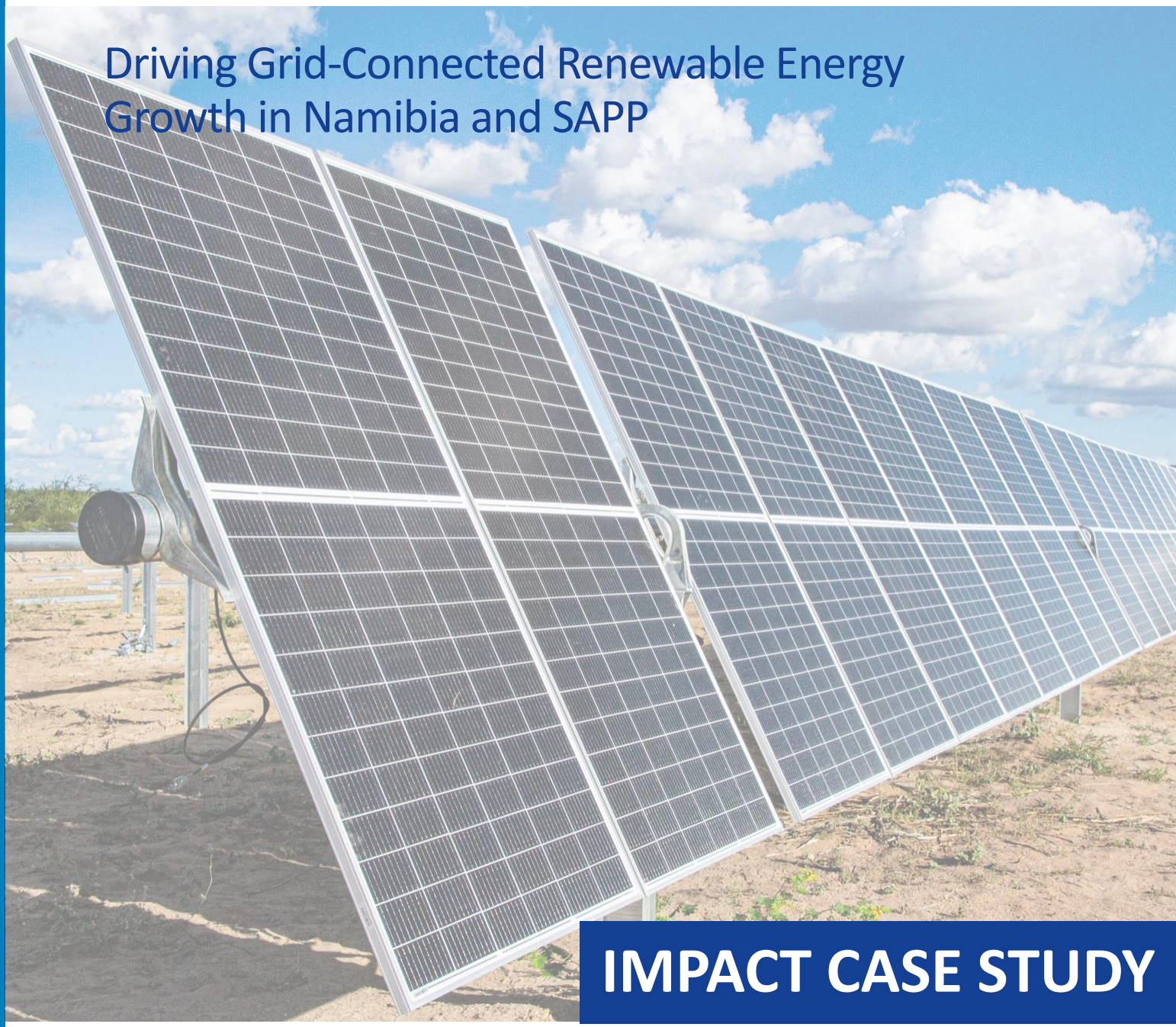
Global Gateway

GET.transform
Transforming Energy Sectors Globally

Opening Power Markets to Private Sector Participation

Driving Grid-Connected Renewable Energy Growth in Namibia and SAPP



IMPACT CASE STUDY

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Introduction

In this series of **Impact Case Studies**, GET.transform sheds light on the tangible and lasting results of advancing energy transitions in partnership with high-impact countries and regions. Focusing on both policy and technical reforms, each case explores how tailored advisory, collaborative dialogue, and hands-on implementation have translated into real-world progress. More than snapshots of success, the case studies surface valuable lessons on what has worked and what has not—insights that may inform future strategies for enabling clean, affordable, and reliable energy systems. Together, they aim to capture how targeted support can create ripple effects far beyond individual interventions.

