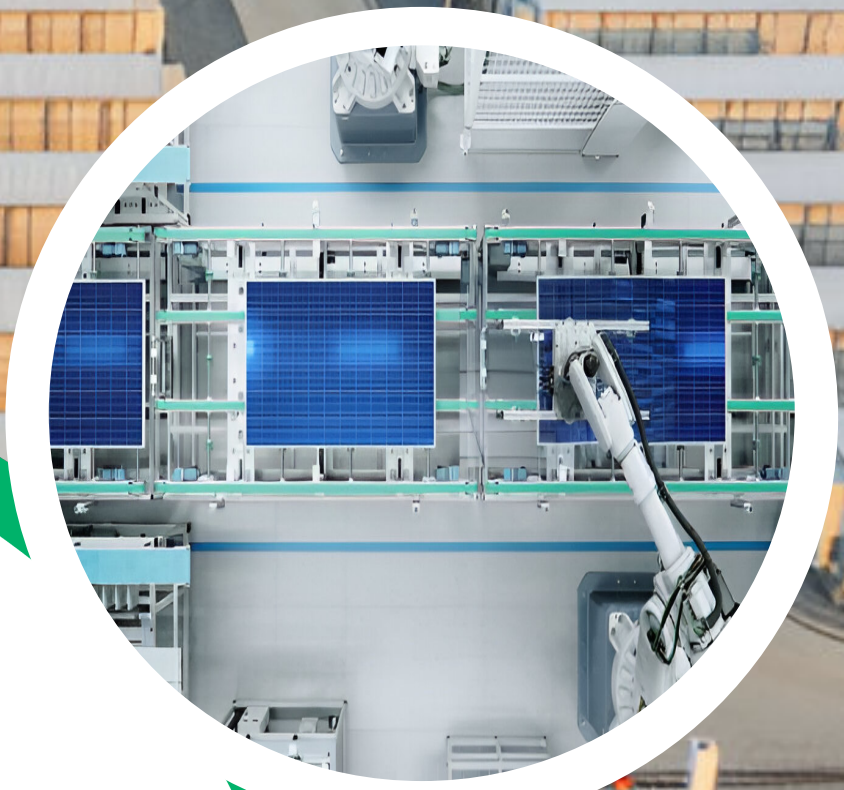
How to Implement China's Support for Africa's Green Industrialisation

Discussion Paper

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CHAPTER ONE - INTRODUCTION

Green industrialisation has emerged as a vital framework for Africa's development in the 21st century, balancing economic growth with environmental sustainability. It seeks to transform African economies by integrating green technologies, renewable energy, and resource-efficient practices into industrial processes. This approach not only aligns with global calls for climate resilience and reduced carbon emissions but is also a central focus of the African Union's Agenda 2063 and other key policy frameworks. While Africa has made strides in its commitment to sustainable development, there are opportunities to further enhance progress, such as developing a unified green industrialisation strategy and expanding domestic capacity to manufacture environmental goods.

China's growing involvement in Africa's green industrialisation presents an opportunity to address these challenges through strategic partnerships. Under the Forum on China-Africa Cooperation (FOCAC), China has increasingly prioritised green development, with commitments ranging from renewable energy projects to industrial chain cooperation. The recently concluded FOCAC 9 emphasised green industrialisation as a cornerstone of Sino-African collaboration, including the launch of a Special Fund for China-Africa Green Industrial Chain. These developments reflect a shift toward a more structured and actionable agenda for fostering sustainable industrial growth in Africa.

This discussion paper explores the policy frameworks underpinning green industrialisation in Africa and examines China's role in advancing this agenda. It provides an overview of Africa's progress and challenges in pursuing sustainable industrialisation, highlights China's evolving commitments through FOCAC, and identifies potential models for collaboration. By leveraging renewable energy projects, enhancing green industrial chains, and linking critical minerals to the manufacturing of environmental goods, China and Africa can jointly promote a greener and more resilient industrial growth path.

CHAPTER TWO - POLICY FRAMEWORK

2.1 A Broad Definition of "Green Industrialisation in Africa"

Green industrialisation lacks a standardised definition but is broadly described by UN agencies. According to UNIDO, it involves "greening industry" through sustainable economic growth, resource-efficient productivity, and improved industrial processes. [1] Similarly, UNECA emphasises structural transformation that minimises resource inputs, reduces harmful waste emissions, enhances infrastructure resilience, and maintains natural resources while supporting economic growth.[2]

This paper defines green industrialisation in Africa as the development of industries and economies that are environmentally sustainable, energy-efficient, and climate-resilient. In particular, it emphasises the integration of green-production technologies into value-chain activities, the adoption of renewable energy, and the implementation of sustainable practices to promote growth in Africa while reducing environmental impact.[3]

2.2 The Current State of African Industrialisation

Africa demonstrates a strong commitment to industrialisation, as reflected in its alignment with the African Union (AU)'s Agenda 2063—a strategic blueprint to transform the continent into a global powerhouse. Various initiatives underscore this commitment, such as the Accelerated Industrial Development of Africa (AIDA), which provides a detailed strategy for implementing the Plan of Action for rapid industrial growth.[4] African Development Bank also identified "Industrialize Africa" as one of its five development priorities.[5] In recent years, there has been a shift towards green development and green industrialisation. This includes integrating green initiatives into value-chain activities, such as the sourcing and processing of raw materials, production manufacturing, and the marketing and sale of finished products, ensuring industrial growth aligns with environmental sustainability.[6]

Although there is no continental wide strategy dedicated to accelerating green industrialisation, several key initiatives are driving this transformation. For instance, the African Union's Green Recovery Action Plan (GRAP) emphasises sustainable recovery by fostering climate resilience and eco-friendly infrastructure. Similarly, the African Union's Climate Change Strategy (AUCC) aims to leverage opportunities in the shift toward a low-carbon economy while advancing green

[1] UNIDO. https://www.unido.org/our-focus-cross-cutting-services-green-industry/green-industry-initiative#:~:text=Greening%20of%20Industry%20is%20a,creates%20awareness%2C%20knowledge%20and%20capacities.
[2] UNECA. (2016). "Economic Report on Africa 2016. Chapter 3: Greening Industrializing: Rationale and Concepts." https://www.uneca.org/sites/default/files/chapterimages/era2016_chap3_en-rev6may.pdf
[3] UNECA. (2016). "Economic Report on Africa 2016. Chapter 3: Greening Industrializing: Rationale and Concepts."
[4] African Union. "AIDA – Accelerated Industrial Development in Africa". https://au.int/en/ti/aida/about#:~:text=Development%20and%20implementation%20of%20an,industries%2C%20including%20the%20informal%20sectors
[5] AfDB. The High 5s." https://www.afdb.org/en/high5s
[6] Ighobor, Kingsley. (2016), "A green path to industrialization." United Nations Africa Renewal. https://www.un.org/africarenewal/magazine/august-2016/green-path-industrialization

recovery efforts across the continent. Table 1 below provides some examples of Africa's own policy framework related to green industrialisation.

Table 1: Africa's Green Industrialisation Policies

Policy Framework	Key objectives

African Union's Agenda 2063	• Transformed Economies
	  ○ Sustainable and inclusive economic growth
	  ○ STI driven Manufacturing / Industrialisation and Value Addition
	• Environmentally sustainable and climate resilient economies and communities

African Union Green Recovery Action Plan (GRAP) (2021-2027)	• Increasing flows, efficiency and impact of climate finance • Promoting renewable energy, energy efficiency and access, and supporting the Just Transition to clean energy
African Union's Climate Change Strategy (AUCC) (2022-2032)	• Enhancing inclusive, low-emission and resource-efficient industrialisation. • Transition to a low-emission green economy and green recovery efforts
The African Renewable Energy Initiative (AREI) (2015-2030)	• Achieve low to zero carbon development strategies • Expand energy access rapidly and support the achievement of all Sustainable Development Goals (SDGs)
African Development Bank Ten-Year Strategy (2024 - 2033)	• Accelerating inclusive green growth in Africa • Driving prosperous and resilient economies in Africa

At last year's COP28, there was an important step forward in promoting green industrialisation in Africa. President Ruto of Kenya convened African leaders to launch the "Africa Green Industrialisation Initiative". This new initiative builds on the UAE's existing US$4.5 billion Africa Green Investment Initiative and aims to finance 15 GW of renewable energy capacity in Africa by the end of this decade and unlock catalytic investment for green industrialisation in Africa.[7] This initiative demonstrates the effort Africa takes to seek the promotion on green industrialisation, and a detailed follow-up implementation plan is unclear but needed.

