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Africa's Solar Gigawatts Are Real. So Are Its 600 Million Without Power.

Research Team

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A new survey ranks Africa's top 10 solar projects, led by Egypt's Benban and Morocco's Noor Ouarzazate. Yet 600 million Africans still lack electricity — and no comparable East African project is yet in the pipeline.

Africa's Solar Buildout — First Edition
Information cut-off: 1 August 2026, 12:00 GMT

Headline Fact

A new survey published today by the Washington-based Energy Platform, carried by attaqa.net, ranks the ten largest solar projects operating in Africa as of the end of 2025. Egypt's Benban Solar Complex tops the list at 1,465 megawatts operational (targeting 2.05 gigawatts), followed by Morocco's Noor Ouarzazate complex at 582 megawatts. South Africa supplies seven of the remaining eight entries. The list confirms that Africa can now build and run gigawatt-scale solar infrastructure — but it says nothing about the roughly 600 million Africans, more than 80% of the world's electricity-access gap, who still have no power at all (attaqa.net, 1 August 2026; Nordic Development Fund, 2026).

Timeline

- **2016–2019:** Egypt's Benban Solar Complex is developed in Aswan governorate, sited in coordination with NASA for its solar-irradiance profile; the park eventually hosts more than 608 million solar cells across 37 square kilometers (attaqa.net, 1 August 2026; Egyptian State Information Service, cited by attaqa.net).
- **2016–2018:** Morocco commissions the four-plant Noor Ouarzazate complex — three concentrated-solar-power stations (Noor I–III) plus the photovoltaic Noor IV — with 3–7 hours of thermal storage capacity (attaqa.net, 1 August 2026).
- **January 2024:** South Africa's Kenhardt hybrid facility connects to the grid, pairing 540 megawatts of solar with a 1,140-megawatt-hour battery system, delivering a steady 225 megawatts from 5:00 a.m. to 9:30 p.m. daily (attaqa.net, 1 August 2026).
- **By end of 2025:** Benban reaches 1,465 MW operational capacity, generating an estimated 3.8 terawatt-hours a year and cutting roughly 2 million tonnes of CO2 annually, according to project data compiled by the Energy Platform survey (attaqa.net, 1 August 2026).
- **Before September 2026 (planned):** A further 200 MW is expected to come online at Benban, pushing the complex toward its 2.05 GW target — on par, by generation, with Egypt's Aswan High Dam (attaqa.net, 1 August 2026; industry reporting cross-checked via WebSearch, July–August 2026).
- **2026 (ongoing):** The World Bank, African Development Bank, and Sustainable Energy for All continue implementing "Mission 300," which targets electricity access for 300 million Africans

by 2030 — roughly half of today's unserved population (Nordic Development Fund, 2026; World Bank, 2024–2026 program materials).

What We Know / What We Don't

We know: the ten ranked projects' operational capacities, technologies, and completion dates are documented by project-level data the Energy Platform attributes to named operators and, for Benban, Egypt's State Information Service. We know South Africa's dominance of the list — six of its own projects among the ten — reflects its head start under the Renewable Energy Independent Power Producer Procurement Programme, not a one-off. We know roughly 600 million Africans lack electricity access today, a figure consistent across the World Bank, the African Development Bank, and Sustainable Energy for All's 2026 reporting.

We don't know: how much of the power these flagship projects generate reaches households and small businesses versus industrial or export offtake — the survey measures installed and operational capacity, not last-mile connection rates. We also don't yet know whether Benban's planned 200 MW addition will connect on schedule before September 2026, or whether Sudan and its East African neighbors have any comparable utility-scale solar project far enough along to appear on a similar list within the next two to three years; neither source site reported one this week.

Do-No-Harm Note

This edition covers infrastructure and energy-market data with no named individuals, displaced communities, or active-conflict elements. The conflict-sensitivity check required by 3Bi's editorial guidelines was run and found no identifying or endangering details requiring generalization.

What to Watch

- **Before 30 September 2026:** whether Benban's additional 200 MW connects on schedule, per Egyptian energy-ministry statements referenced in the source survey.
- **2026, ongoing:** progress markers on Egypt's stated target of 42% renewables in its power mix by 2035, against which Benban's expansion is a leading indicator.
- **2026–2030:** disbursement and connection milestones under the World Bank/AfDB/SE4ALL "Mission 300" initiative, the main multilateral vehicle aimed at closing the 600-million-person gap this report highlights.
- **Ongoing:** whether Sudan, Kenya, Ethiopia, or Djibouti announce a utility-scale solar project of comparable ambition — a gap 3Bi has flagged in prior coverage of the region's climate-finance shortfall relative to North Africa.

Sourcing & Next Update

Primary source: attaqa.net, "1 ",(▨▨▨▨▨▨▨▨▨▨) ▨▨▨▨▨ ▨▨▨▨▨ ..▨▨▨▨▨▨▨ ▨▨ ▨▨▨▨▨ ▨▨▨▨ ▨▨▨▨▨▨▨ 10 ▨▨▨▨ August 2026, citing survey data from the Energy Platform (Washington, D.C.) and Egypt's State Information Service. Corroborating context: Nordic Development Fund, "600 million Africans without energy are facing a crisis," 2026; World Bank Mission 300 program materials, 2024–2026. This is a first edition; 3Bi will issue a follow-up if Benban's expansion, Mission 300 disbursements, or a comparable East African project generate a material update.

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