

SECTOR INTELLIGENCE BRIEFING

THE GREEN ECONOMY

Investment in Africa, 2020–2026

A country- and sector-level review, with a five-year investment outlook to 2031

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Africa Green Economy Investment Review · 2020–2031

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Executive Summary

Africa's green economy has moved decisively from a niche development-finance story into one of the continent's fastest-growing investment categories. Between 2020 and 2026, capital flows into clean power, climate technology ventures, green hydrogen, green bonds and carbon markets all expanded markedly — even as the continent continues to receive a disproportionately small share of global climate finance relative to its needs.

Renewable energy investment across Sub-Saharan Africa doubled to roughly \$15 billion in 2023, before easing to between \$13.5 billion and \$13.8 billion in 2024–2025 as capital rotated away from utility-scale projects and toward distributed, corporate-backed solar. South Africa, Nigeria and Kenya remain the three dominant destinations for power-sector capital, while Egypt, Morocco, Namibia and Mauritania anchor a separate — and far larger — green hydrogen investment pipeline worth well over \$100 billion in announced projects.

Climate technology has, at the same time, become the largest single category of African start-up venture funding, overtaking fintech for the first time in 2025 at roughly \$1.1–\$1.5 billion (estimates vary by tracker). Funding nonetheless remains heavily concentrated among a small number of energy-access and e-mobility companies, leaving agritech, waste management and climate-adaptation ventures comparatively under-capitalised.

\$2.8 trillion vs. \$40 billion

Africa's estimated climate finance need through 2030 for its Nationally Determined Contributions, against roughly \$40 billion a year in actual clean energy investment today.

Looking ahead to 2031, credible upside exists across nearly every sub-sector — but that upside is conditional. Closing even a fraction of Africa's financing gap will require sustained growth in blended finance, carbon markets, green bonds and corporate procurement: the themes explored throughout this report.

1. Scope and Approach

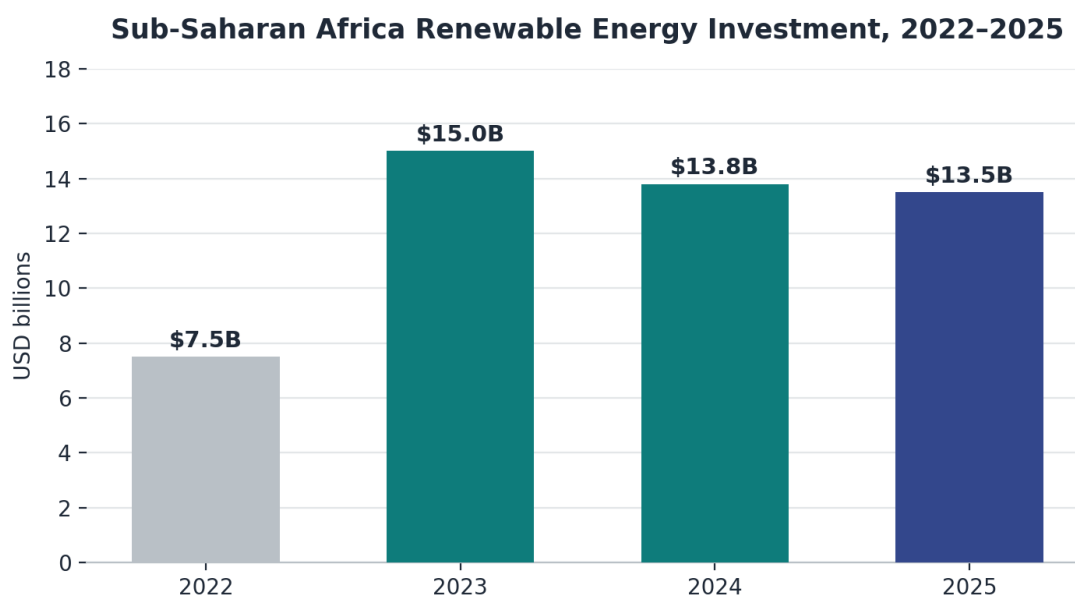
This review synthesises publicly available data from BloombergNEF, the International Energy Agency (IEA), the African Development Bank (AfDB), Briter Bridges, TechCabal Insights, the Africa Green Hydrogen Alliance, and industry reporting published through July 2026. "Green economy investment" is used broadly to cover renewable power, climate technology venture capital, green hydrogen, green and sustainability bonds, and carbon and nature-based markets.