2.3 China's Involvement in Green Industrialisation in Africa

African countries have established deepening ties with China in green development, particularly under the framework of the Forum on China-Africa Cooperation (FOCAC). In 2006, China's first African Policy made only a brief reference to climate change as part of environmental cooperation.[8] However, by 2015, during the FOCAC 6, the focus on green development became more pronounced. President Xi Jinping underscored China's commitment to enhancing Africa's

[7] COP28. "At COP28, Kenya's President Ruto Convenes African Leaders to Launch the 'African Green Industrialization Initiative'." https://www.cop28.com/en/news/2023/12/At-COP28-Kenyas-President-Ruto-convenes-African-Leaders-to-launch-the-Africa-Green-Industrialization

[8] Gazette of the State Council. (2006). China's Policy Paper on Africa, Retrieved from http://www.gov.cn/gongbao/content/2006/content_212161.htm

capacity for green, low-carbon, and sustainable development, complemented by the launch of a China-Africa green development plan. In 2021, the 8th FOCAC introduced the Declaration on China-Africa Cooperation on Combating Climate Change, marking a significant step forward in green cooperation. By 2024, "Green Development" was highlighted as one of the ten key partnership initiatives in FOCAC 9, with an emphasis on the development of renewable energy projects, new energy technologies, and industrial chains. This evolution (see Table 2 below) highlights the steady and more concrete advancement of the FOCAC platform for green development cooperation between China and Africa, although there is still a lack of a concrete perspective on green industrialisation.

FOCAC 9 – the new chapter for green industrialisation?

FOCAC 9, held in early September 2024, elevated China-Africa relations to the level of "an all-weather strategic partnership". Beijing Action Plan outlines ten Partnerships as priority areas for China-Africa cooperation in the next three year, with Green Development highlighted as a key focus. FOCAC 9 demonstrated a more ambitious and concrete commitment to Africa's green industrialisation than ever before (see Table 2 below).

Table 2: Snapshot of FOCAC 9 Commitments related to Green Industrialisation[9]

Key Areas	Details
Industrial Chain Cooperation	China will support Africa in developing local value chains, manufacturing and deep processing of critical minerals. China will undertake 10 supporting projects of industrial parks for African countries and hold 100 training sessions on industrialisation. China enterprises is expanding investment in Africa's trade supply chain, green industrial chain and medium- and high-tech manufacturing.
Green Development	China will support Africa implement 30 clean energy and green development projects and set up a Special Fund for China-Africa Green Industrial Chain. China will encourage investments in a range of renewable energy projects across Africa, including solar, wind, green hydrogen, hydroelectric, geothermal power initiatives.
China-AU Energy Partnership	China will support Africa's green transition by assisting in investment policy formulation, fostering joint ventures, and building capacity to integrate Africa into the global green supply chain. China will give full play to its strengths in the utilisation of solar and wind energy, support African countries in making better use of renewable energy sources and expand investments in energy-saving technologies, high-tech industries, and low-carbon sectors.

[9] Development Reimagined generated based on FOCAC documents.

Green Transport	The two sides encourage green transport transition. This encourages Chinese businesses to participate in installation of infrastructures to support the green shift with renowned Chinese advanced technology.
Africa Solar Belt Program	China will work with African countries to deliver on the Declaration on China-Africa Cooperation on Combating Climate Change and promote the implementation of the Africa Solar Belt project.
Green Mining	The two sides speak positively of the importance of the China-Africa Geo-science Cooperation Center in technology application, information sharing and green mining and will jointly carry out practical cooperation in geo-science research, mineral development

First, it established a more concrete commitment on developing renewable energy projects. For example, the new Beijing Action Plan pledged to launch 30 clean energy projects in Africa in the next three years, with investments in a diverse range of renewable energy sources, including solar, wind, green hydrogen, hydroelectric, and geothermal power. This represents a more detailed and expanded vision compared to the broader category of "other renewable sources" mentioned three years prior.

Second, the FOCAC 9 documents signaled a renewed emphasis on industrial cooperation, featuring an entirely new chapter on industrialisation. A focus on transition minerals and industrial chain cooperation is also introduced, which showcased an increasingly aligned approach with African development agenda, incluidng the AfCFTA, the Africa Mining Vision (AMV) and Accelerated Industrial Development for Africa (AIDA). In specific, the Beijing Action Plan committed to establishing a Special Fund for China-Africa Green Industrial Chain to support the cooperation across the upstream, midstream and downstream segments of green industry chains as well as to foster the development of clean energy, green transport and green minerals. By October 2024, the Special Fund, set up by the China-Africa Development Fund, was officially launched in Beijing with a scale of 5 billion RMB (US$0.69 billion).[10] The first project under the Special Fund was launched in South Africa on solar energy development (see Box 1 below).

Box 1:
Case Study - The first project under the Special Fund for China-Africa Green Industrial Chain

The China-Africa Development Fund (CDF), together with CGN Energy International (CGNEI), Sinosteel and South Africa's Kona Holdings, has officially commenced the construction of the first phase of the 60MW TFC photovoltaic (PV) power plant project in South Africa. This project is the first project invested by the Special Fund for China-Africa Green Industrial Chain after its official establishment in October 2024. (Source from: Belt and Road Portal)

Third, for the first time, FOCAC documents featured green mining and explicitly linked critical minerals to the local manufacturing of value-added products. There are a few Chinese mining companies taking into account sustainable growth and environmental protection when they

[10] FOCAC 2024. https://2024focacsummit.mfa.gov.cn/pthd/202410/t20241023_11511598.htm

operate their businesses in Africa (see Box 2 below).[11] The new Beijing Action Plan also emphasised upgrading Africa's mineral value chains through direct investments in refining and processing. This closely aligns with Africa's ambitions to shift from exporting raw minerals to fostering domestic processing and manufacturing of green energy technologies. Such initiatives contribute to the objectives of the AU's Agenda 2063, which envisions the continent becoming the world's largest manufacturing hub.

Box 2:

Case Study - Bikita Minerals Lithium Mine Gets 12MW Solar PV Plus 6MWh Battery

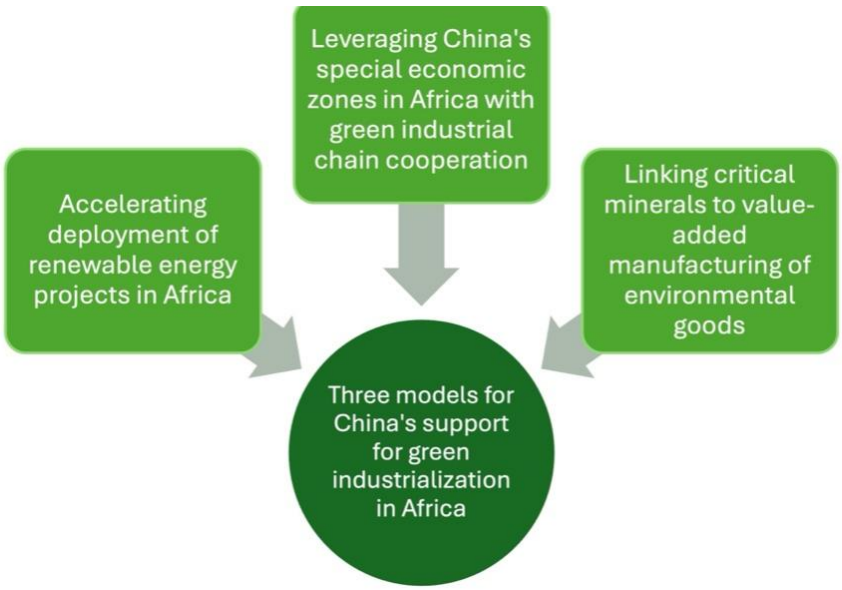
Bikita Minerals, a subsidiary of Sinomine Group operating in Zimbabwe on lithium mine, has enhanced its operational sustainability with a state-of-the-art 12MW solar PV system coupled with a 6MWh lithium battery storage facility. This significant renewable energy investment, completed in early 2024, represents a strategic move to address the mine's power challenges amid Zimbabwe's persistent electricity shortages. The hybrid system, which includes over 21,000 solar panels and advanced battery storage technology, not only ensures reliable power supply for critical mining operations but also aligns with the company's environmental commitments by reducing carbon emissions by approximately 10,000 tons annually. Beyond environmental benefits, the solar-plus-storage solution helps Bikita Minerals achieve substantial cost savings by reducing diesel consumption and dependency on the national grid, while also supporting the mine's expansion plans, including its new spodumene processing plant. (Source: CleanTechnica: Zida Invest ; Mining Zimbabwe)

