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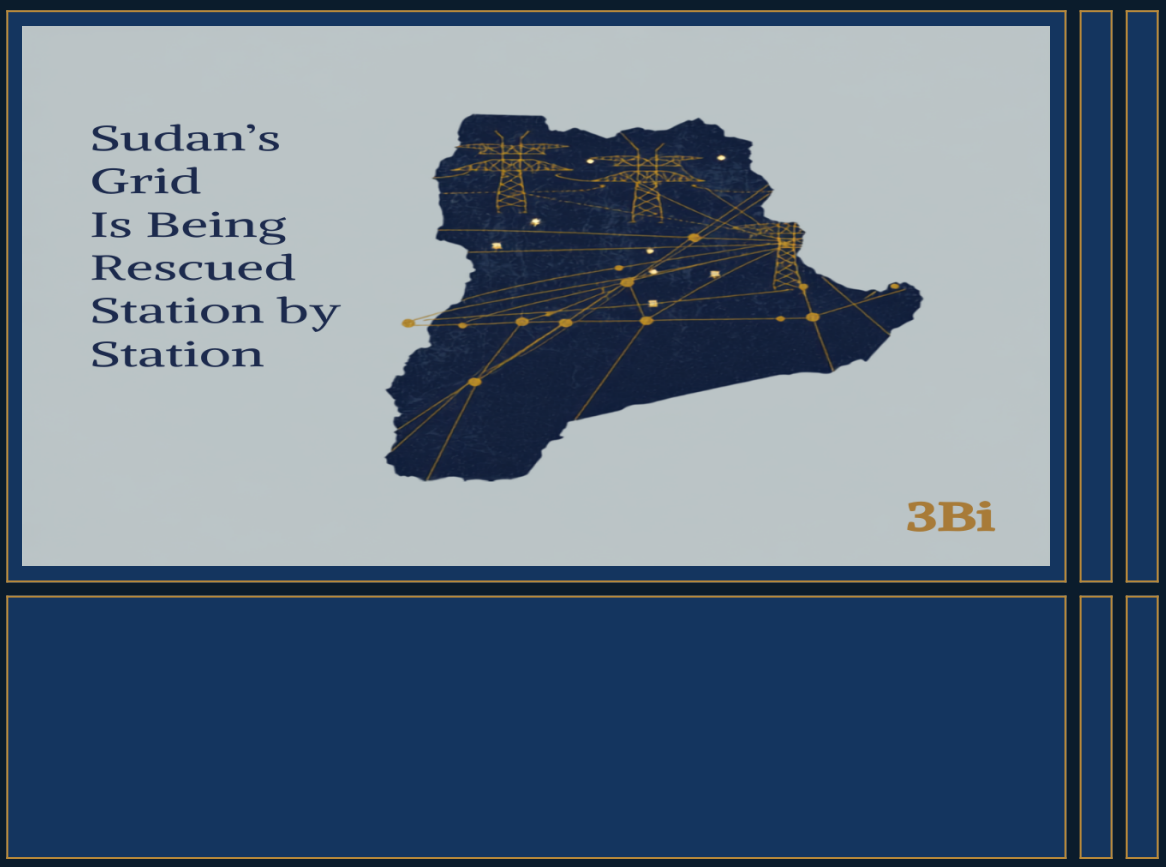

Sudan's Grid Is Being Rescued Station by Station. The Real Fix Is a Second Source of Power.

Research Team

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Contents

Sudan's grid crisis is a single-point-of-failure problem, not just a capacity one. This week's Shendi repair, new solar plans, and Azerbaijani investment interest show the diversification pivot underway — and how far it still has to go.

