

## META Monthly: Renewables Update - May/June 2019

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### Renewables Opportunities in Southern Africa: Spotlight on Namibia

In this issue of META Monthly, we consider Namibia's renewables sector and the surge of solar projects across the country in recent years. In next month's issue we will change direction for a discussion on investment protection in the Kingdom of Saudi Arabia.

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The most significant challenge faced by Namibia's power sector is supply as demonstrated by the fact that in 2011 only 30 percent of the population had access to electricity. With demand exceeding domestic supply, 60 percent of the country's total electrical energy is imported, primarily from South Africa's Eskom and the Southern Africa Power Pool (SAPP). Renewable energy, particularly solar, offers a viable option for meeting the country's increasing energy demand while, simultaneously, enabling Namibia to achieve climate goals and progress towards its sustainable development objectives. In light of this, the Government of Namibia has recognised the development of renewables in the country as a top priority.

A number of reforms have been implemented to strengthen Namibia's power sector and provide an enabling environment to attract investors and independent power producers. These reforms include the consolidation of more than 70 distributors into five regional electricity distribution companies, and the establishment of transparent tariff setting procedures. Both of these reforms are overseen by the sector regulator, the Electricity Control Board (ECB), and supported by the United States Agency for International Development (USAID) via the Africa Infrastructure Program. In April 2015, the ECB established the Renewable Energy Feed-in-Tariff (REFIT) programme for solar PV, biomass, and wind projects to support projects with a capacity of 500 kW to 5 MW. In 2017, the ECB and the Ministry of Mines and Energy of Namibia released the National Integrated Resource Plan (NIRP), which sets out a 20-year development plan for the country's electricity supply. The ECB also adopted The 5<sup>th</sup> National Development Plan (NDP5) in May 2017, which is part of the series of seven National Development Plans to implement and achieve the objectives of Namibia's Vision 2030. In an effort to decrease dependence on imported electricity, NDP5 has set a target of 750 MW locally generated energy by the year 2020.

The REFIT programme has, in general, been received positively in Namibia. Statistics show that 11 of the 14 projects have reached financial close and have been connected to the grid, bringing the total capacity of closed renewables projects in Namibia to over 90 MW. The new projects have received multilateral support. In April 2018, the Multilateral Investment Guarantee Agency of the World Bank (MIGA) announced that it will provide guarantees for the Ejuva One and Two projects. MIGA is also providing breach of contract cover for all of the 14 power purchase agreements (PPAs) signed between NamPower and the project companies. The REFIT programme has boosted local and foreign investment, employment, and domestic know-how in the renewables sector.

Namibia's success to date can therefore be attributed to key regulatory reforms in the energy sector, a clear fiscal policy that promotes investment in renewable projects, and a well-communicated pipeline of upcoming projects via the NIRP and NDP5.

Notwithstanding the success of the REFIT programme, the general consensus is that the Government of Namibia requires greater private sector participation and investment to achieve the nation's renewable power targets. At the same time, there are calls in Namibia to reduce subsidies to the private sector, which are principally based on the argument that subsidies motivate firms to over produce, and consumers to over use, all at the government's cost.

Due to the strong appetite for renewable projects on the part of developers and lenders across Africa and the Middle East, feed-in-tariff programmes in the region have gone by the wayside. Given the market interest, there is no longer a crucial need to subsidise renewable projects. Consequently, many developing countries, even in Southern Africa, are turning to competitive bidding processes to draw in private sector participation. Competitive bidding relies on market-forces to create an environment where subsidies—such as feed-in-tariffs—become unnecessary yet result in ever decreasing tariffs.

Namibia may be the world's leader in solar power potential. Namibia has the highest sun radiation levels in the world—estimated at a daily rate of 5-6 kWh/m<sup>2</sup> and up to 10 hours per day for more than 300 days a year. In recognition of this fact, the Government of Namibia continues to actively support the development of solar projects in a bid to meet the country's power demand. In 2018, NamPower and the Government of Namibia completed prefeasibility studies for the development of a number of additional solar PV projects. In addition to PV, NamPower is conducting feasibility studies for the development of concentrated solar plant, which will aid in baseload generation.

