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Innovative technology solutions for **sustainability**

For the first time in the history of Africa, Abengoa operates a thermal solar tower plant for 24 consecutive hours

- The Khi Solar One plant has been developed by Abengoa and Industrial Development Corporation of South Africa (IDC) and began operating in February, 2016.
- This milestone demonstrates the strength of the partnership and its ability to develop the solar thermal sector in South Africa.

29th March 2016 - Abengoa (MCE: ABG.B/P SM /NASDAQ: ABGB), the international company that applies innovative technology solutions for sustainability in the energy and environment sectors, together with the IDC and Khi Community Trust, has successfully completed 24 consecutive hours of commercial operation, solely powered by solar energy in its Khi Solar One plant. This plant is the first thermal solar tower plant in Africa and the first tower plant to achieve 24 hours of operation with solar energy.

The Khi Solar One plant is a one of a kind thermal solar tower that employs heated steam. It has a capacity of 50 MW, allowing it to supply clean energy to about 45,000 South African households. The plant began commercial operation on February 2nd, 2016.

The company has achieved this milestone thanks to the storage developed by Abengoa's Research and Development team, the IDC and Khi Community Trust. The system accumulates steam at high temperatures and pressure, and allows for the generation of electricity after sunset. This system is capable of generating 50 MW for two hours after sunset. However, the fall in energy consumption at night allows for the operation of the plant below full power. Using this system, the operating unit of Abengoa, the IDC and Khi Community Trust in Khi Solar One have been able to produce electricity for 24 hours using only the steam generated by solar energy and meet energy needs. This milestone demonstrates the successful progress in the advancement of the operation of this innovative plant.

Khi Solar One is the result of significant research and development led by Abengoa. Specifically, the implementation of this large-scale project commercially, Abengoa previously operated a plant with a capacity of 5 MWt, located at the Solucar. Experience gained from the operation of the pilot plant allowed for the optimization of technology and served as a reference for project financing. All this work has resulted in the launch of a plant with increased efficiency, performance and production in terms of cost compared to previous models.

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This project also offers numerous environmental and socioeconomic benefits. It eliminates the production of 183,000 tonnes of CO₂ per year, providing the energy needed to meet the growing South African electricity demand in a sustainable manner. The plant has also promoted local economic development with the participation of a large number of local businesses. Similarly, the project's part ownership by the Khi Community Trust ensures the continuity of investment in the community.

Along with this plant, Abengoa, IDC, PIC and KaXu Community Trust are currently in the process of building another 100 MW parabolic trough plant, Xina Solar One. This plant will employ a storage system that will allow the plant to operate for five hours without the sun. These projects demonstrate the commitment of Abengoa, IDC, PIC, Khi and Kaxu Community Trusts to the development of renewable energy in South Africa as part of the government strategy to collect up to 17,800 MW of renewable energy by 2030, thus reducing its dependence on oil and natural gas.

About Abengoa

Abengoa (MCE: ABG.B/P SM /NASDAQ: ABGB) applies innovative technology solutions for sustainability in the energy and environment sectors, generating electricity from renewable resources, converting biomass into biofuels and producing drinking water from sea water. (www.abengoa.com)

About the IDC

Established in 1940, the IDC is a national development finance institution set up to promote economic growth and industrial development. We are owned by the South African government under the supervision of the Economic Development Department. We promote entrepreneurship through the building of competitive industries and enterprises based on sound business principles.

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