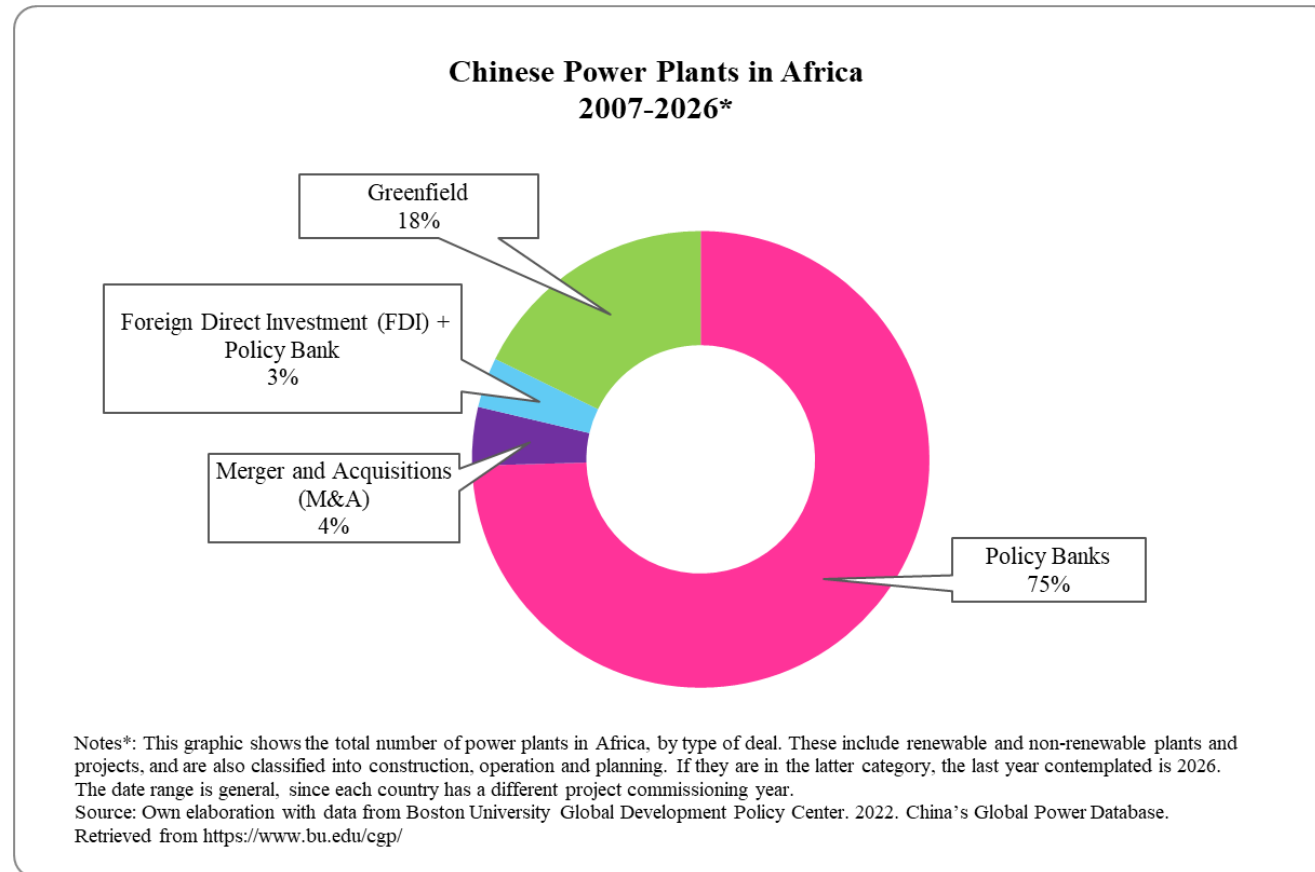


Chinese Energy Projects in Africa. Are they building a sustainable development? Or are they devastating the environment?