By 3Bi Research Team

The Hook

On Saturday, Sudan's energy minister flew to Shendi to inspect a converter station that has spent months in disrepair. His ministry says the final tests — pending a gas refill — could soon shave hours off the load-shedding schedule for River Nile State (Sudanese Ministry of Energy and Petroleum statement, via attaqa.net, 22 August 2026). It's the kind of story we read almost every month now: a single station comes back online, a single town gets relief, and the underlying fragility stays exactly where it was. Sudan's grid has absorbed roughly $3 billion in war damage since 2023 (UNDP, reported 26 May 2026), and the minister's own fix for Shendi is telling — not just repair the converter, but "secure a second source of power" for the area, because right now there isn't one.

That phrase is the real story. Sudan doesn't have a generation-capacity problem so much as a single-point-of-failure problem, and this week gives us the clearest look yet at how the government is — and isn't — solving it.

The Argument

One: outages are a design flaw, not just a wartime casualty. Shendi's converter station wasn't hit by an airstrike this month; it broke down, and because the surrounding grid had no backup path, one broken machine meant scheduled blackouts across an entire state. The ministry's fix mirrors the diagnosis: new imported spare parts for the converter, yes, but paired explicitly with a second, independent supply line — plus new transformers for the Kabbashi area north of Khartoum, expected by October, so that district can also draw from two sources instead of one (attaqa.net, 22 August 2026). A grid built on single threads breaks the moment any one thread frays, war or no war.

Two: the government's own diversification plan is real, but it's a rounding error against the damage. Alongside the Shendi repair, the ministry confirmed plans for two new solar plants — 10 MW in Shendi itself and 20 MW in Northern State — plus a wind project and a 50 MW solar station at Kalanaib in eastern Sudan (attaqa.net, 22 August 2026). Sudan's installed solar capacity stood at roughly 190 MW as of 2025, against a pre-war 2033 target of 3,300 MW of renewables, including 2,190 MW of solar (UNDP Solar Energy Value Chain Study, cited via North Africa Post, 2026). Even fully built, this week's additions move the needle by a few percentage points. The

ambition is directionally right; the arithmetic isn't close to matching $3 billion in damage.

Three: foreign capital is starting to notice, which is the more consequential development. On 20 August, the energy minister met a delegation from Azerbaijan's state-owned Glensol Energy Solutions to discuss investment across electricity and oil. The company's proposal: two solar projects in Khartoum totaling 100 MW in a first phase, scaling toward 1,000 MW over subsequent stages (attaqa.net, 22 August 2026; allAfrica.com, 21 August 2026). Glensol's own delegation head noted the company had been eyeing Sudan before the war started — a reminder that investor interest didn't require a ceasefire to exist, only a credible entry point. If even a fraction of that 1,000 MW pipeline materializes, it would roughly triple Sudan's current installed solar base.

Why It Matters to the Reader

For 3Bi's donor and policy audience, the gap between Sudan's diversification ambition and its diversification arithmetic is the actionable finding, not the Shendi repair itself. UNDP's own recommendation — a National Solar Fund pooling domestic banks, federal and state government, UNDP, and international donors — exists precisely because project-by-project fixes, however welcome, can't close a $3 billion hole (UNDP, 2026). Meanwhile, the affordability side of this story is getting worse even as the supply side improves on paper: currency depreciation has more than quadrupled the local cost of a standard solar panel since before the war, and battery prices have more than tripled (UNDP Solar Energy Value Chain Study, cited via North Africa Post, 2026). A donor funding generation capacity without also funding the financing and distribution layer — the piece the Saudi "principal buyer" aggregation model we examined last week solves for a different market — will keep watching new megawatts get announced faster than they get affordable.

The Glensol talks are worth tracking specifically because they test whether Sudan can attract capital at a scale its own budget cannot reach. A single foreign investor moving from a 100 MW pilot to a 1,000 MW pipeline would do more for grid redundancy than a decade of one-station-at-a-time repairs — but only if the deal structure, financing terms, and grid interconnection plans get built in parallel, not bolted on afterward.

Close

Shendi's converter station will likely come back online within weeks. That's good news for one state's outage schedule. Whether it's good news for Sudan's grid depends on whether "a second source of power" becomes the design principle for the whole network, or stays a line in one ministry statement about one town.

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