Because trackers apply different methodologies and reporting windows, figures from different sources are presented side by side rather than merged into a single headline number. Throughout this report, the direction of travel matters more than any single point estimate.

2. Continental Overview, 2020–2026

Africa's overall energy investment reached an estimated \$110 billion in 2024, of which around \$70 billion was directed to fossil-fuel supply and power, with the remainder going to clean energy technologies. Private-sector clean energy investment on the continent nearly tripled over five years, rising from roughly \$17 billion in 2019 to close to \$40 billion in 2024 — even as public and development-finance institution (DFI) funding for African energy fell by about a third over the past decade, a decline driven largely by a pullback of more than 85% in Chinese DFI spending.

Within that total, renewable power asset finance tracked by BloombergNEF for Sub-Saharan Africa rose from roughly \$7–\$8 billion in 2022 to a record \$15 billion in 2023 (2.3% of the global total), before easing slightly to \$13.8 billion in 2024 and \$13.5 billion in 2025 as utility-scale project financing tightened and capital rotated toward smaller, distributed-solar deals.



Source: BloombergNEF, Sub-Saharan Africa Clean Energy Market Outlook

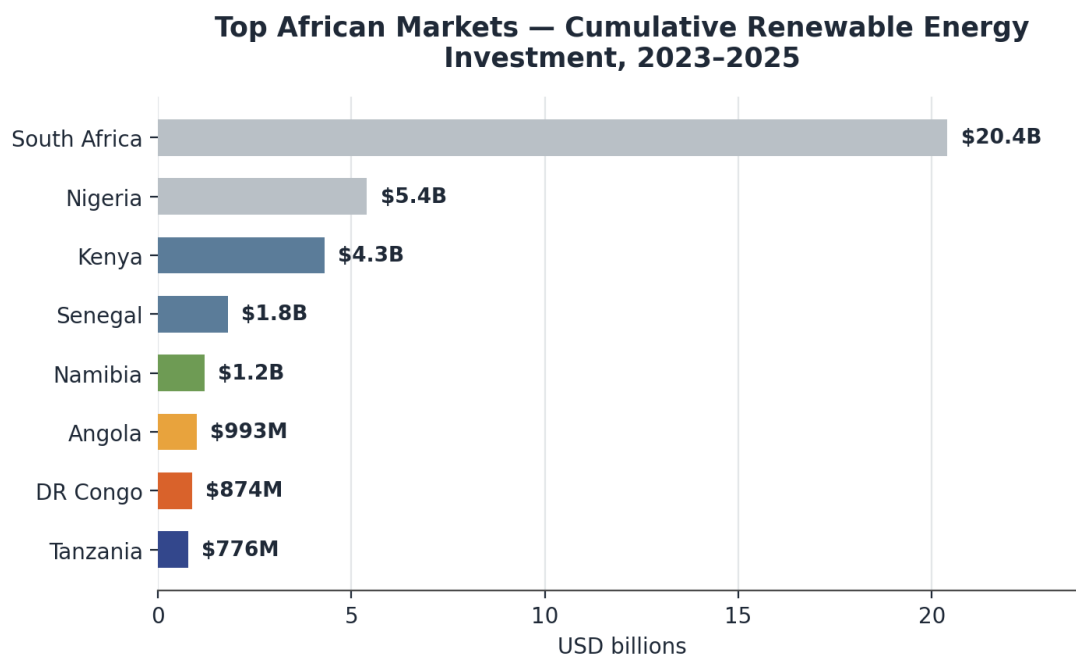
Figure 1. Sub-Saharan Africa renewable energy investment, 2022–2025 (BloombergNEF).

The continent’s installed renewable capacity has doubled over the past decade to roughly 72 GW. Yet the African Union’s target of 300 GW by 2030 implies that annual deployment must jump from about 8 GW today to 32.5 GW a year — a build rate that current investment and financing conditions are not on track to meet.

