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A Blackout Toppled Madagascar's President. Sudan's Grid Is Next.



A decade-long financing model can't keep pace with a crisis moving this fast.

3Bi Research Team

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A Blackout Toppled Madagascar's President. Sudan's Grid Is Running the Same Script.

Research Team

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Madagascar's 2025 blackout-driven uprising toppled a president. Sudan faces the identical diesel-price-cap-utility equation today — and can't afford the decade-long financing timeline that a proven hybrid solar-diesel retrofit model just took to reach commissioning.

In September 2025, protests over rolling power and water cuts in Antananarivo grew into a youth-led uprising that, within three weeks, drove President Andry Rajoelina from the country and put Madagascar's military in charge (Reuters/AP reporting via Jefferson City News-Tribune, 15 October 2025; Wikipedia, "2025 Malagasy protests," accessed 19 September 2026). The immediate trigger wasn't an election, a coup plot, or a foreign intervention. It was blackouts — the kind caused by a diesel-dependent utility that a government price cap had already bankrupted (attaqa.net, citing pv magazine, 19 September 2026).

Sudan is running the same arithmetic today, at a larger scale and under harsher conditions. Thermal plants offline, hydropower stretched thin, an Ethiopian import line cut, and diesel prices up more than 40% since March have pushed blackouts to 12–18 hours a day in parts of the country (Al Jazeera, 16 April 2026; Borkena, 22 July 2026; TimesLIVE, 28 August 2026). Sudan's war supplies its own aggravating factors — grid damage, fuel-supply disruption — that Madagascar didn't have. But the underlying mechanism connecting a broken utility to political rupture is the same one that just played out in Antananarivo, and it is worth 3Bi's readers taking seriously rather than filing this as an unrelated island story.

The Argument

First, the mechanism that toppled Rajoelina is structural, not accidental. Madagascar's national utility, Jirama, was required by government price caps to sell electricity below the cost of producing it, and that cost was itself inflated by diesel generators running on imported fuel hauled over difficult terrain (attaqa.net, 19 September 2026). The result was a utility that could not invest in its own infrastructure, a grid that degraded further each year, and outages reaching eight or more per day in the capital. Electrification, officially reported at 40% once tiny 20-watt solar home kits are counted, is in practice far lower — and total national electricity consumption is roughly 2.5 terawatt-hours a year, about 12% of what Brussels alone uses, for a country of 34 million people (attaqa.net, 19 September 2026). That is not a temporary supply hiccup. It is a utility structurally incapable of meeting demand, and it is precisely the condition under which the World Bank estimates roughly 75% of Malagasy citizens live in poverty (allafrica.com, 30 September 2025) — the exact population with the least slack to absorb an outage-driven cost spiral.

Second, Sudan already has every element of that same equation, plus conflict on top of it. Sudan's Ministry of Energy has attributed worsening blackouts to the halt of Ethiopian power



imports and to Rapid Support Forces attacks on grid infrastructure, compounding thermal-plant failures and leaving hydropower from Merowe and Roseires unable to cover base demand on its own (Borkena, 22 July 2026; TimesLIVE, 28 August 2026). Petrol prices climbed more than 40% between late March and mid-2026, from roughly 4,860 to 6,870 Sudanese pounds per litre, pushing private diesel generation — the household- and business-level backstop for grid failure — out of reach for growing numbers of people (Al Jazeera, 16 April 2026). Sudan's government has responded with stopgaps, including a new power-generation barge delivered to Port Sudan in July 2026 (North Africa Post, 22 July 2026). Stopgaps buy time. They do not change the underlying equation that just cost Madagascar's president his office.

Third, the fix exists, it is not experimental, and it is currently moving at exactly the wrong speed. A Belgian-financed consortium — led by Enerdeal (now a subsidiary of Portugal's EDP) alongside the Becquerel Institute — spent roughly a decade building hybrid solar-diesel-battery retrofits across five sites in Madagascar: the towns of Ambilobe, Mananara, and Marovoay, plus the tourist islands of Sainte Marie and Nosy Be (attaqa.net, 19 September 2026). The results were real: roughly 5 megawatts of solar capacity layered onto existing diesel generation, cutting fuel burn and improving reliability without waiting for a full grid rebuild. But by attaqa.net's own account, the project's backers acknowledge that ten years between financing approval and commissioning is far too slow for a technology whose costs fell sharply over that same decade — a 2026 start would look nothing like the 2016 one. That financing tempo is a luxury Sudan, mid-crisis and losing generation capacity in real time, cannot afford to replicate.

Why It Matters to the Reader

For donors, multilateral lenders, and Sudanese energy planners, the Madagascar case is not a cautionary tale about a distant island — it is a proof of concept sitting on the shelf. Hybrid solar-diesel-battery retrofits are a bankable, already-demonstrated way to stabilize fuel-starved local grids without waiting for the political and physical conditions needed for full network reconstruction. Sudan's diesel-dependent towns, backup-generator-reliant hospitals, and barge-supplemented ports are functionally the same category of site as Ambilobe or Marovoay before the retrofit. The barrier is not technical feasibility; it is underwriting speed. A financing and engineering model that took a decade to reach commissioning in a comparatively stable Madagascar is not a model Sudan can adopt on the same clock — the country experiencing more severe blackouts today may have less political runway than Madagascar did before September 2025, not more.

Close

3Bi recommends that Sudan's Ministry of Energy and Petroleum, together with international development-finance partners, commission a feasibility assessment — within the next 90 days —



for hybrid solar–diesel–battery retrofits at Sudan's most diesel-dependent generation sites, explicitly modeled on Madagascar's five-site Finexpo program but compressed to a financing-to-commissioning timeline measured in months rather than years. The technology and the financing instruments both already exist. What is missing is the willingness to move at the speed the underlying crisis demands, rather than the speed institutional habit has defaulted to.

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