



Khobab Wind Farm lifts first wind turbine

In March, Khobab Wind Farm completed the lifting of the first of its 61 wind turbine generators, ahead of schedule. It is anticipated that the first power will be exported in the next three to four months and that the wind farm is to start supplying electricity from all 61 turbines to the national grid by end-2017, as part of the third round of the Renewable Energy Independent Power Producer Procurement Programme.

“ This is a crucial point in the construction of the wind farm and even more pleasing that we are not just ahead of schedule, but also on budget,” said Kevin Foster, Project Manager of Khobab Wind Farm.

The wind turbines, which are 100 metres tall to allow for optimum energy production, take up to three days to erect, if prevailing weather conditions allow. The three 53 metre blades, made from fibreglass reinforced epoxy, are connected to the rotor at ground level before being lifted to the top of the turbine tower. This is a complicated lifting exercise, in which one crane raises the assembled rotor whilst another smaller crane and taglines guide the rotor into the correct position. The heaviest component is the nacelle, which contains the generator and gearbox; and weighs 82,5 tons.

This is the same team that was responsible for the installation of the wind turbines at Noupoort Wind Farm and more recently at the adjacent Loeriesfontein Wind Farm. “Working with an experienced crew makes all the difference,” added Foster.

The site was chosen because of its excellent wind resource, its proximity to national roads for wind turbine transportation, the favourable construction conditions, municipality and local stakeholder support, the straightforward electrical connection into Eskom’s Helios substation approximately 7 km south of the site, and studies which showed that there would be minimal environmental impact.

When operating at full capacity, the Khobab Wind Farm will generate approximately 563 500 MWh of clean renewable energy per year; this is expected to supply electricity to power up to 120 000 South African homes. ■





Khobab Wind Farm is owned by a consortium dedicated to providing clean, renewable energy to the people of South Africa:

Lekela Power: Lekela Power is a pan-African renewable energy platform, which has in excess of 1 300MW of wind and solar power projects in its portfolio. It is a 60:40 joint venture between Actis, a leading investor in growth markets, and Mainstream Renewable Power, the global wind and solar company.

Loeriesfontein Community Trust: Established by the project company with the objective of carrying out public benefit activities to benefit the local community in the areas of enterprise development, education and health.

Thebe Investment Corporation; one of South Africa's most established broad based BEE Investment management companies and leading investor in the Energy & Resources sector (advised by Bridge Capital).

The IDEAS Managed Fund, is managed by Old Mutual Alternative Investments, a subsidiary of

Old Mutual Investment Group one of Africa's largest independent investment managers.

Futuregrowth Asset Management is a fixed interest investment company that protects and grows around R170 billion of clients' assets across the full scope of interest-bearing products, and a range of development funds, in a way that has a positive financial, economic and social impact on investors, communities and the country as a whole.

Genesis Eco-Energy in partnership with Lereko Metier Sustainable Capital. Genesis Eco-Energy is a pioneering South African renewable energy developer which has been active in South Africa since 2001.

Lereko Metier Sustainable Capital is a resource efficiency private equity fund that has garnered additional support of two of its investors DEG (The German Development Bank) and FMO (The Dutch Development Bank) in the investment across the Mainstream portfolio.