3. Investment by Country

Renewable power investment remains heavily concentrated. South Africa alone attracted an estimated \$20.4 billion in renewable energy investment between 2023 and 2025 — roughly 60% of the Sub-Saharan African total — helped by its REIPPPP procurement programme, a chronic domestic power deficit, and rapidly growing corporate and rooftop solar uptake (corporate-backed renewables now account for about 94% of the country’s renewable market).

Nigeria, Kenya, Senegal, Namibia, Angola, the Democratic Republic of Congo and Tanzania form a clear second tier, led by Nigeria’s fast-growing distributed solar sector, valued at about \$2.4 billion on its own.



Source: BloombergNEF, Sub-Saharan Africa Clean Energy Market Outlook (2025/2026)

Figure 2. Cumulative renewable energy investment by country, 2023–2025 (BloombergNEF).

Country	Cumulative renewable investment, 2023–25	Notable feature, 2020–26
South Africa	\$20.4bn	REIPPPP procurement; 94% corporate-backed renewables; largest green hydrogen pipeline (Boegoebaai, Coega) and green bond programme (R3.7tn ESG finance plan to 2030)
Nigeria	\$5.4bn	Distributed/rooftop solar boom (\$2.4bn market); sovereign green bond issuance since 2017; Nigeria Clean Hydrogen project targeting a \$50bn market
Kenya	\$4.3bn	Regional leader in geothermal (~985 MW); strong climatetech and agritech venture ecosystem
Senegal	\$1.8bn	Growing utility-scale solar and wind pipeline
Egypt	n/a (hydrogen-led)	Over \$17.4bn in secured green hydrogen commitments; Suez Canal Economic Zone hub; renewable capacity nearly doubled since 2015
Morocco	n/a (hydrogen-led)	Noor Ouarzazate CSP complex; \$10bn+ green hydrogen/ammonia pipeline; regional green-tech export hub
Namibia	\$1.2bn	Flagship \$10bn Hyphen green hydrogen project; high solar and wind resource
Mauritania	n/a (hydrogen-led)	AMAN project — roughly \$40bn in announced green hydrogen investment
Angola	\$993m	Early-stage renewables and waste-data / EcoBuild-style environmental tech entrants
DR Congo	\$874m	Emerging private-sector renewables participation
Tanzania	\$776m	Growing distributed solar and off-grid investment

