

AFRICAN ENERGY CHAMBER

Venezuelan Refinery Experience Offers Pragmatic Lessons for Africa's Struggling Downstream Sector

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Africa's refining sector continues to underperform, with numerous facilities operating well below nameplate capacity or sitting idle entirely. Against this backdrop, the African Energy Chamber has raised an unconventional proposition: that Venezuela's hard-won experience managing degraded refinery assets — particularly at the Paraguaná Refining Complex and the El Palito refinery — could provide a practical recovery playbook for African operators facing similar structural challenges.

Venezuela's Paraguaná complex, once among the largest refining centres in the world, and the smaller El Palito facility have both endured years of chronic underinvestment, sanctions pressure, skilled-labour exodus, and equipment deterioration — conditions that mirror what many African refineries face today. Rather than wholesale reconstruction, Venezuelan operators have been forced to develop incremental, low-capital approaches to sustaining throughput on ageing kit, prioritising operational continuity over optimal efficiency. That pragmatic, constraints-driven engineering culture is precisely what the African Energy Chamber suggests could be transferable.

Across Sub-Saharan Africa, refineries in Nigeria, Zambia, and elsewhere have struggled with feedstock irregularity, deferred maintenance backlogs, and a shortage of specialised turnaround expertise. The result is heavy dependence on refined product imports, persistent fuel shortages, and foreign exchange drain — problems that carry serious macroeconomic and energy-security consequences. Several African

governments have signalled renewed commitment to domestic refining capacity, most prominently through Nigeria's Dangote refinery, but the challenge of rehabilitating legacy state-owned facilities remains largely unresolved.

The Venezuelan model, as outlined by the African Energy Chamber, is not presented as a success story — both Paraguaná and El Palito have suffered significant output losses over the past decade. Rather, the lesson lies in specific technical and operational adaptations: cannibalising non-critical units to keep priority process trains running, improvised maintenance protocols under parts-supply constraints, and workforce retention strategies in difficult operating environments. These are transferable competencies, particularly for African national oil companies managing refineries where capital for full rehabilitation is unavailable in the near term.

The broader implication for the African downstream investment climate is that refinery recovery does not necessarily require greenfield-scale capital or international major involvement. South-South technical cooperation — whether with Venezuelan engineers, Indian refining specialists, or others with experience in constrained environments — could accelerate throughput recovery at facilities where conventional international contractors have not engaged. That said, governance, feedstock security, and commercial frameworks remain prerequisite conditions that technical fixes alone cannot address.

Why this matters to partners and clients of Saga

Norwegian service companies with refinery maintenance, inspection, and turnaround capabilities — particularly those experienced in brownfield and life-extension work — should monitor African national oil company refinery rehabilitation tenders closely, as the framing around low-capital recovery strategies may open procurement channels that full-scale reconstruction projects have not. Companies offering rotating equipment services, heat exchanger maintenance, or process safety systems are well positioned to engage at the unit level rather than waiting for full facility overhauls. This is a market to monitor and selectively approach through NOC partnerships or development finance institution-backed rehabilitation programmes.

PARTNER ANGLES

- **Service:** Rotating equipment and mechanical integrity specialists can target African NOC refineries seeking incremental throughput recovery without full capital overhaul budgets.
- **Pipeline:** Feedstock supply reliability is a core constraint at African refineries — pipeline integrity and metering service providers can add value upstream of refinery gates.
- **FPSO:** Offshore-to-refinery crude supply chain optimisation becomes relevant where coastal refineries depend on domestic crude that is currently being exported rather than processed locally.
- **Drilling:** Increased domestic refining ambition in Nigeria and elsewhere supports the investment case for sustained upstream drilling activity to guarantee feedstock volumes.
- **Subsea:** Where offshore crude is earmarked for domestic refining — as in Nigeria — subsea production reliability directly underpins refinery feedstock security, creating a linked service opportunity.

[Original source: African Energy Chamber →](#)

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