[11] ZIDA. (2024). "Bikita Minerals commits to sustainable growth." https://zidainvest.com/bikita-minerals-commits-to-sustainable-growth/

CHAPTER THREE - POTENTIAL MODELS FOR CHINA'S SUPPORT FOR AFRICA'S GREEN INDUSTRIALISATION

As highlighted in the overview of policy frameworks in the previous section, Africa has yet to develop a comprehensive action plan dedicated to green industrialisation. While the recent FOCAC introduced several new commitments to renewable energy development, industrial cooperation, and the 'greening' of supply chains in Africa, it still falls short of providing a specific, holistic strategy for green industrialisation. Nonetheless, building on the commitments outlined in the FOCAC 9 documents, this paper explores three models of China's support for advancing green industrialisation in Africa (see Figure 1 below).

Figure 1: Three Models of China's Support for Green Industrialisation in Africa



3.1 Model 1 - Accelerating deployment of renewable energy projects in Africa

The deficit in electricity access across Africa significantly hampers the continent's ability to realise its industrial potential. Studies indicate that African enterprises experience an average of more than 50 hours per month of power interruptions, with the economic cost to firms estimated at between 2% and 15% of their annual revenues.[12][13][14] These power outages not only disrupt productivity but also deter investment, limiting the growth of industries across the continent.

[12] Oseni Musiliu. (2019). "Costs of unreliable electricity to African firms". https://energyforgrowth.org/wp-content/uploads/2019/08/Costs-of-unreliable-electricity-to-African-firms-.pdf
[13] Amoah, A., Ferrini, S., & Schaafsma, M. (2019). "Electricity outages in Ghana: Are contingent valuation estimates valid?" Energy Policy, 135, 110996. https://doi.org/10.1016/j.enpol.2019.110996
[14] Birku Reta Entele & Shibiru Ayalew. (2024) "The cost of electricity interruption for manufacturing firms in Ethiopia: valuing outage by applying stated preference approach." Journal of Applied Economics, 27:1, 2394715, DOI: 10.1080/15140326.2024.2394715

To address this electricity gap and establish a sustainable, efficient, and reliable power supply for Africa's industrialisation, the expansion of renewable energy is critical. Advances in solar and wind technologies between 2010 and 2023 have significantly reduced costs, making renewable energy increasingly competitive with fossil fuels (see Table 3 below). According to the International Renewable Energy Agency (IRENA), the global levelised cost of electricity (LCOE) for solar photovoltaic (PV) and onshore wind in 2023 was 56% and 67% lower, respectively, compared to the weighted average cost of fossil fuels.[15] Additionally, the cost of battery storage technologies declined by 89% over the same period, further enhancing the feasibility of renewable energy as a reliable power source for industrial applications.

Table 3: Cost change of renewables, 2010 and 2023[16]

Type of renewable	Total installed costs (USD/kW)			Levelised cost of electricity (USD/kWh)		
	2010	2023	Percentage change	2010	2023	Percentage change
Solar PV	5310	758	-86%	0.460	0.044	-90%
Concentrated Solar Power (CSP)	10453	6589	-37%	0.393	0.117	-70%
Onshore wind	2272	1169	-49%	0.111	0.033	-70%
Offshore wind	5409	2800	-48%	0.203	0.075	-63%

The same IRENA study revealed that renewable power saved Africa US$11 billion on fuel costs in 2023, the lowest among all continents. In comparison, Asia saved US$212 billion. To close the gap, there is a need for enhanced international cooperation, targeted investments, and policy frameworks that encourage the development of large-scale renewable projects and cross-border energy networks.

On the policy front, in 2021, the AU launched the African Single Electricity Market (AfSEM), aiming to create a unified electricity market across Africa.[17] Supporting AfSEM is the Continental Master Plan (CMP), which seeks to add 16,500 km of transmission lines and expand generation capacity to 232 GW, laying the groundwork for integrating regional renewable projects.[18] The Continental Master Plan (CMP) includes a number of renewable energy projects that hold the potential to significantly boost power supply for both industries and households. For instance, the Grand Inga Hydropower Project in the Democratic Republic of Congo (DRC) has the capacity to generate 42 GW of electricity. This transformative project could meet the energy needs of industries in the DRC and benefit countries in the region through the trading market.

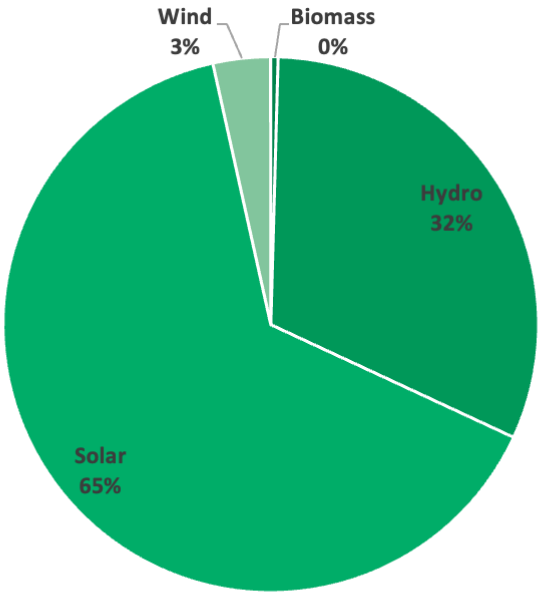
[15] IRENA. (2024). "Renewable Power Generation Costs in 2023". International Renewable Energy Agency. Abu Dhabi.
[16] Source: IRENA (2024), "Renewable Power Generation Costs in 2023".
[17] African Union. (2021). "African Union Launches World's Largest Single Electricity Market (AFSEM)". https://au.int/en/pressreleases/20210604/african-union-launches-worlds-largest-single-electricity-market-afsem
[18] PIDA. (2024). "Energy in Africa." https://www.au-pida.org/energy-sector/

China, with its expertise in renewable energy technologies and competitive manufacturing capabilities, is well-positioned to collaborate with Africa in harnessing its vast renewable energy potential. Through strategic partnerships and investments in planned projects such as CMP, China can support the continent in advancing its energy transition and driving industrial development.

The Nairobi Declaration on Climate Change was a pivotal outcome of the African Climate Summit held in Kenya in September 2023. Significantly, African nations committed to increasing Africa's renewable generation capacity from 56 GW in 2022 to at least 300 GW by 2030.[19] This means Africa needs to increase its capacity by at least 23.3% per year from 2023 onwards to meet the target. Thus, a huge demand in Africa in renewable energy deployment is required and China has already and can play an important role.

According to Development Reimagined's China Africa Climate Action Tracker,[20] since the launch of the Declaration on China-Africa Cooperation on Combating Climate Change in 2021 until August 2024, Chinese stakeholders have been engaged in 87 renewable energy projects in Africa, of which 67 have disclosed installed capacity with a total of around 30 GW. Of the 30 GW of potentially added installed capacity, 65% will generated from solar projects, and 32% from hydro projects (Figure 2 below).

Figure 2: Comparison of Installed Capacity of Different Renewable Energy Projects in Africa[21]



	Biomass	Hydro	Solar	Wind
Number of Projects	3	27	49	6

[19] African Union. (2023). "Summary of the African Leaders Nairobi Declaration on Climate Change and Call to Action." https://au.int/sites/default/files/documents/43682-doc-AU_Nairobi_Declaration_Action_1.pdf
[20] Development Reimagined. (2024). "Database: Tracking China-Africa Climate Actions since FOCAC 9." https://developmentreimagined.com/database-tracking-china-africa-climate-actions-since-focac-8/
[21] Development Reimagined. (2024). "Database: Tracking China-Africa Climate Actions since FOCAC 9."