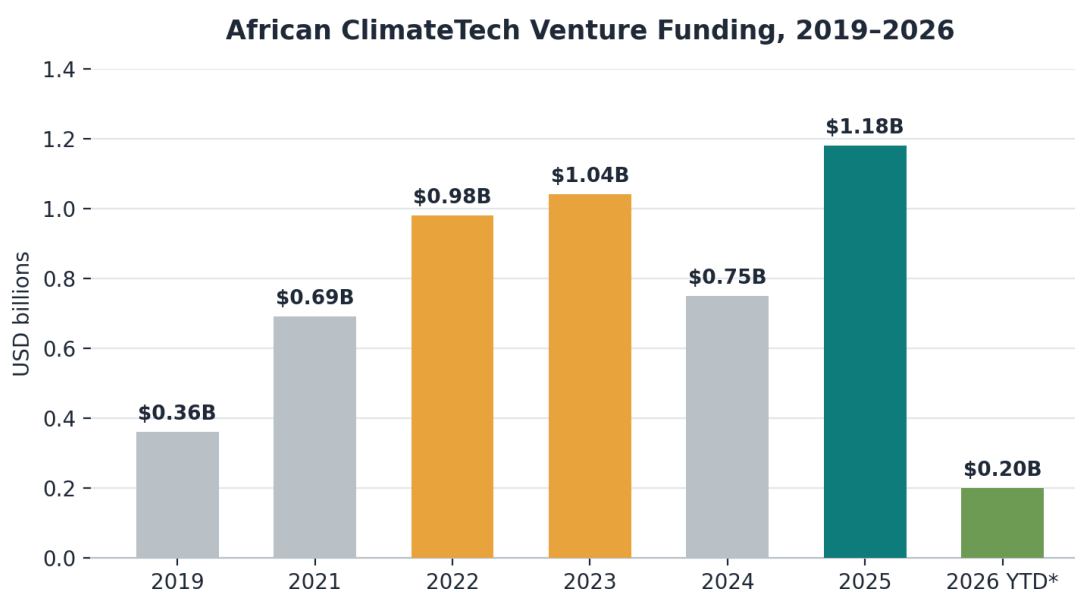
4. Investment by Sector

4.1 Power: Utility-Scale and Distributed Renewables

Utility-scale renewables have slowed relative to distributed solar. BNEF-tracked utility-scale investment across Sub-Saharan Africa fell from \$5.1 billion in 2024 to \$4.3 billion in 2025 as fewer large solar and wind projects reached financial close, largely due to high financing costs. Distributed and commercial-and-industrial solar has taken up the slack, with corporate procurement reaching a cumulative \$10.5 billion since 2024 and gaining traction beyond South Africa in Zambia, DR Congo and Ghana.

4.2 ClimateTech Venture Capital

Climate technology has grown from a \$206 million niche in 2016 into Africa's largest venture capital category by 2025. Cumulative disclosed funding since 2019 has reached roughly \$5.66 billion across 928 deals (per TechCabal Insights), or \$6.35 billion across 779 companies since 2016 (per Briter Bridges) — trackers differ on scope but agree on direction. 2025 was a record year at \$1.1–\$1.5 billion, a 57% jump over 2024's dip, now representing 38–40% of all disclosed African start-up funding.

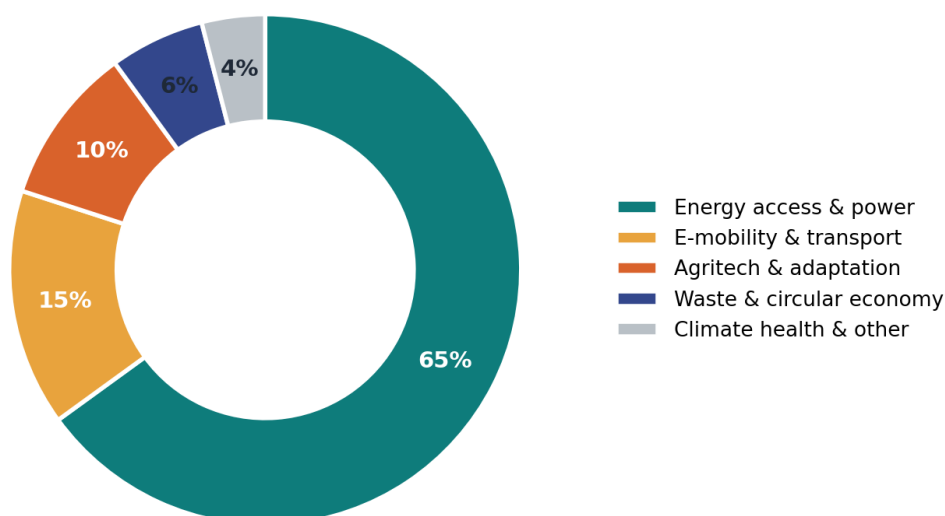


*2026 figure is partial-year (through February 2026). Source: TechCabal Insights / Briter Bridges trackers.

Figure 3. African ClimateTech venture funding trend, 2019–2026 (approximate, blended from multiple trackers).

Funding remains concentrated: the top 20 funded companies captured 60% of all ClimateTech capital raised since 2016, and the top 10 alone raised as much as every other company in the sector combined. Energy-access and e-mobility ventures — M-KOPA, Sun King, Spiro and similar asset-backed models — dominate, while agriculture, waste management and climate adaptation remain comparatively under-funded.

