



## SECTOR PROFILE

## RENEWABLE ENERGY

Profiling Namibia's renewable energy sector for investment

## Introducing Namibia

Namibia is ranked amongst the world's most politically stable countries. The Namibian Government is committed to stimulating economic growth and employment through the attraction and retention of investments.

Namibia's primary infrastructure is well-developed and modern, with a good transport system whose road infrastructure quality is ranked the best in Africa, an efficient communication system with global cellular networks and globally competitive broadband, as well as a sophisticated financial sector.

A land of contrasting beauty, Namibia is strategically located on the south-western coast of Africa and serves as a quintessential trade conduit with the rest of the world for landlocked countries including Botswana, Zambia, Zimbabwe and the Democratic Republic of Congo through the port of Walvis Bay. Compared to other ports in the region, the congestion-free port of Walvis Bay offers shipping line time savings of up to five days to Europe and the Americas, and is a springboard into the Southern African Development Community (SADC) trade block, with a market access of 330 million people.

The country is endowed with natural wind and sun resources, and is considered to be amongst the most competitive destinations in the world with potential to become a producer and exporter of green hydrogen, reckoned to catalyse the decarbonisation of the planet.

Namibia is a middle-income country whose considerable successes rest on a stable multiparty parliamentary democracy that delivers sound economic management, good governance, fundamental civic freedoms and respect for human rights.



Namibia values long-term relationships with foreign investors, and provides numerous opportunities for international investors seeking a foothold and growth on the African continent. The Government has put in place an enabling environment to assist with identification of opportunities, syndicate financing, operating and tax incentives in certain sectors, particularly manufacturing, and one-stop bureau services for establishment of local operations of international companies.

The Namibia Investment Promotion and Development Board (NIPDB) serves as a one-stop shop for all companies aspiring to do business in Namibia. As a public entity in the Office of the President, the NIPDB exists to facilitate investments into Namibia.

This brochure presents the Namibian sectors which are abundantly filled with development opportunities awaiting investment. The areas of green hydrogen, renewable energy, oil and gas, chemical industry, sustainable tourism, transport and logistics and value addition opportunities in the mining sector.

To register your interest in any of the sectors featured within these pages, please visit our webpage on www.nipdb.com for further information. You'll also find contact details at the end of this document.

## Sector Profile

# **Renewable Energy**

#### Overview of sector and significance to the Namibian economy

Namibia is abundantly endowed with diverse indigenous energy sources. The country boasts the world's second highest solar and wind regimes. Namibia possesses a technical wind potential of over 100GW, making it one of the windiest places in the world with a capacity factor of around 50%. In addition, Namibia has a large capacity of rangeland and biodiversity which make it suitable for the accumulated biomass opportunities from bush thinning, making it an economically viable resource for value addition opportunities.

Namibia's Electricity Supply Industry (ESI) is regulated, operated and managed by several agents. The Ministry of Mines and Energy (MME) is responsible for energy policy and legislation, while the Electricity Control Board (ECB) is the regulator of the ESI. NamPower is a commercial public entity, responsible for electricity generation, transmission and energy trading. Regional Electricity Distributors (REDs) and some local authorities are licensed to distribute electricity, while a number of Independent Power Producers (IPPs) are licensed to generate renewable energy.

At its peak, the economy consumed about 640 megawatts of power per annum with a large part of the energy needs imported from neighbouring countries and the Southern African Power Pool (SAPP). On average, NamPower imports between 50% and 60% of its energy requirement.

#### Namibia's current Generation Capacity

Installed Capacity: 680 MW Hydro: 347 MW Coal: 122 MW Wind: 7 MW Solar: 163 MW Thermal (Gas, HFO, Diesel): 41 MW Namibia's Grid Connections

Current Access Rate: 56% Urban: 72% Rural: 35%

Source: https://www.usaid.gov/powerafrica/namibia (2021)

NamPower owns a world class transmission system and a network of 66 kV to 400 kV overhead lines spanning a distance of more than 11,700 km. Continuous investments are being made to strengthen and maintain the national grid to ensure an efficient, reliable and effective network with minimal disruptions.

#### Opportunities in the Renewable energy sector in Namibia

The Government of Namibia's commitment to supporting renewable energy is prescribed in the Renewable Energy Policy and National Energy Policy. Rapid technology development in Solar PV, wind, biomass and storage will enable the country to diversify the local generation mix, reduce dependency on electricity imports, and ultimately deliver a sustainable low-cost supply mix to the economy of Namibia.

Given the abundance of renewable resources available to Namibia, Namibia has the potential to become energy self-sufficient via renewables and could become a net exporter of power to the rest of the Southern African region with proper investment in the renewable industry. The Renewable Energy Policy aims to achieve 70% or more of electricity generated in the country to be from renewable energy sources. Coupled with the Independent Power Producer policy and Modified Single Buyer arrangements - further private sector investment into the sector is anticipated.

The Renewable Energy industry is set to rapidly expand in light of the nation's Green Hydrogen ambitions, as well as the African Union's (AU) announcement of an intended African Continental Power Pool.

#### How to invest in the Renewable Energy sector

Investment opportunities for Independent Power Producers (IPP) exists, as the Government introduced the newly Modified Single Buyer Market (MSB) model in 2019. This allows large electricity customers to buy up to 30% of their demand directly from an IPP rather than from NamPower. The MSB framework is expected to add 450 MW of solar power to the national generation capacity, once fully implemented, as well as export into SAPP.

NamPower will undertake a systematic procurement process for their power projects and invite potential bidders through a competitive procurement process. Private off takers generally negotiate Power Purchase Agreements (PPAs) with IPPs, where in some cases a competitive procurement process applies. Specific requirements for applications to obtain a generation license can be obtained from the ECB including detailed IPP application guidelines, information requirements, a standard advertisement format and a generation license application.

#### Shared experience of Domestic and Foreign Investment in Namibia

InnoSun Energy Holding is an affiliate of the French company, InnoVent. The Franco-Namibian company is an IPP that develops, constructs, operates and maintains renewable generation plants, specialising in solar and wind technologies. So far, Innosun has invested N\$ 600 million on four power plants currently in operation, namely the Omburu Solar Park (4.5 MW), Osona Fund Energy (5MW), Ombepo Wind Farm (5MW) and Alcon Energy (5MW). Innosun is now focusing on the Oab Wind Park (8MW) on more than 150 ha of leased land and the WindNam park (50MW), on more than 900 ha on leased land.

### " …

Namibia can be described as one of the countries in the world, endowed with the best solar irradiation. Having such a valuable natural resource above us, the potential is immense, and it must be harnessed to achieve universal access to modern energy services... As an IPP, InnoSun will be able to sign supply agreements with Contestable Customers (CC), who are required to register with the MSB office. For InnoSun, this presents exciting opportunities to participate in the local energy supply market and future alignment of the Namibian MSB with SAPP.

~Usuta Imbili - Executive Director, Innosun Energy Holding, 2021

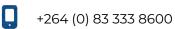
6 | Sector Profile - Renewable Energy





#### The Namibia Investment Promotion and Development Board (NIPDB)

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