One observation drawn from the Tracker is that solar projects are at the center. There have been 42 projects on solar energy over the past 18 months, compared to 19 hydro power and 5 wind power projects. This trend was also evident during the FOCAC 9. Specifically, China and Africa signed a number of Memorandum of Understanding (MoUs) and investment agreements on renewable energy cooperation during the forum, with solar projects accounting for 82% of the total.[22] If these projects are successfully implemented, they will bring at least 720 MW of installed renewable energy capacity to Africa, and most of this additional capacity will come from solar energy. (see Table 4 below).

Table 4: MoUs and Investment Deals Signed during FOCAC 9 [23]

Country	RE Projects Agreed	Expected Capacity (MW)
Zimbabwe	Selous PV project	100
	Manhize Wind Power project	100
Zambia	Kariba North Solar PV Power plant	100
	Solar PV Project at Kafue Lower	100
	Datang to deliver 3 solar projects	220
	10,000 rooftop PV installation project	/
Namibia	To start build country's largest solar power plant with China Jiangxi International Economic and Technical Cooperation Co. Ltd & China New Energy Development	100
Burundi	Joined the Africa Solar Belt project. China will present 4,000 sets of household solar PV power generation systems	/
Egypt	8 GW solar manufacturing hub in the Suez Special Economic Zone in Egypt	/
Sudan	Solar projects	/
Chad	Electricity projects	/
TOTAL		**720**

In the past two years, the emerge of solar projects in Africa from Chinese investors has been due not only to China's mature solar products manufacturing capabilities, but also due to a shift towards “small and beautiful” projects (see Box 3 below). President Xi first introduced the concept of “small and beautiful” at the Belt and Road Symposium in 2021.[24] Compared to the “mega

[22] Development Reimagined collected and calculated based on the publicly available information.
[23] Development Reimagined collected and calculated based on the publicly available information.
[24] LIU Kanyi. (2024). “China enters new phase for ‘belt and road’ infrastructure initative.” Pinsent Masons. https://www.pinsentmasons.com/out-law/analysis/china-new-phase-belt-and-road-infrastructure-initiative#:~:text=The%20term%20'Xiaoermei'%20(small,priority%20in%20China's%20overseas%20cooperation.

project" – e.g. large hydropower projects - that China has been advocating in the past - with large investments and long payback periods, 'Small and beautiful' projects are small in terms of investment and financing, short in terms of time required, and low in terms of risk for all parties, and at the same time, to meet the needs of local living standards, ESG and climate change. This makes it easier for private companies participate rather than having to wait loans from Chinese policy banks such as China Exim Bank and China Development Bank (CDB).

Box 3:
Case Study - "Africa Sola Belt" Program in Africa

In September 2023, during the first Africa Climate Summit, China's Minister of Ecology and Environment, Huang Runqiu, announced the launch of "Africa Solar Belt" program to develop and implement the South-South cooperation to address climate change. Under the program, the Chinese side will provide at least about RMB100 million (US$13.74 million) in public funds over the next three years to help 50,000 families in Africa without electricity to solve the problem of lighting with electricity. (Source: Ministry of Ecology and Environment)

Nevertheless, there is still a need for green mega infrastructure that can meet the energy needs of industrialisation in Africa - both on a single-country basis and on a transnational basis. This means that investment in large-scale renewable energy projects in Africa remains urgently needed.

3.2 Model 2 – Leveraging China's special economic zones in Africa with green industrial chain cooperation

Expanding renewable energy projects in Africa provides a critical foundation for powering production, manufacturing, and industry—key drivers of the continent's industrial development. Industrial chain cooperation is one of the ten partnership initiatives outlined in the Beijing Action Plan (2025–2027), where China emphasised its support for industrial parks and economic and trade zones in African countries.

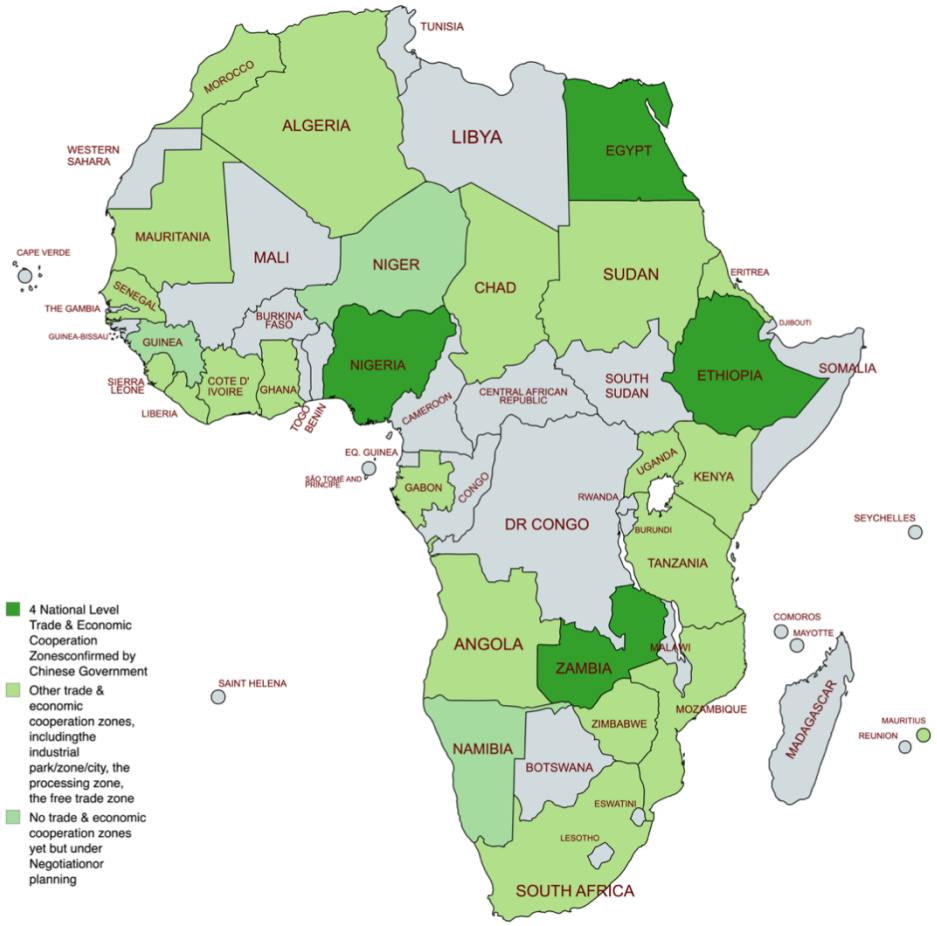
Africa's special economic zones (SEZs)[25] were adopted across the continent in the 1990s, as African governments looked to East Asian economies as models for rapid economic development. With widespread recognition of infrastructure and institutional weaknesses hindering Africa's growth, SEZs became a practical solution, enabling governments to concentrate resources and infrastructure in focused areas.

China plays an important role in establishing SEZs in Africa. Since the inception of the FOCAC, China has actively shared its experience in investment promoting through SEZs and has established SEZs in Africa. For example, in 2006, at the 3rd Ministerial Conference of FOCAC, China committed the establishment of three to five SEZs in Africa countries.[26] As of 2023, there

[25] This report uses the term "special economic zones (SEZs)" to cover other types of areas in the country attracting investment but with different objectives. SEZs can be also referred to industrial parks, free trade zones, export processing zones, and economic and trade.
[26] FOCAC. (2006). "FOCAC Beijing Action Plan (2007-2009)." https://www.focac.org/eng/zywx_1/zywj/200611/t20061116_7933564.htm

are 25 SEZs included in the statistics of China's Ministry of Commerce, attracting more than 620 enterprises covering industries such as mineral resources, textiles, manufacturing, agricultural products processing and household appliances, with a cumulative investment of US$7.35 billion (see Figure 3 below).[27] These SEZs provide the necessary infrastructure, support services and incentives to attract Chinese companies, which promote the development of manufacturing industries and create employment opportunities in Africa.