Share of African ClimateTech Funding by Sub-Sector (cumulative, 2019–2025)



Source: Briter Bridges / Catalyst Fund / FSD Africa, *State of ClimateTech in Africa report*

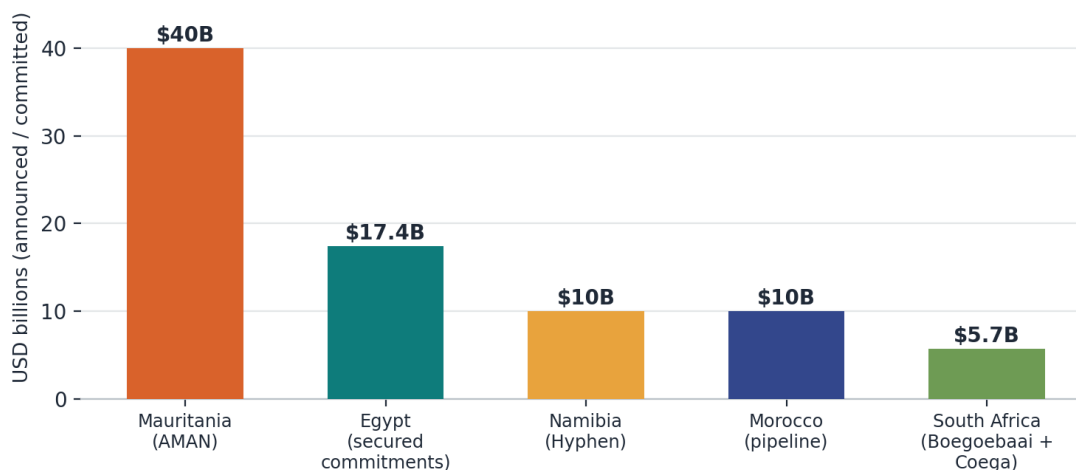
Figure 4. Approximate share of cumulative African ClimateTech funding by sub-sector, 2019–2025.

Agritech funding has been more volatile, and recently smaller: after peaking at \$776 million in 2022, it fell to \$206.9 million in 2024 and to roughly \$118–\$168 million in 2025 — though deal quality has shifted toward processing and cold-chain infrastructure, with East Africa capturing about 41% of 2025 deal value.

4.3 Green Hydrogen

Green hydrogen has become the largest single line item in Africa's green economy pipeline. Industry trackers count 78 announced projects with combined investment needs of roughly \$194 billion, with Egypt, Morocco and South Africa accounting for about 80% of that pipeline. Mauritania's AMAN project alone represents an estimated \$40 billion in planned investment; Namibia's Hyphen project is valued at \$10 billion; and Egypt has secured over \$17.4 billion in investment commitments centred on the Suez Canal Economic Zone.

Flagship Green Hydrogen Projects — Announced Investment by Country Hub



Note: figures are announced/pipeline investment, not all at Final Investment Decision.
Sources: African Energy Chamber, AfriCGE, Ecofin Agency, Green Hydrogen Organisation (2026)

Figure 5. Announced investment in flagship African green hydrogen hubs.

The gap between announced ambition and projects reaching Final Investment Decision (FID) remains wide — most of this pipeline is still at the memorandum-of-understanding or feasibility stage. Even so, the Africa Green Hydrogen Alliance, which now spans eleven countries, is targeting up to \$20 billion a year in green hydrogen investment by 2030.

4.4 Green Bonds and Sustainable Debt

Africa remains a marginal participant in the roughly \$2.6 trillion global green bond market, but momentum is building. Nigeria's sovereign green bond programme, launched in 2017 and expanded in 2019, has been oversubscribed, and South Africa's National Treasury has published a sustainable-finance framework underpinning a R3.7 trillion (\$228 billion) ESG financing plan through 2030, alongside a target of raising R160 billion a year from international climate-finance institutions. Rwanda's 2023 Green Taxonomy is positioning the country as an East African sustainable-finance hub.

4.5 Carbon Markets and Nature-Based Finance

The Africa Carbon Markets Initiative projects that the continent's carbon credit market could scale roughly nineteenfold by 2030, generating up to \$6 billion in annual revenue and supporting around 30 million jobs; other industry estimates put the addressable opportunity as high as \$50–\$100 billion by 2030. Growth is being driven by Article 6 implementation under the Paris Agreement, rising CORSIA aviation-offset demand, and a broader shift from market “readiness” toward transaction-ready project pipelines in nature-based solutions, regenerative agriculture, waste-to-value and blue carbon.