This case study zooms in on Namibia's power market reform which saw the introduction of one of the most progressive market structures on the African continent.

Partner Testimonials

From a policy perspective, our MSB market model has opened the door to a whole range of new investors and enables exports into the SAPP markets. The guidelines offer vital information to anyone interested in tapping into this potential.

Robert Kahimise
CEO, Electricity Control Board, Namibia

Firmly acknowledging the local MSB market in Namibia, with this guide, we provide structured information on how to become an active SAPP member. We are starting from the advanced Namibian perspective but ultimately aim to boost electricity trading in the entire region through increased participation of independent players.

Stephen Dihwa
Executive Director, Southern African Power Pool

1 The Challenge

Prior to 2019, Namibia's power sector operated under a traditional Single Buyer model, with the public utility NamPower monopolising electricity procurement and distribution. While effective in maintaining central control, this model significantly constrained the entry of Independent Power Producers (IPPs), stifled private investment, and limited the integration of renewable energy sources into the national grid.

The consequences were twofold: a lack of market competition and heavy reliance on electricity imports, particularly coal-based power from South Africa, which at times accounted for over 60% of Namibia's electricity supply. This dependency exposed the country to regional supply disruptions and price volatility, while slowing progress toward energy security and decarbonisation goals.

The key barrier to progress was a rigid market structure that offered little room for innovation, diversification, or cost-reflective participation by private actors. Without clear regulations enabling third-party access or diversified off-taker arrangements, IPPs faced limited pathways to finance and operate projects. As a result, the country struggled to attract the private capital needed to scale up domestic generation capacity—especially in renewables—and reduce import dependency.

While Namibia's adoption of the Modified Single Buyer (MSB) model in 2019 aimed to address these issues by opening the market in phases, the model proved initially difficult to navigate due to complex, unclear rules and undefined roles for market participants.

2 The Approach

Namibia decided to launch a coordinated, multi-stakeholder initiative to address the constraints of its traditional market model and unlock private sector investment.

Namibia's Electricity Control Board (ECB), NamPower, the Ministry of Industries, Mines and Energy, and the Southern African Power Pool (SAPP) partnered with GET.transform to operationalise and streamline the country's emerging market structure by refining the regulatory framework and supporting the

implementation of the MSB model. This collaboration culminated in the development of the MSB and SAPP Market Access Guide in 2023, a practical tool designed to clarify roles, processes, and responsibilities under the new market design.

A cornerstone of the reform process was inclusive stakeholder engagement. Through targeted workshops, consultations, and policy dialogues, the partners identified regulatory and institutional bottlenecks and aligned on a shared vision for the power market's evolution. Input from government institutions, private developers, utilities, and regional bodies further helped shape a market model grounded in investment viability and operational clarity.

Figure 1: Approach (Source: GET.transform)

The MSB model itself is being implemented in phases, gradually expanding market access to ensure a smooth and orderly transition. A central feature of the model is that it enables IPPs to sell a portion of their electricity directly to large domestic consumers or export it into the SAPP regional market. In parallel, eligible consumers are permitted to procure part of their energy needs from IPPs, fostering a more dynamic and competitive market environment. The volume of electricity eligible for direct sales is subject to periodic review and adjustment by the ECB, ensuring that the system remains flexible, adaptable, and aligned with evolving market conditions.

Looking ahead, the MSB model will be complemented by the introduction of additional market platforms, including intraday and day-ahead markets, further enhancing market liquidity, price transparency, and operational efficiency.