Figure 3: Chinese built Special Economic Zones in Africa [28]



Today, there are approximately 276 SEZs across Africa, with some still under construction[29]. Northern Africa accounts for the largest share (29%) of the total SEZs developed in the continent, followed by Eastern Africa (26%), Western Africa (24%), Southern Africa (15%) and Central Africa (6%). Morocco, Nigeria, Egypt, Ethiopia, and Kenya are the top five countries on the continent

[27] China-Africa Economic and Trade Promotion Council. (2023). https://www.caetp.net.cn/h-nd-904.html
[28] Various sources generated by Development Reimagined
[29] African Economic Zones Organization. (2021). "African Economic Zones Outlook 2021." https://www.africaeconomiczones.com/aezo-knowledge-center/outlook/

with the highest number of SEZs.[30] One of the most notable examples of SEZ development in Africa is Egypt's Suez Canal Economic Zone (SCZone) (see Box 4 below). Established to leverage the strategic location of the Suez Canal, SCZone has become a model for successful industrial development with a focus on logistics, manufacturing, energy, and trade. After a decade of development, the renewable energy industry is one of the current focuses of the SCZone.[31]

Box 4:
Case Study - Egypt's Suez Canal Economic Zone and China's role

Background

Egypt's Suez Canal Economic Zone (SCZone), established in 2015, has become one of Africa's leading economic zones. Covering an area of 460 square kilometres, SCZone has four major industrial zones and six ports, with a focus on logistics, manufacturing, energy and trade. Chinese companies have played a pivotal role since its inception, with the China-Egypt TEDA Suez Economic and Trade Co-operation Zone, established in 2008, being one of the most successful. By 2024, more than 160 Chinese companies will be operating in the zone, covering a wide range of industries such as glass fibre manufacturing and petroleum equipment.

Hydrogen Investment

In November 2023, Egypt approved a National Hydrogen Energy Strategy aimed at reducing carbon emissions and making Egypt a global leader in the low-carbon hydrogen energy economy.[32] During the Egypt-EU Investment Conference, Egypt's sovereign fund and the Suez Canal Economic Zone (SCZone) have signed four agreements with European and other developers in the green ammonia sector worth around $33bn.[33] Chinese companies are also involved in the development of the hydrogen energy sector in Egypt. Notably, in February 2024, China State Construction Engineering Corporation (CSCEC) and South Korea's SK Group announced a collaboration to invest $1.9 billion in a large-scale green hydrogen project in Egypt, focusing on renewable energy production, green hydrogen, and ammonia export.[34]

Characteristics and Impacts of China's Involvement

China's involvement in the SCZone differs from the fragmented or sector-specific approaches typically taken by international actors such as the European Union (EU).[35] Instead, China emphasizes integrated infrastructure development36, diversified industrial investment, and a long-term commitment to fostering economic resilience[37]. Through initiatives such as the Belt and Road Initiative (BRI), Chinese stakeholders have demonstrated the capacity to efficiently deliver transformative projects while aligning their investments with host countries'

[30] African Economic Zones Organization. (2021). "African Economic Zones Outlook 2021."
[31] SCZone. https://sczone.eg/services/east-ismailia-2/
[32] Currie, Charlie. (2023). "Egypt approves national green hydrogen strategy." H2 View. https://sczone.eg/services/east-ismailia-2/
[33] Xinhua. (2024). "Egypt, EU sign investment deals worth billions of USD." https://english.news.cn/20240630/21cf248d47c44351a05b7fab470c8be9/c.html
[34] Hydrogen Energy Industry Promotion Assocation. (2024). "China Construction signed a contract for Egypt's green hydrogen/green ammonia project." https://cn-heipa.com/newsinfo/6880159.html
[35] Valadbaygi, K., & Fleitz, T. (2024). Unravelling the EU's promotional integration strategy in the MENA region: a dialectical analysis of the Agadir and GAFTA Agreements. Global Political Economy, 1-21.
[36] Demissie, A. (2018). Special economic zones: Integrating African countries in China's Belt and Road initiative. Rethinking the silk road: China's Belt and Road Initiative and emerging Eurasian relations, 69-84.
37 Zeng, D. Z. (2015). Global experiences with special economic zones: Focus on China and Africa. World Bank policy Research working paper, (7240).

developmental priorities.[38] For example, in January 2025, PowerChina signed a contract to build the 1.1 GW Suez Wind Power Project in Egypt's Red Sea governorate, further advancing Egypt's utilization of wind energy and contributing to sustainable development.[39] In addition, China's own experience and expertise in the development of SEZs has enabled rapid deployment and comprehensive planning in the host countries, with tangible economic benefits.

China has been developing SEZs in Africa more than 20 years. One of the drivers for China to establish SEZs in Africa at the early stage was to relocate Chinese manufacturing activities to Africa, particularly in well-established labour-intensive industries such as shoe-making, textile and leather product processing.[40] And now it is time to consider adding "green" elements to future plans. For example, China and Nigeria signed a MOU for establishing a low-carbon demonstration zone in Lekki, primarily focusing on capacity building (see Box 5 below).

Box 5:
Case Study - Lekki Low-Carbon Demonstration Zone

During the High-level Forum on South-South Cooperation in Response to Climate Change at the COP29, the Ministry of Ecology and Environment of China and the Ministry of Environment of Nigeria signed a MoU on cooperation in the construction of the Lekki Low-Carbon Demonstration Zone. China will support the enhancement of Nigeria's capacity to respond to climate change through the joint preparation of a development plan for the Lekki Low-Carbon Demonstration Zone, and the implementation of seminars and capacity-building activities. (Source: China's Ministry of Ecology and Environment)

However, there are many more areas in which China could play an important role. For example, these SEZs could be served as hubs for green technology transfer, and environmental goods manufacturing. To facilitate green technology transfer, these SEZs could facilitate knowledge exchange and innovation in renewable energy, energy efficiency and smart infrastructure though training programs and workshop, pilot projects, and join research centers. These will equip local businesses and workers with the skills needed to develop and implement cutting-edge low-carbon technologies, such as solar microgrids, energy-efficient cooling systems, and smart grid solutions. At the same time, these SEZs could play a central role in fostering green supply chains by promoting sustainable sourcing, low-carbon logistics, and environmentally friendly manufacturing processes. More importantly, the SEZs could leverage its advantage of offering tax incentives, green finance options, and preferential trade policies, to attract the environmental goods manufacturers for local production of solar panels, wind turbines, and battery storage systems. This would reduce costs and enhance accessibility in Africa.

[38] See Bräutigam, D., & Tang, X. (2014). "Going global in groups": Structural transformation and China's special economic zones overseas. World development, 63, 78-91; and Mohan, A. (2023). China-A strategic Economic Player in Africa. ELECTRONIC JOURNAL OF SOCIAL AND STRATEGIC STUDIES, 4, 141-166.
[39] PowerChina signs contract to build the 1.1 GW Suez wind project in Egypt https://www.enerdata.net/publications/daily-energy-news/powerchina-build-wind-farm-egypt.html
[40] UNDP and International Poverty Reduction Center in China. (2015). "Comparative Study on Special Economic Zones in Africa and China." Working Paper series. No.06.2015.

Attracting businesses in above-mentioned industry will be one of the key solutions and thus could boost local manufacturing of environmental goods, such as solar panels, wind turbines, and battery storage systems, reducing costs and enhancing accessibility.

3.3 Model 3 – Linking critical minerals to value-added manufacturing of environmental goods

In light of the pressing issue of global warming and the urgent need to combat climate change, it is crucial for Africa to prioritize the balance between economic development and environmental preservation. One key aspect of achieving this balance is through localised environmental goods manufacturing, which needs to be linked to Africa's critical minerals.

Critical Minerals

Critical minerals are the essential raw materials for producing components used in clean technologies and environmental goods.[41] Africa is home to 30% of the world's mineral reserves, many of which are indispensable for renewable energy and clean technology manufacturing.[42] For example, the continent holds approximately one-third of global bauxite resources, the primary source of aluminum used in solar PV components. Additionally, the Democratic Republic of Congo (DRC) alone accounts for over 70% of the world's cobalt reserves, a crucial element in lithium batteries powering electric vehicles and energy storage systems.