4.6 Circular Economy, Waste and Green Buildings

Waste management and the built environment remain the most under-capitalised parts of Africa's green economy: together with sustainable-cities ventures, they represent only about 10% of the climatetech venture landscape, despite significant exposure to climate vulnerability. Waste-focused ventures have raised roughly \$191 million cumulatively — a fraction of energy-sector totals — even as urban waste-data platforms, recycling and circular-economy models gain policy attention at events such as Africa's Green Economy Summit, whose 2026 pipeline included energy, waste, e-mobility, food and blue-economy projects worth a combined \$3.09 billion in sought funding.

5. Key Drivers, 2020–2026

- Falling technology costs: solar PV is now the least-cost power source in many African markets, improving bankability without subsidy.
- Energy security pressure: chronic grid deficits in South Africa, Nigeria and elsewhere have pulled corporate and household capital into distributed solar.
- Rising DFI and multilateral coordination: AfDB's Africa Adaptation Acceleration Program, the Arab Coordination Group, and blended-finance vehicles are increasingly co-investing rather than acting alone.
- Maturing carbon-market infrastructure: improved MRV standards, Article 6 rules, and CORSIA compliance demand are converting “readiness” into transactable credit pipelines.
- A widening set of asset-backed climatetech business models — pay-as-you-go solar, e-mobility leasing — that are attractive to growth-stage and debt investors, not just early-stage venture capital.

6. Key Challenges and the Financing Gap

- Scale of need versus flows: Africa needs an estimated \$2.8 trillion by 2030 to meet its Nationally Determined Contributions, against roughly \$40 billion a year in actual clean energy investment today.
- High cost of capital: currency risk, sovereign credit ratings and perceived project risk keep African financing costs well above global peers, constraining utility-scale project finance in particular.
- DFI retrenchment: public and development finance for African energy has fallen by about a third over the last decade, with Chinese DFI spending down more than 85%.
- Concentration risk: both renewable power investment (South Africa) and climatetech venture funding (a handful of companies) are heavily concentrated, leaving many countries and sectors under-served.
- Execution gap in green hydrogen: of the roughly \$194 billion in announced project value, only a small share has reached Final Investment Decision.
- Nascent green-bond and carbon-market infrastructure: weak sustainability-reporting frameworks and monitoring capacity have drawn criticism even where issuance has grown, as in Nigeria.

7. Bankability: The Deciding Factor Between Pipeline and Financial Close

Nearly every constraint identified elsewhere in this report converges on a single question: is the project bankable? Bankability — a project’s ability to secure debt and equity financing on the strength of predictable revenue, manageable risk and creditworthy counterparties — is the filter that decides how much of Africa’s green economy pipeline actually converts into built capacity, rather than remaining an announced ambition.

The pattern recurs throughout the data already reviewed. Utility-scale renewable investment fell from \$5.1 billion in 2024 to \$4.3 billion in 2025 specifically as “fewer large solar and wind projects reached financial close, largely on high financing costs” (Section 4.1) — a bankability problem, not a resource or demand problem. Of the roughly \$194 billion in announced green hydrogen investment, only a small share has reached Final Investment Decision, with most of the pipeline still sitting at the memorandum-of-understanding or feasibility stage (Section 4.3) — again, a bankability gap rather than a lack of ambition. And South Africa’s dominance of the renewable power market is itself substantially a bankability story: REIPPPP succeeded because it gave lenders a standardised, government-backed procurement structure that other markets have struggled to replicate.

Bankability, not capital, is the binding constraint

Africa is not short of announced projects or investor interest — it is short of projects structured well enough for lenders to underwrite. Closing that gap does more to accelerate the sector than any single new pool of capital.