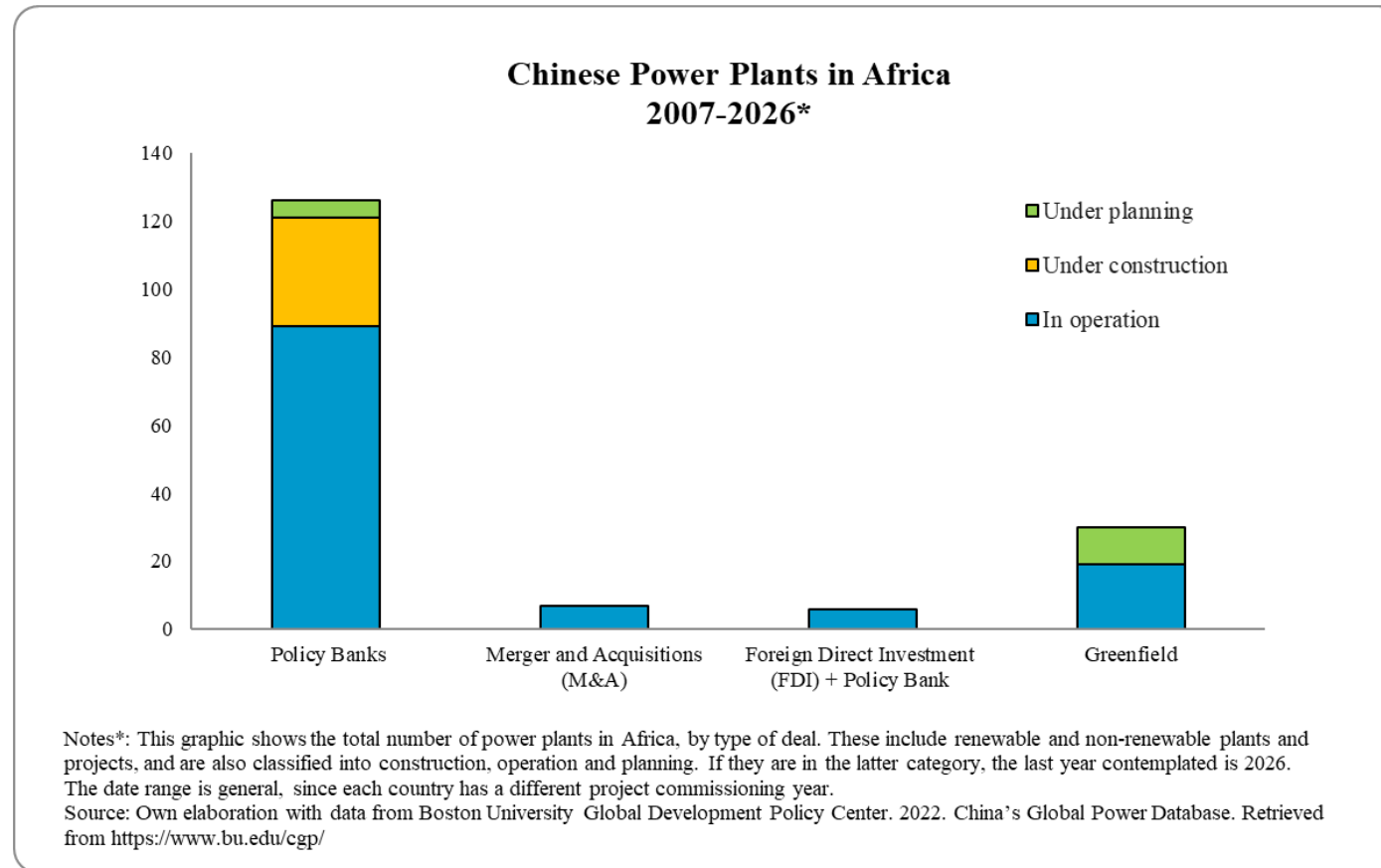
ALICIA GIRÓN AND ANDREA REYES

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.Chinese Power Plants in Africa

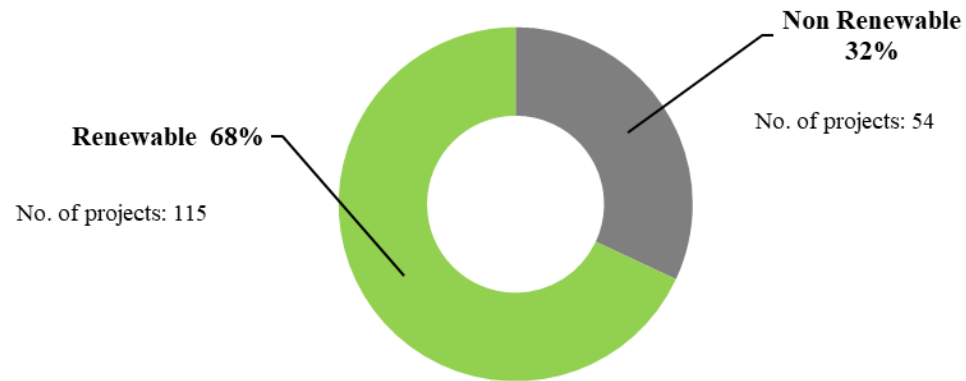


Chinese Power Plants in Africa



Chinese Power Plants in Africa by Type of Energy

**Chinese Power Plants in Africa by Type of Energy
2007-2026***



Notes*: This graphic shows the total number of power plants in Africa, by type of deal. These include renewable and non-renewable plants and projects, and are also classified into construction, operation and planning. If they are in the latter category, the last year contemplated is 2026.