Chinese investment in Africa's mineral sector began in the late 1980s, driven by China's domestic demand for raw materials vital to its rapid industrialisation and infrastructure development. By 2023, Chinese foreign direct investment (FDI) stock in Africa reached US$42.11 billion, with 21.7% (US$9.16 billion) directed toward mining, making mining the second-largest FDI sector after construction.[43] This investment is concentrated in resource-rich nations such as South Africa, the DRC, Zambia, and Zimbabwe, focusing on critical minerals like copper, cobalt, and lithium, which are essential for clean energy technologies. Table 5 below presents some of the key critical minerals and links to environmental goods.

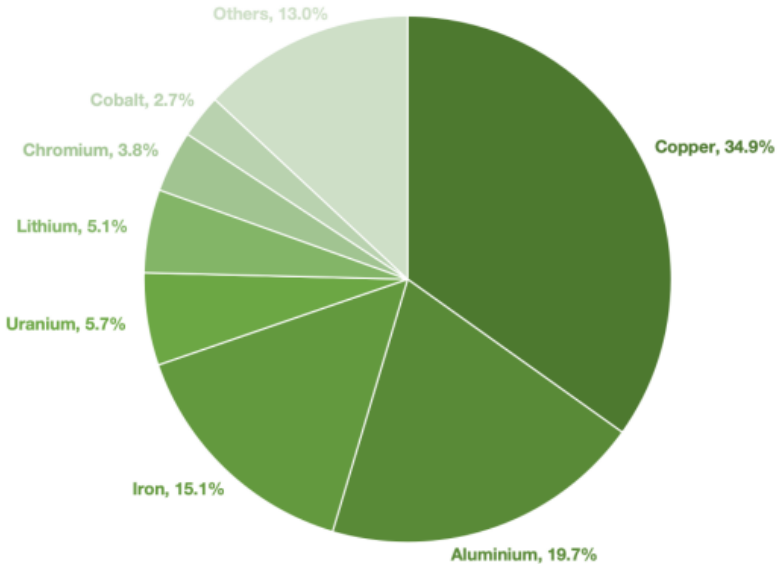
Table 5: Critical Minerals in Southern Africa and its linkage in the Environmental Goods manufacturing [44]

Critical Minerals	Major producing countries	Use for Environmental Goods
Copper	DRC, Zambia	Solar PV, Wind turbines, Evs and Battery storage
Cobalt	DRC	Evs and Battery storage
Lithium	Zimbabwe, DRC	Evs and Battery storage

[41] IEA. "The role of critical minerals in clean energy transitions." https://www.iea.org/topics/critical-minerals
[42] Chandler, Ben (2022). "Africa's critical minerals. Africa at the heart of a low-carbon future." Mo Ibrahim Foundation. https://mo.ibrahim.foundation/sites/default/files/2022-11/minerals-resource-governance.pdf
[43] MOFCOM (2024), '2023 Statistical Bulletin of China's Outward Foreign Direct Investment'.
[44] Development Reimagined generated

Chinese-controlled mining projects are particularly prominent in Southern Africa. The DRC, Zambia, and South Africa are key hubs for copper and cobalt extraction, while Zimbabwe has emerged as a significant site for lithium mining since 2020. Between 2000 and 2022, copper attracted 35% of China's non-energy mining FDI in Africa, followed by investments in aluminum, iron, uranium, and lithium (see Figure 4).[45] These investments reflect China's strategic focus on securing critical minerals to support its clean energy ambitions. But they are focusing on primary processing, such as the production of cobalt hydroxide and lithium spodumene.

Figure 4: Chinese FDI for non-energy mining and processing in Africa by mineral (2000-2022)[46]



Chinese investment in Africa's critical mineral resources aligns with the broader global shift toward sustainable practices and green technology. Minerals such as copper, cobalt, and lithium are central to renewable energy infrastructure, electric vehicles, and energy storage systems, all of which are crucial for the green transition. Chinese-backed projects in Africa's critical mineral sectors therefore integral not only to meeting China's domestic demand but also to supporting a global supply chain centered on green energy and sustainable practices.

Environmental Goods

Environmental goods (EG)[47], encompassing products and technologies that contribute to environmental protection and sustainability, are playing an increasingly important role in the global efforts towards net zero emissions. The trade of environmental goods has been gaining significant

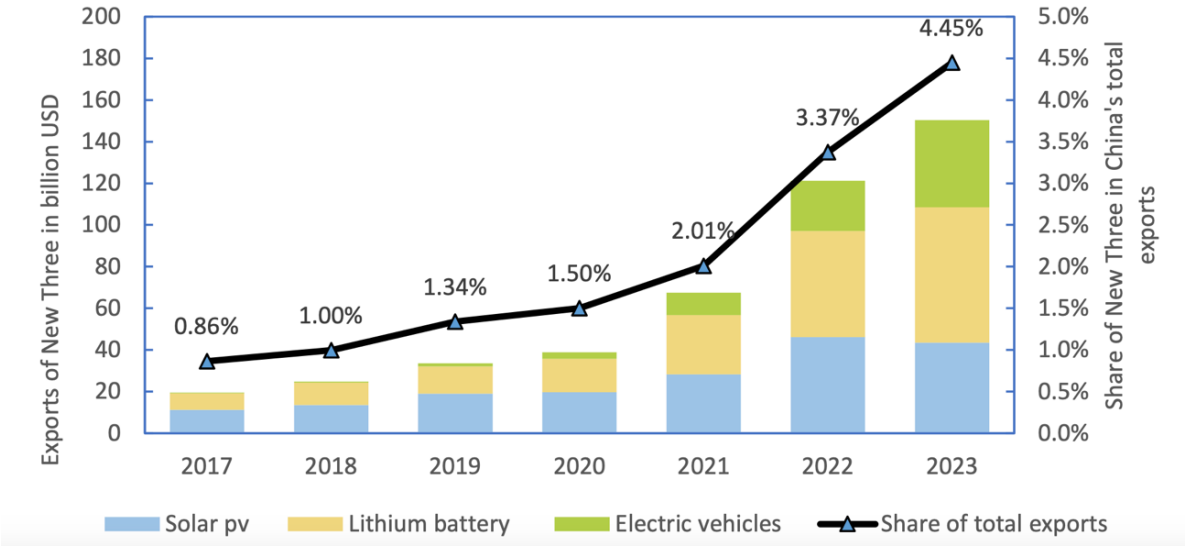
[45] Moses, Oyintarelado, Dianah Ngui, Lucas Engel and Abbi Kedir. 2024. "China-Africa Economic Bulletin, 2024 Edition." Boston University Global Development Policy Center and African Economic Research Consortium.
[46] Source: Moses, Oyintarelado, Dianah Ngui, Lucas Engel and Abbi Kedir. 2024. "China-Africa Economic Bulletin, 2024 Edition."
[47] The Defined by the OECD and APEC, environmental goods (EGs) encompass four main categories: Environmental Protection (EP), Renewable Energy (RE), Environmental Monitoring & Assessment (EMA), and Environmentally Preferable Products (EPP).

importance in international trade, reflecting their growing contribution to both economic and environmental objectives.

According to IMF's database[48], global trade in environmental goods grew from US$433.3 billion in 1994 to US$3.46 trillion in 2021 with China being at the forefront of this growth. In particular, over the past three decades, China has become a leading manufacturer and the world's largest net exporter of environmental goods. In 2021, the export value of China's environmental goods accounted for 20% of the world's export value in 2021 (US$351.47 billion). "New Three" products including batteries, electric vehicles (EVs) and solar PV equipment, identified by China as vital for economic growth and green development, play a meaningful role in this.