What Makes a Project Bankable

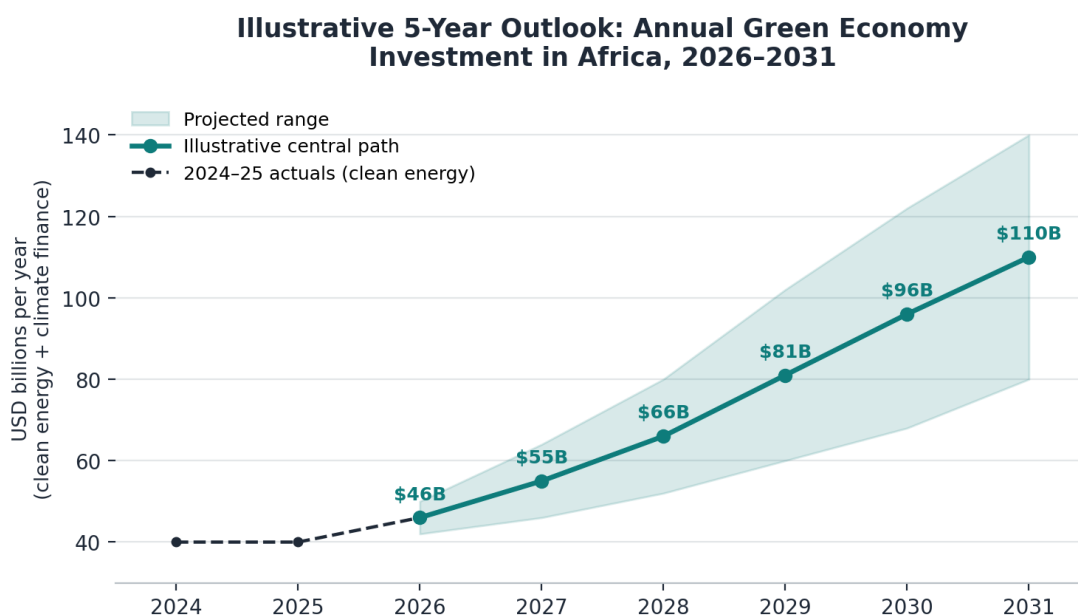
Factor	What strengthens bankability	What weakens it
Offtake quality	Long-tenor power purchase agreements with creditworthy counterparties — utilities, sovereigns or investment-grade corporates — under transparent procurement such as REIPPPP	Short-tenor or unclear offtake arrangements, weak utility balance sheets, payment-history risk
Currency and political risk	Local-currency financing, partial risk guarantees and political-risk insurance from DFIs and multilaterals	Unhedged foreign-currency debt against local-currency revenue; sovereign credit deterioration

Factor	What strengthens bankability	What weakens it
Grid and infrastructure readiness	Confirmed grid capacity and connection agreements ahead of financial close	Transmission constraints that risk curtailment once a project is operating
Regulatory and permitting track record	Standardised, repeatable procurement frameworks with a demonstrated history of financial close	Case-by-case negotiation, permitting delays, and policy inconsistency between administrations
Credit enhancement and blended finance	First-loss capital, guarantees and concessional tranches from DFIs that lower the risk private lenders must price	Reliance on commercial-only capital stacks in markets where risk premia remain elevated

Taken together, these factors explain why distributed and corporate-backed solar has been more financeable than large utility-scale projects in most markets outside South Africa: shorter development timelines, direct corporate offtake, and smaller ticket sizes make each individual deal easier to underwrite, even where national grid and regulatory conditions remain unresolved (see Section 9 for the investor implications). They also explain why blended finance, DFI co-investment and credit enhancement recur as the central policy lever throughout this report — these instruments exist specifically to convert projects that are technically and commercially sound but not yet bankable into ones that are.

8. Five-Year Investment Outlook, 2026–2031

The projections below are illustrative. They are built from stated institutional targets — the African Union’s 300 GW-by-2030 goal, the Africa Green Hydrogen Alliance’s \$20 billion-a-year ambition, the Africa Carbon Markets Initiative’s scenarios, and AfDB/IEA financing-gap estimates — rather than a single consensus forecast. They describe a plausible corridor, not a guarantee.



Illustrative projection built from AfDB, IEA and BNEF target trajectories — not a guaranteed forecast.

Figure 6. Illustrative outlook for annual green economy investment in Africa, 2026–2031.