The date range is general, since each country has a different project commissioning year.

Source: Own elaboration with data from Boston University Global Development Policy Center. 2022. China's Global Power Database. Retrieved from <https://www.bu.edu/cgp/>

Chinese Power Plants in Africa by Type of Energy

Chinese Power Plants in Africa by Type of Energy 2007-2026*		
<i>Deal</i>	<i>Non-Renewable</i>	<i>Renewable</i>
Policy Banks	35	91
Merger and Acquisitions (M&A)	7	0
Foreign Direct Investment (FDI) + Policy Bank	0	6
Greenfield	12	18
Total	54	115
169	32%	68%

Notes*: This table shows the total number of power plants in Africa, by type of deal. These are also classified into construction, operation and planning. If they are in the latter category, the last year contemplated is 2026.

The date range is general, since each country has a different project commissioning year.

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Chinese Renewable and Non-Renewable Plants in Africa by Corporation

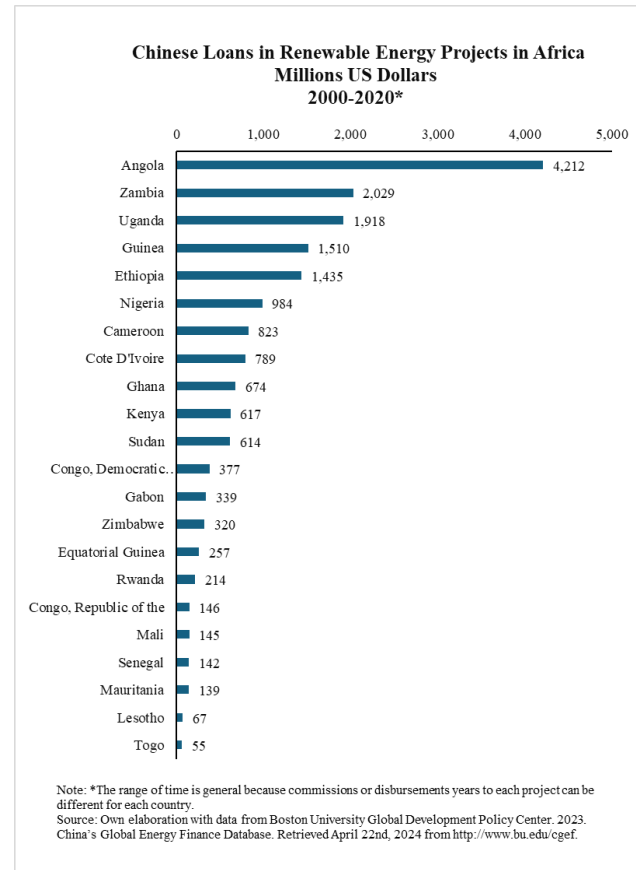
Chinese Renewable and Non-Renewable Power Plants in Africa by Corporation 2007-2026*			
<i>Renewable</i>			
<i>Corporation</i>	<i>Countries</i>	<i>Type of Energy</i>	<i>Total of Power Plants</i>
Anhui Conch	Democratic Republic of Congo	Hydropower	4
China Metallurgical Group Corporation	Zimbabwe	Solar	1
Chint	South Africa	Solar	1
Fuxing Xiaocheng	Ghana	Solar	1
Guodian Group	South Africa	Wind	2
Power China	Cameron, Uganda and Zambia	Hydropower	11
Power China	Ethiopia	Wind	3
Tebian Electric Apparatus (TBEA)	Tunisia	Solar	1
			24
<i>Non-Renewable</i>			
<i>Corporation</i>	<i>Countries</i>	<i>Type of Energy</i>	<i>Total of Power Plants</i>
China General Nuclear Power Group	Egypt	Gas	4
China Gezhoubu	Liberia	Oil	1
China National Petroleum Corporation	Chad	Oil	5
Jiangsu Communication Clean Energy Technology (CCETC)	Nigeria	Gas	1
Shenzhen Energy	Ghana	Gas	5
State Grid Corporation of China	Nigeria	Gas	3
			19

Notes*: This table shows the total number of power plants in Africa, by type of deal. These are also classified into construction, operation and planning. If they are in the latter category, the last year contemplated is 2026.

