

South Africa

Lekela has three projects in operation in South Africa's Northern Cape: Loeriesfontein, Khobab and Noupoort. Together, they have a combined generating capacity of 360MW.

Summary: Loeriesfontein and Khobab

- Loeriesfontein and Khobab wind farms comprise a total of 122 wind turbines, spanning 6,653 hectares. They commenced commercial operations in December 2017.
- With a generation capacity of 140MW each, these neighbouring projects combine to make up the largest single expanse of wind turbines in the country.
- Both projects were contracted under the South African Government's Round Three Renewable Energy Independent Power Producer Procurement programme (REIPPPP).
- Collectively, the wind farms add over a million megawatt hours of clean, renewable energy each year to the country's national grid. This is enough to power around 240,000 South African households.
- The wind farms will avoid an estimated 22 million tonnes of carbon emissions over their lifespan when compared to traditional fossil fuel power plants.
- The projects benefit from strong backing from the local community and municipality and have implemented an extensive social investment programme. This is anticipated to contribute approximately ZAR800m over the life of the two projects.

Summary: Noupoort

- Noupoort wind farm has a generation capacity of 80MW and comprises 35 wind turbines, spanning an area of 7,500 hectares.
- The project successfully reached commercial operations in July 2016, making it the first wind farm to do so as part of the South African Government's round three REIPPPP.
- The wind farm generates over 300,000MWh of clean renewable energy each year; supplying electricity to 70,000 South African homes.
- The project will avoid around 300,000 tonnes of carbon emissions annually compared to traditional fossil fuel power plants.
- The wind farm works actively with the local community and is anticipated to invest over ZAR170m in local initiatives during its lifetime.



Two further projects are in development by Lekela in South Africa. Kangnas and Perdekraal East will together add a further 245MW of clean, reliable power to South Africa's grid.

These five projects form part of Lekela's wider portfolio across Africa. Focusing on delivering clean, reliable energy, Lekela is also developing projects in Senegal, Ghana and Egypt. At a time when power generation is in high demand, Lekela will deliver 1,300MW of much-needed clean energy across all four countries.

Construction & operation

All three operating wind farms use Siemens' SWT-2.3-108 wind turbines, each with a hub height of 99.5m and three blades each 53m long, made from fibreglass reinforced epoxy. The turbines reach to an overall tip height of 152m, allowing the wind farms to capture the excellent winds in the Northern Cape.

Kangnas and Perdekraal will also use the well proven Siemens' SWT-2.3-108 technology and will employ a slightly higher hub height of 115m meaning the blade tips will reach to 168m.

The large majority of the turbine towers were locally manufactured in South Africa's Western Cape and civil and electrical works were completed by a consortium comprised of Murray and Roberts Construction and Consolidated Power Projects.

Siemens is also employed under a long-term service arrangement to ensure the projects achieve world class levels of operational performance throughout the life of the projects.

Cost of fuel

The wind resource is free and clean, and unlike imported fossil fuels, will not have a negative impact on South Africa's balance of payments. The project will also offer competitively priced electricity in South Africa.



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Lekela is a renewable power generation company. We deliver utility-scale projects that supply much-needed clean energy to communities across Africa.

Through a platform built to develop, own and operate wind and solar assets, Lekela draws from its team members extensive experience, and from its founder shareholders decades of proven energy heritage. Lekela has the skills and drive to progress projects from mid or late-stage development into long-term operation. As a result, Lekela delivers sustainable, reliable and competitively-priced power to governments, utilities and large-scale industrial projects.

Lekela's current portfolio includes more than 1,300 megawatts across projects in Egypt, Ghana, Senegal and South Africa.

Socio-economic benefits

Like all Lekela's projects, the wind farms actively participate in the local community. Lekela focuses on initiatives that improve education, enterprise and the environment. This includes providing job opportunities, sourcing from the local economy and investing in community projects.

It is anticipated that over the life of the wind farms, around ZAR970m in total will be invested in community led socio-economic and economic development projects in the local areas.

Community Trusts have been established for each operating project, providing the local communities with a 5% shareholding in their corresponding wind farm. The trusts will carry out public benefit activities to assist the local community's economic development.

- **Loeriesfontein & Khobab:** community investments already made include a local childhood development programme and the creation of opportunities for economic development through the provision of 24 scholarships for the community.
- **Noupoort:** a 6-month development programme is stimulating new local enterprises and an extensive upgrade of the maths and science laboratory at the local high school.