## Below is a list of the most recent and upcoming solar projects in Namibia.

### **Recent**

#### 5 MW Ohorongo Cement Solar PV Plant

The US\$7 million 5 MW solar PV project at the Ohorongo Cement factory in the Otjozondjupa region commenced operation in 2018. The plant comprises 20,000 modules mounted on single-axis trackers. This is the first utility-scale project in Namibia to generate solar power for industrial use.

#### 37 MW Hardap Solar PV Project

The US\$70 million Hardap Solar PV Project located in south-central Namibia, which is the country's first large-scale solar project, reached financial close in March 2018. The 100-hectare project has the capacity to produce 112 GWh per year, meeting 3 percent of the country's energy requirement. This project was developed outside the REFIT programme, but received a multilateral guarantee from Proparco with respect to the R608 million (US\$50.8 million) debt provided by Standard Bank.

#### 5.78 MW Trekkopje Solar Project

The US\$9.5 million 5.78 MW Trekkopje Solar Project, which was funded by the Bank of Windhoek and constructed by the Enertronica Group, became operational in October 2018. The output from the project is fed into the

NamPower grid. However, Enertronica Group also built three smaller solar technology facilities to serve schools of the surrounding communities.

#### 5 MW NCF Solar Project

The US\$12.5 million 5 MW solar PV project, which was developed by NCF Energy (Pty) Limited under the REFIT programme and managed by NamPower, reached financial close in May 2016. The project is funded by USAID and Ino-Harith Capital (Pty) Ltd, the fund manager of The Government Institutions Pension Fund, which has indicated that US\$7 million is earmarked for the development of the project, including the relating transmission line at Okatope. Senior and Mezzanine debt are provided by Power Africa Partner Nedbank and Absa in equal shares in their capacity as joint mandated lead arrangers.

#### 7 MW B2Gold Otjikoto Solar Farm

The US\$8.5 million 7 MW solar PV project was constructed by B2Gold in 2017. Prior to this project, the Otjikoto mine obtained 100 percent of its energy requirements from the 24 MW Otjikoto power plant comprising of heavy fuel oil diesel generators.

#### 6.5 MW Ohorongo Solar Park

The 6.5 MW Ohorongo Solar Park co-developed by Gildemeister energy solutions and the German SunEQ GmbH become operational in 2018.

#### Ejuva I and Ejuva II Solar PV Projects

The Ejuva I and Ejuva II Solar PV Projects, located side-by-side in Gobabis, were constructed and managed as one project feeding an estimated 25.8 GWh per year into the national grid. The projects, which cost a total of US\$21 million to build, commenced operation in 2018 and are backed by a 25-year PPA with NamPower. The local partners own 34 percent of the equity, while developer CIGenCo SA owns 49 percent, and asset manager Mergence Unlisted Investment Managers (Namibia) owns 17 percent. The local co-development partners, OKA Capital and BPI Energy Solutions, played a key role in successfully bringing the projects to completion. MIGA announced in April 2018 that it will provide guarantees for the projects.

### **Upcoming**

#### 80 MW Groot Solar PV Park

The US\$284 million 80 MW Groot Solar PV Park in Tses, which is expected to commence operations by 2021, will supply electricity to five plants owned by Namibia-based manufacturing company, Groot Glass. Groot Glass has appointed the German engineering firm, Suntrace, as its technical adviser for the development of the project. The project will be equipped with a storage system for the supply of electricity after sunset. Groot Glass envisages that the surplus electricity (around 15 percent or up to 12 MW) will be fed into the national grid through NamPower. Investec is acting as mandated lead arranger in respect of the proposed debt financing for the project.

#### 5 x 5 MW Solar PV Projects in Windhoek

Winston & Strawn is advising the Government of Namibia on structuring and procuring five 5 MW solar PV projects in Windhoek. The projects, which will be procured on a public-private partnership basis, as well as will increase access to reliable and affordable electricity by meeting the increased energy demand in Windhoek, diversifying Windhoek's electricity supply, and reducing reliance on electricity generated by NamPower.

6 Min Read

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