Does China's role in Africa's energy sector support or threaten industrialisation?

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Making Africa's Energy Transition Work: Local Manufacturing, Decent Work, and Sustainable Livelihoods

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Saviour or predator?

THE SAVIOUR STORY

China powers Africa's rise

Builds the dams, roads and power plants others will not fund, fast and without lectures

vs

THE PREDATOR STORY

China's debt trap tightens

Loads countries with debt, imports its own kit and workers, leaves little behind

40% of nations total operational wind (~504 MW), standing alongside other facilities like Ashegoda (120 MW), Assela (100 MW), and Aysha II (80 MW).

8 host villages still off the grid and majority without access to electricity

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Which story fits? Neither.

China is now Africa's leading energy builder

USD 30bn+

lent by Chinese policy banks for African energy, 2000 to 2016

80%+

of global renewable manufacturing capacity held by Chinese firms by 2023

43%

of Africans still lack reliable electricity

Where China builds

- **Hydropower** Sudan, Ghana
- **Oil and gas** Nigeria, Angola
- **Solar** Kenya
- **Wind** Ethiopia, South Africa

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- Powering Africa: China’s expanding role in the continent’s energy future
- Scaling China's Green Energy Investment in Sub-Saharan Africa: Challenges and Prospects
- From North–South to South–South Cooperation: China’s Role in Renewable Energy Development in Africa

How China built a renewable powerhouse

A huge home market

Domestic demand let firms grow, cut costs and learn at scale

Patient state finance

Policy banks backed factories and projects for the long term

Local content first

Wind farms in China once had to use 70% locally made parts

Learning by doing

Firms mastered projects at home, then exported kit and contracts

The lesson China built capability at home before it competed abroad

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The Adama wind farms in Ethiopia

Adama I

53 MW

USD 118m

Adama II

153 MW

USD 345m

- First Chinese-financed wind farms commissioned in Africa
- 85% loan from China EXIM Bank, 15% from Ethiopia
- Built under EPC plus finance by HydroChina and CGCOC

How I studied it

120 Interviews

8 host villages visited

4 Stakeholder categories

Government officials, Chinese contractors, university consultants and farmers

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Bounded benefits are real but capped

Jobs

Gain 69 to 84% of Adama I workers were Ethiopian

Limit Mostly low-skill and temporary work

Roads and local trade

Gain Better roads, transport and village trade

Limit Roads served the turbines, the boom ended

Skills

Gain 55 utility staff trained across the two projects

Limit Able to run a wind farm, not yet design one

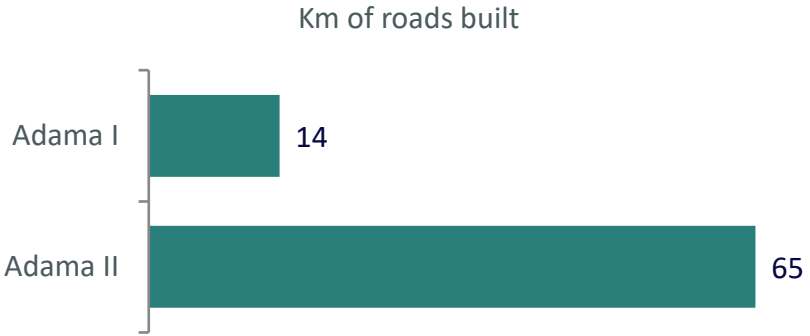
Policy learning

Gain Push to private power, 65 bidders by 2017

Limit Gains in institutions, not yet factories

Who sets the bounds? African states

The bounds can move



- Adama I used no local firms. Adama II used Ethiopian firms and cement
- Work permits refused when local hiring fell short

The worst costs were homegrown

About 1,330 households lost land

Official compensation figures ranged from 8,000 to 280,000 birr per hectare

Promised electricity used to win consent, then not delivered

Farmers blamed Ethiopian officials, not the Chinese

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QUESTION ONE

How I assess China's role in Africa today

Real contribution

- Power where it is badly needed
- Finance at scale and speed
- Builds where others will not

Clear constraints

- Tied loans mean imported kit
- Thin local value chains
- Few high-skill jobs remain

Debt, with nuance

- EXIM loans at about 2 to 3% interest
- Yet Ethiopia at high risk of debt distress in 2017
- Productivity, not lender, is the test

Neither predator nor saviour. China supplies the hardware. Africa must supply the strategy.

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QUESTION TWO

Six conditions for moving up the value chain

1 Strategic coherence

Tie every energy deal to a clear industrial plan

2 Bargaining power

Write local content, training and technology terms into contracts, then enforce them

3 Capability before contracts

Invest early in skills, universities and local suppliers

4 Beneficiation with purpose

Process minerals at home and link them to component makers

5 Regional scale

Use the AfCFTA to give factories markets big enough to compete

6 Fairness at the margins

Connect host communities and pay fair, livelihood-based compensation

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Complement or constraint? African agency decides

- Benefits from Chinese energy deals are real but bounded
- The bounds moved when Ethiopia negotiated harder
- The deepest harms came from domestic governance

The question is not what China wants. It is what Africa negotiates.

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