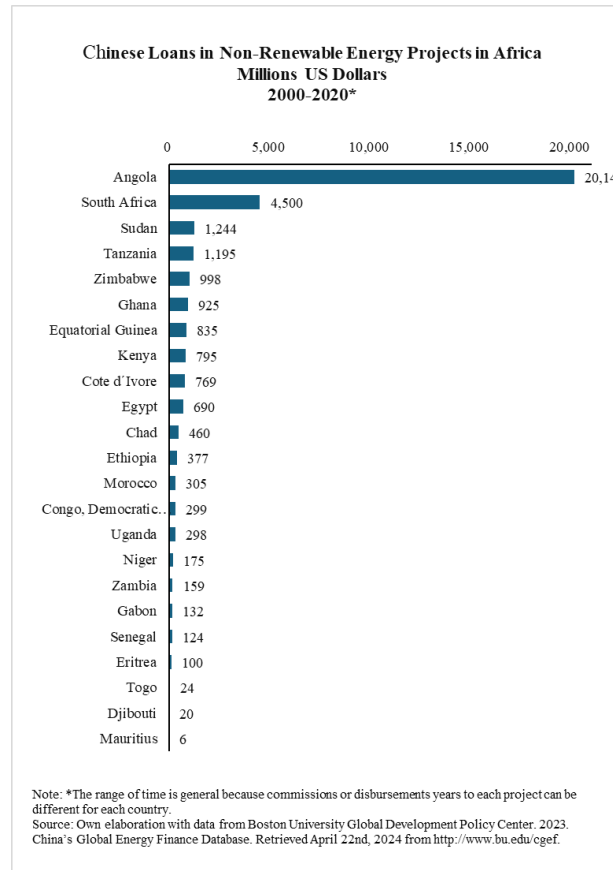
The date range is general, since each country has a different project commissioning year.

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Chinese Loans in Renewable Energy Projects in Africa



Chinese Loans in Non-Renewable Energy Projects in Africa



6.1 Mutual Funds with investments in Chinese corporations in renewable energy plants

1. AIFMC Herun Structured Hybrid Securities Investment Fund holds 8.04% of the outstanding shares of State Grid Corporation.
2. ICBCCS Logistics Industry Equity Fund owns 4.18% of the outstanding shares of State Grid Corporation.
3. ABC CA Strategic Income 1-Year Period Hybrid Fund holds 3.11% of the outstanding shares of State Grid Corporation.
4. ABC-CA Strategy Selected Hybrid Fund owns 1.88% of the outstanding shares of State Grid Corporation.
5. Vanguard Emerging Markets Stock Index Fund owns 1.86% of the outstanding shares of China General Nuclear Power Group, Shenzhen Energy Group Co. Ltd., China Gezhoubu.
6. Vanguard Total International Stock Index Fund TOTAL holds 1.75% of the outstanding shares of China General Nuclear Power Group, Shenzhen Energy Group Co. Ltd., China Gezhoubu.
7. ICBCCS Emerging Manufacturing Hybrid Fund with 1.70% of the outstanding shares of State Grid Corporation.
8. Kopernik Global All Cap Fund holds 1.57% of the outstanding shares of China General Nuclear Power Group.
9. ICBCCS Small Medium Capital Growth Balanced Fund owns 1.38% of the outstanding shares of State Grid Corporation.
10. CIFM Prosperity Selected Mixed Fund holds 1.16% of the outstanding shares of State Grid Corporation.

6.2 Mutual Funds with investments in Chinese corporations with non-renewable energy plants

1. Huatai-PineBridge CSI 300 ETF Units holds 1.71% of the outstanding shares of China National Chemical (ChemChina), SDIC Power Holdings Co Ltd.
2. Huatai-Pinebridge CSI Photovoltaic Industry Index ETF holds 1.62% of the outstanding shares of Chint, TBA.
3. GF CSI Infrastructure Engineering ETF Fund with a 1.39% stake in the outstanding shares of China National Chemical (ChemChina).
4. Tianhong CSI Photovoltaic Industry Index Fund with 1.30% of the outstanding shares of Chint, TBA.
5. China AMC SSE 50 ETF holds 1.23% of TBA's outstanding shares.
6. CITIC Dividend Value 1Yr Mix Collective Asset Mgmt Plan owns 0.56% of the outstanding shares of Chint.
7. China AMC Large Cap Select Fund holds 0.45% of the outstanding shares of China Metallurgical Group Corporation and Chint..
8. E Fund Seeded Csi 300 Etf with 0.41% of the outstanding shares of Guodian Power Development, TBA.
9. Huaan SSE 180 ETF Index Fund holds 0.37% of the outstanding shares of China Metallurgical Group Corporation, Power China, TBA.
10. First Sentier Invs. Glb. Umb. - FSSA China Growth Fund with 0.35% of Chint's outstanding shares.