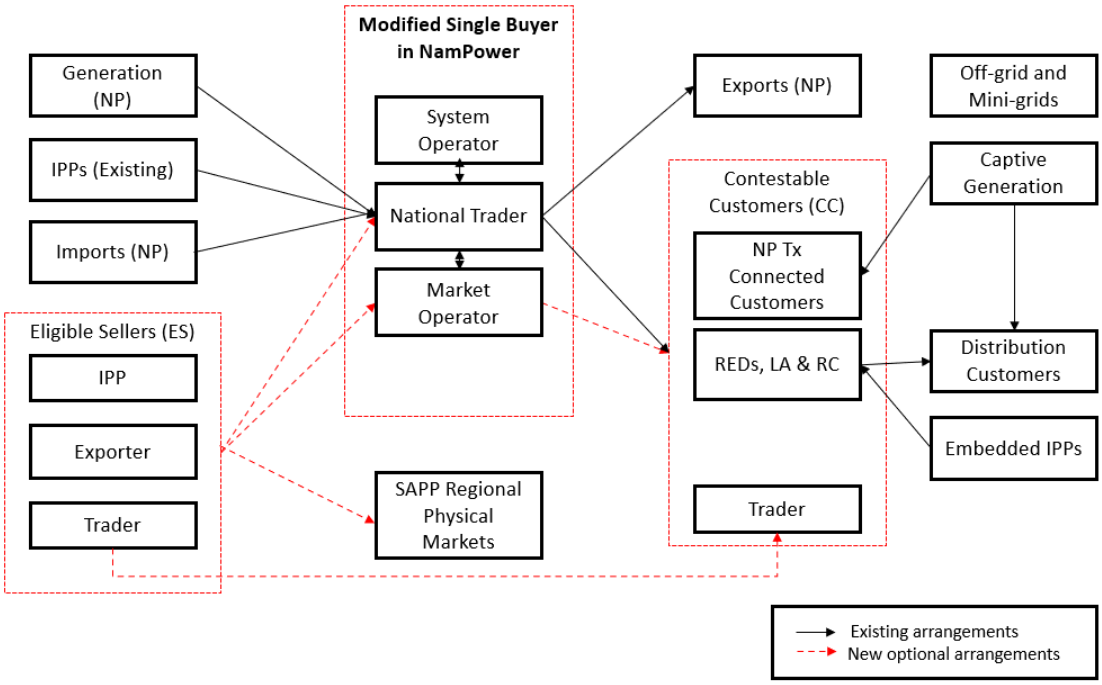

Figure 2: The MSB market model - Phase 1 (Source: MSB and SAPP Market Access Guide, 2023)

The phased approach gives regulators the ability to monitor progress and make timely adjustments, while enabling IPPs to diversify their revenue streams, reduce reliance on a single off-taker, and participate more actively in the power market. It creates a more predictable and bankable environment for renewable energy projects and other forms of private generation.

3 The Impact

The implementation of the MSB model has yielded significant positive outcomes, particularly in boosting investor confidence and expanding private-sector participation in Namibia's power sector.

Local generation is steadily increasing. Namibia now expects to meet 53 percent of its national electricity demand through domestic power production. This represents a major shift from the past, where the country imported the majority of its electricity, largely coal-based, from South Africa. Within the MSB framework, seven solar PV projects with a total capacity of 28 MW are already operational, and an additional 93 MW of renewable energy is expected to come online in the next year. Considering that

Namibia's total installed capacity stands at around 680 MW, this expansion represents roughly 18% of national capacity, showing how impactful these reforms have been in a relatively short time.

One of the most notable milestones was the launch of Namibia's first fully merchant IPP project, a 20 MW solar plant developed by Solarcentury Africa, which will be operational in the coming year. This project marks a turning point for Namibia's power market, as it is the first utility-scale solar plant in the country to operate under a fully commercial structure. Unlike traditional IPP agreements, which rely on long-term PPAs with a state utility, this solar project sells power directly into the SAPP under the MSB framework.

This success demonstrates the viability of privately financed, market-based power generation within Namibia's liberalised market environment. It shows that bankable projects are possible even without a state utility acting as the off-taker, allowing developers to diversify risk and revenue streams.

Figure 3: Impact Summary (Source: GET.transform)

Encouraged by these new opportunities, there has been a strong surge in interest from the private sector. To date, the ECB has issued 79 electricity generation licences under the MSB. While this reflects growing market confidence, the wave of applications also created pressure on the grid. In response, Namibia initiated the development of a Grid Access Guide, supported by GET.transform, to manage rising demand and ensure transparent and efficient connection procedures. Beyond Namibia, the MSB model is setting a valuable precedent for other African nations, offering a scalable blueprint for how

market-driven reforms can unlock private investment in the power sector. As other countries seek to transition toward competitive power markets, Namibia's MSB experience serves as a compelling example of how well-structured energy reforms can drive sustainable energy development and regional power integration market-driven reforms can unlock private investment in the power sector. As other countries seek to transition toward competitive power markets, Namibia's MSB experience serves as a compelling example of how well-structured energy reforms can drive sustainable energy development and regional power integration.

By continuing to build on these successes, Namibia is not only strengthening its own energy security but also contributing to the broader evolution of a more dynamic and interconnected African power market.

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