Sector	2026 run-rate	Illustrative 2031 potential	Primary swing factor
Renewable power	~\$13–\$14bn/yr	\$25–\$35bn/yr	Grid upgrades; utility-scale FIDs; corporate procurement growth
ClimateTech venture capital	~\$1.0–\$1.5bn/yr	\$2.5–\$4bn/yr	Growth-stage and debt capital entering beyond the top 10–20 companies
Green hydrogen (cumulative FID)	<\$20bn to date	\$40–\$80bn cumulative	Offtake agreements with Europe and Asia; infrastructure buildout
Green bonds / sustainable debt	Nascent	\$10–\$20bn/yr issuance	Sovereign programmes (South Africa, Nigeria, Kenya, Egypt) scaling
Carbon markets	~\$0.3–\$1bn/yr	\$3–\$6bn/yr	Article 6 implementation; CORSIA demand; MRV credibility

If this corridor is realised, cumulative green economy investment in Africa over 2026–2031 could plausibly range from roughly \$250 billion at the low end to over \$500 billion at the high end, across power, venture capital, hydrogen, bonds and carbon markets combined — still well short of the \$2.8 trillion NDC financing need. This gap underscores why blended finance, DFI co-investment and private capital mobilisation will remain the central policy question through the decade.

What Would Move the Needle

- Grid investment: without transmission and distribution upgrades, renewable capacity additions will keep running into curtailment and bankability limits.
- Growth-stage and debt capital for climatetech: the sector's next stage of scale depends on financing beyond early-stage venture capital — asset-backed debt, blended finance and larger private equity cheques.
- Green hydrogen offtake certainty: European and Asian demand signals, and firm offtake contracts, will determine how much of the \$194 billion pipeline actually reaches FID.
- Sovereign green bond scaling: South Africa's R3.7 trillion ESG plan, and similar moves elsewhere, could meaningfully deepen African green-debt markets if executed.
- Carbon market integrity: credible MRV and Article 6 rules will determine whether the ACMI's nineteen-fold scale-up scenario is achievable or optimistic.

9. Strategic Implications for Investors and Venture Builders

- Distributed and corporate-backed solar, rather than large utility-scale projects, is currently the more financeable near-term opportunity across most markets outside South Africa.
- Climatetech capital is concentrating in proven, asset-backed models — ventures with clear unit economics and revenue-backed structures are best positioned to attract growth-stage capital.
- Waste management, circular economy and green-building ventures are structurally under-capitalised relative to their climate exposure — a potential white space for patient, blended-finance-backed capital.
- Green hydrogen offers large headline numbers but long timelines to FID; near-term value is more likely to sit in adjacent services — engineering, offtake advisory, local content — than in direct project equity for most investors.
- Carbon markets and nature-based finance are moving from framework-setting to transaction-readiness; project developers with credible MRV capability are likely to be well placed as Article 6 mechanisms mature.

10. Sources

BloombergNEF — Sub-Saharan Africa Clean Energy Market Outlook (2025/2026); Africa Power Transition Factbook (2024). International Energy Agency — World Energy Investment 2024 & 2025, Africa. African Development Bank / Africa Adaptation Acceleration Program. Africa Carbon Markets Initiative. Africa Green Hydrogen Alliance / Green Hydrogen Organisation. African Energy Chamber — The African Energy Transition Provides Opportunity (2026). TechCabal Insights — Africa’s Climatetech in 2025 and Africa’s Climate Tech Has Raised \$5.66 Billion Since 2019. Briter Bridges / Catalyst Fund / BFA Global / FSD Africa — State of ClimateTech in Africa report (2026). Startup Map Africa — Top Agritech Startups in Africa 2026. Green Central Banking — Green Bonds in Africa (2026). Ecofin Agency, AfriCGE, ScienceDirect — green hydrogen analyses (2025–2026). VUKA Group / Africa’s Green Economy Summit (2026). Bloomberg — South Africa Eyes Green Bonds for \$228 Billion ESG Finance Plan (2026).

Note: figures throughout are drawn from the most recent publicly available reporting as of July 2026 and combine multiple tracking methodologies; where sources disagree, this is noted in the text.