7.1 Institutional Investors with investments in Chinese corporations in renewable energy plants

1. China Merchants Fund Management Co., Ltd. owns 8.84% of the outstanding shares of Chint.
2. Taiping Asset Management Co., Ltd. holds 4.95% of the outstanding shares of Power China.
3. Huatai-PineBridge Fund Management Co., Ltd. with a 2.68% interest in the outstanding shares of Guodian Power Development, Power China, TBA.
4. The Vanguard Group, Inc. holds 2.33% of the outstanding shares owned by China Metallurgical Group Corporation, Guodian Power Development, TBA.
5. Aegon-Industrial Fund Management Co., Ltd. holds 1.52% of the outstanding shares of Chint, TBA.
6. Rosefinch Fund Management Co., Ltd. with 1.28% of the outstanding shares of Chint, Power China.
7. Tian Hong Asset Management Co., Ltd. owns 1.26% of TBA's outstanding shares.
8. ICBC Credit Suisse Asset Management Co., Ltd. holds 1.18% of the outstanding shares of Power China.
9. Guotai Junan Assets (Asia) Ltd. holds 1.03% of the outstanding shares of Power China.
10. First Sentier Investors (Hong Kong) Ltd. owns 0.94% of the outstanding shares of Chint.
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7.2 Institutional Investors with investments in Chinese corporations in non-renewable energy plants

1. ICBC Credit Suisse Asset Management Co., Ltd. holds 11.18% of the outstanding shares of State Grid Corporation.
2. Invesco Great Wall Fund Management Co. Ltd. (Invst Mgmt) holds 9.66% of the outstanding shares of State Grid Corporation.
3. ABC-CA Fund Management Co., Ltd. with 5.99% of the outstanding shares of State Grid Corporation.
4. The Vanguard Group, Inc. owns 5.27% of the outstanding shares of China General Nuclear Power Group, Shenzhen Energy Group Co. Ltd, China Gezhoubu.
5. GIC Pte Ltd. (Investment Management) holds 4.93% of the outstanding shares of China General Nuclear Power Group.
6. E Fund Management Co., Ltd. holds 3.85% of the outstanding shares of State Grid Corporation.
7. Bosera Asset Management Co., Ltd. owns 2.86% of the outstanding shares of State Grid Corporation.
8. Fullgoal Fund Management Co., Ltd. holds 2.47% of the outstanding shares of State Grid Corporation.
9. China Southern Asset Management Co., Ltd. with 2.26% of the outstanding shares of State Grid Corporation.
10. Kopernik Global Investors LLC with a 2.12% interest in the outstanding shares of China General Nuclear Power Group.

8. Conclusions

- China's actions in the coming years could prove crucial to combat climate change, as both financing and the energy transition are two of the most relevant issues in this area. China's actions will have to be closely monitored both internally and externally, for example if it will present any more specific plan to achieve the commitment announced in 2020 during the United Nations General Assembly, when it spoke of achieving carbon neutrality before 2060.
- Climate financing is being developed under the economic growth model that China has promoted for decades, characterized by a combination of state involvement and private companies. China has sought to maintain state control or at least state participation, especially in key sectors, to promote its economic growth.
- China has become the continent's largest trading partner. According to the China-Africa Cooperation Forum held in 2024, a quarter of Africa's exports go to this country.
- The need for cooperation to help the continent achieve a fair and equitable modernization was emphasized, particularly to protect its population from the climate crisis.

8. Conclusions

- Therefore, it will be necessary to closely monitor not only financing but also trade and diplomatic relations to determine whether China's involvement in Africa is contributing not only to mitigating climate change in developing economies but also to their broader development.
- Given that several African countries are facing debt problems, it will also be important to observe other variables such as repayment terms, interest rates, etc., and assess whether this type of financing is truly beneficial. In other words, it will be essential to thoroughly understand the conditions of this financing and observe any potential negative implications it may have.