China accounted for 68%, 74% and 86% of global production of EVs, batteries and solar modules, respectively in 2023. Exports of China's "New Three" products increase by 650% from about US$20 billion in 2017 to more than US$150 billion in 2023, with Europe, North America and East Asia being the major markets (see Figure 5 below).[49]

Figure 5: China's export of "New Three" and its share of China's total exports[50]

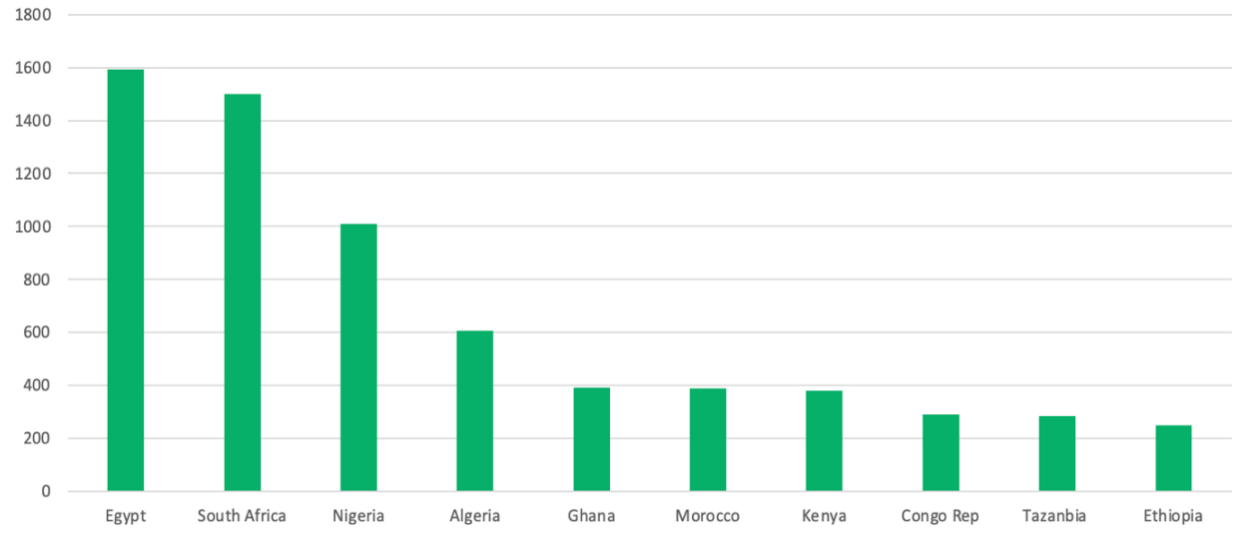


In contrast, Africa's participation in EG trade remains minimal. In 2021, Africa's share of the global trade of EGs was less than 1%, with South Africa contributing over half of this amount. This spark difference between the trade performance of a single country (China) and that of the entire continent (Africa) underscores the significant opportunity for African nations to further strengthen cooperation with China and enhance their participation in the global EGs market.

[48] IMF: Climate Change Dashboard. Access from: https://climatedata.imf.org/datasets/8636ce866c8a404b8d9baeaffa2c6cb3_0/about
[49] Zhang, Jing, and Christophe Nedopil (2024). "China Green Trade Report 2023." Griffith Asia Institute. https://www.griffith.edu.au/__data/assets/pdf_file/0032/1952249/Zhang_Nedopil_China-green-trade_2023-Report.pdf
[50] Zhang, Jing, and Christophe Nedopil (2024). "China Green Trade Report 2023." Griffith Asia Institute.

China has been trading with African countries on EGs (see Figure 6 below). For example, BYD, one of the frontier electric car makers, opened its businesses in South Africa in 2023 and introduced its EVs in the region.[51] Similarly, China's bus manufacturer Yutong launched the first electric buses in Nigeria, marking a significant step towards advancing sustainable transport solutions in Africa.[52]

Figure 6: Top 10 African countries in environmental goods trade with China[53]



Most of the engagement between China and Africa in the EG sector remains centered on import and export trade, while a few companies are already engaged in the assembly operations (see Box 6 below). While the trade arrangement allows African markets to access affordable and high-quality green products, it underscores a missed opportunity to deepen the collaboration through local production.

[51] IOL. (2023). "World's biggest electric carmaker launches in South Africa." https://www.iol.co.za/motoring/industry-news/worlds-biggest-electric-carmaker-launches-in-south-africa-byd-atto-3-price-announced-4bf214a9-5773-4115-a142-22abbeac9e2d
[52] Xinhua. (2023). "Chinese bus maker Yutong launches first electric buses in Nigeria". https://english.news.cn/africa/20230524/a8eb49cbfd7a40e3b2b45177060ac7bb/c.html
[53] Source: IMF, Trade in Environmental Goods, Climate Change Dashboard

Box 6:
Case Study - Power Solution Launch Local Assembly of Off-grid Solar Products in Ethiopia

Power-Solution, a Shenzhen-based off-grid solar home system manufacturer with 15 years of experience, has strategically ventured into local manufacturing in Ethiopia. Having served over 7.2 million families across 66 countries, the company selected Ethiopia after evaluating key factors such as local manufacturing incentives, market demand, and potential partnerships.

In 2024, Power-Solution began with Semi-Knocked Down (SKD) assembly and plans to transition to Complete Knock Down (CKD) manufacturing by 2025. To navigate cultural and geographical challenges, the company partnered with local businesses, initially focusing on high-demand products like their flagship solar light, the “Candles Killer”.

While there are challenges such as higher labour costs, inefficiencies, defective rates, shifting customs policies, and exchange rate fluctuations, Power-Solution views localisation as pivotal to its African expansion strategy. In the long term, the abundance of local labour, geographic proximity to consumer markets, and expected profits are all incentives for Power-Solution to continue to expand in other countries. It has already planned to replicate this model in Nigeria, capitalising on the continent's growing demand for solar products. (Source: Interview with Power Solution)

China, as a leader in the global energy transition and with its huge manufacturing and trading capacity for EGs, can play an important role in Africa’s manufacturing-driven green growth. Given Africa’s abundant natural resources, large labour market and the economic scale under the African Continental Free Trade Area (AfCFTA) - the largest free trade area in the world, as well as a focus under FOCAC 9 on value-added products, there is a need to increase its manufacturing capacity in the EG sector in the future, using critical minerals as a link.

CHAPTER FOUR - SOLUTIONS TO CHINA'S SUPPORT FOR AFRICA'S GREEN INDUSTRIALISATION

4.1 Innovative Financing Mechanisms for Green Industrialisation Projects

1. ***Leveraging the role of Special Fund for China-Africa Green Industrial Chain****:* The establishment of the Special Fund for China-Africa Green Industrial Chain, as part of FOCAC 9, is a positive step. The Special Fund, with an initial scale of 50 billion RMB (US$684 million), focuses on supporting cooperation across the China-Africa green industrial chain, promoting development in areas such as clean energy, green transportation, green minerals, and green upgrading of traditional industries in Africa.[54] However, China could expand this initiative by offering concessional loans and blended financing models tailored to green industrialisation projects. Blended financing can significantly enhance the bankability of renewable energy projects by improving their risk-return profiles, thereby attracting commercial investors, bridging the financing and risk gaps.[55] These financing could be directed toward high-impact areas such as renewable energy, eco-friendly infrastructure, and green technology hubs. Chinese banks could support the establishment of green industrial zones across Africa by providing affordable financing options that reduce entry barriers for manufacturers and incentivise sustainable practices.

2. ***Exploring the way to implementation of Green Bonds***: One promising approach is the implementation of green bonds as per the example of Evolution in Mauritius[56] which are specifically created to fund environmentally friendly projects. By issuing green bonds dedicated to the environmental goods industry, Chinese banks can attract a broad spectrum of investors who are keen on sustainable investments. Banks could also consider the establishment of funds that pool resources from multiple investors to fund large-scale projects such as the production of wind turbines, solar PVs or EVs, spreading risk and increasing the potential for substantial returns.

3. ***Encouraging public-private participation (PPP) on renewable energy deployment and EG manufacturing projects****:* Chinese companies could also seek to establish PPPs in which they will collaborate with African government entities and financial institutions to finance renewable energy projects and projects focused on the production of environmental goods, benefiting from government guarantees or subsidies that will reduce their financial risks. Over two thirds of African countries have regulatory frameworks for developing PPPs that are applicable to the energy sector.[57] For instance, the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) in South Africa is a public procurement program that allows Independent Power Producers (IPPs) to submit competitive bids to design, develop and operate large-scale renewable energy power plants in the country. This

[54] Belt and Road Portal (2024). "中非绿色产业链专项资金首个项目落地开工". https://www.yidaiyilu.gov.cn/p/08QRJK8I.html
[55] World Bank Blogs (2022). "Blended finance can catalyze renewable energy investments in low-income countries".
[56] "Evoluton II (Mauritius) No. 2 LP." FMO. https://www.fmo.nl/project-detail/50277
[57] Ronge, Alexandre, Vivek Shastry, and Andrew Kamau (2024). "Public-Private Partnerships in the African Energy Sector". https://www.energypolicy.columbia.edu/wp-content/uploads/2024/04/PPPsinAfrica-CGEP_FactSheet_040124.pdf

PPP programme has attracted US$16 billion in private-sector investment and added 5,243 MW of renewable energy to South Africa.[58]

4.2 Greening Special Economic Zones (SEZs)

1. ***Integrating green technologies into special economic zones (SEZs)****:* China's established SEZs in Africa, such as Eastern Industry Zone in Ethiopia and Lekki Free Zone in Nigeria, offer significant opportunities to foster green industrialisation. By incorporating renewable energy systems, waste recycling facilities, and green manufacturing technologies into these zones, China can transform them into hubs for sustainable industrial practices. For example, SEZs can be equipped with solar energy systems and water recycling plants to reduce their environmental footprint. The UNIDO Framework for Eco-Industrial Parks provides a valuable guideline for transforming SEZs into environmentally sustainable and economically viable ecosystems. A successful example is South Africa's East London Industrial Development Zone (ELIDZ), recognised by UNIDO as a leading eco-industrial park for its innovative use of renewable energy and circular economy practices[59]. This model offers valuable insights for greening other SEZs in Africa.

2. ***Attracting more companies on green technology to the SEZs***: China can support African countries in developing local industries that transform raw materials into finished products rather than exporting them unprocessed. This approach would enable African nations to add value within their borders, boosting local manufacturing, job creation, and economic resilience. There are SEZs in Africa dedicated to green technology manufacturing, such as the Atlantis Special Economic Zone (ASEZ) in South Africa[60]. The ASEZ focuses on industries such as renewable energy components, energy-efficient appliances, and other sustainable technologies. By encourage Chinese investment into ASEZ, China can guide African countries on the development of local supply chains for green technology components of China's "New Three" products such as solar panel production, electric vehicle assembly, and lithium battery manufacturing, ensuring that these parks contribute to Africa's long-term economic transformation.

4.3 Expanding Renewable Energy Infrastructure for Industrial Development

1. ***Continued implementation of mega renewable projects****:* To support Africa's green industrialisation, China can continue prioritising large-scale investments in renewable energy infrastructure. While small-scale projects like solar installations cater to local needs, large projects are essential to meet the energy demands of Africa's growing industries. China can leverage its technological expertise and manufacturing capacity to develop transnational renewable energy grids, tapping into Africa's abundant solar, wind, and

[58] NDC Partnership. "South Africa's Renewable Energy Independent Power Producer Procurement Programme". https://ndcpartnership.org/knowledge-portal/good-practice-database/south-africas-renewable-energy-independent-power-producer-procurement-programme?utm_source=chatgpt.com
[59] East London IDZ (2024). "ELIDZ Named Leading Eco-Park in the world by UNIDO". https://www.elidz.co.za
[60] Atlantis Special Economic Zone. "About Us". https://atlantissez.com/about-us/

hydropower resources. These projects should emphasise affordability and reliability, ensuring they are accessible to African industries while promoting local job creation and skills development. Joint ventures with African governments and private stakeholders can enhance ownership and sustainability, aligning with the targets set in the AU's Agenda 2063 and the African Renewable Energy Initiative (AREI).

2. ***Encouraging more "small but beautiful" renewable energy projects to address local needs**:* "Small and beautiful" projects have the advantage of low financing (flexibility to use private sector funding) and a fast delivery cycle, which facilitates solutions for decentralised communities. For instance, China could provide technical expertise and financing for off-grid solar systems, mini wind farms, and small hydropower installations in rural and under-served areas. These projects would empower communities with sustainable energy sources, reduce reliance on costly and polluting fossil fuels, and enhance energy access. Furthermore, African countries could also participate into China's "Africa Solar Belt" program to address the electricity demand of the households.

4.4 Linking Critical Minerals to Green Value Chains

1. ***Increasing investment in the whole supply chain of green manufacturing***: Given China's active involvement in Africa's mining sector, greater investment in midstream and downstream activities—such as processing, manufacturing, and the distribution of green products—can foster more resilient and sustainable industrial ecosystems across the continent. These investments can help reduce reliance on imports, lower production costs, and enhance the competitiveness of African-made green products in global markets. Moreover, these "first-mover" Chinese manufacturers can improve their profit margins by tapping into the entire African market. The continent is a US$2.97 trillion economy with 5 of the world's 10 fastest growing countries and is on a path of substantial green growth.[61]

2. ***Establishing Joint Ventures to Strengthen Local Capacity**:* Africa's abundant reserves of critical minerals, including cobalt, lithium, and rare earth elements, position the continent as a key player in the global energy transition. To ensure these resources contribute to sustainable industrialisation, China can collaborate with African businesses through joint ventures or partnerships, including those based in industrial parks, to promote value-added processing and manufacturing within Africa. Instead of merely extracting raw materials, these collaborations can focus on refining minerals and producing components for renewable energy technologies, such as batteries and solar panels. Such initiatives would not only increase Africa's participation in global green supply chains but also foster technology transfer, capacity building, and job creation.

4.5 Strengthening Policy Alignment and Collaboration on Green Industrialisation

The Chinese government can enhance its involvement in the policy arena by adopting a more targeted strategy within the FOCAC framework that prioritises green industrialisation initiatives in Africa. For example, China can share the expertise and lessons learnt from the development of

[61] African Development Bank Group (2023). "Launch of the African Development Bank Group's African Economic Outlook 2023 Report on "Mobilizing Private Sector Financing for Climate and Green Growth in Africa" - Presentation by Prof. Kevin Chika Urama, FAAS".

"New Three" products, which aligns with China's ambition to lead in global green technologies. Additionally, China can bolster Africa's green industrialisation by aligning its investments with regional and continental strategies, such as the African Union's Green Recovery Action Plan (GRAP) and the African Continental Free Trade Area (AfCFTA). This strategic alignment not only ensures that China's efforts are tailored to Africa's specific needs and priorities, but also opens new markets for Chinese green products and technologies, enhancing China's economic influence in the region. Moreover, fostering trilateral cooperation between China, African Union, African development financial institutions and international organisations like the United Nations and the World Bank can enhance coordination, minimise redundancies, and amplify the impact of green industrialisation initiatives. By actively supporting Africa's green industrial development, China solidifies its leadership in global green technologies, stimulates demand for its products, and strengthens its position in global climate diplomacy.

4.6 Enhancing Skills and Knowledge Transfer on Green Technologies

The success of green industrialisation relies heavily on the availability of a skilled workforce. China has expertise in the development of "New Three" products in a short period. Thus, China can intensify its collaboration with African institutions by establishing training centers focused on green technologies and industrial processes, including processing and manufacturing of solar PV panels and EVs. These centers could offer vocational training, academic programs, and research opportunities tailored to Africa's industrial needs, supporting long-term development in line with FOCAC commitments. This approach not only builds a skilled labour pool that supports Chinese investments but also enhances local capacity for green manufacturing and innovation. Additionally, Chinese companies operating in Africa can integrate capacity-building initiatives into their projects, ensuring knowledge transfer and the development of local expertise. This strategy empowers African workers and entrepreneurs, while also enhancing the operational efficiency and local integration of Chinese enterprises. By investing in human capital and knowledge transfer, China fulfills its FOCAC commitments to industrial cooperation, education, and talent development, and cements its role as a strategic partner in Africa's green industrial transformation.

About Development Reimagined

Development Reimagined (DR) is a pioneering, African-led, women-led, Africa-first and award-winning international development consultancy, with headquarters in Beijing and offices in the UK and Kenya. DR was created in response to the complexities of global poverty and sustainable development – which requires new ideas, and new solutions. DR - and the clients we work with - invest in thoughtful insights backed by cutting-edge analytics and deep relationships.

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