

PRESS RELEASE

Adding power to the national grid

Consortium celebrates first anniversary of Upington Solar Plant launch

Thursday, 12 December - As world leaders gather for the UN Climate Change Conference (COP 25), which takes place in Madrid (Spain) this week, South Africa celebrates the first year of operation of the renewable energy plant Ilanga 1, owned by Karoshoek Solar One (IPP), which has been supplying clean energy to the national grid. The engineering, procurement and construction (EPC) Contractor partners, a consortium between SENER, COBRA and EMVELO, the Owner (Karoshoek Solar One), the Lenders and other key project partners, launched the impressive solar power plant outside Upington.

This unique Concentrated Solar Power (CSP) plant Ilanga-1, contributes 100MWe of on-demand power that is clean, sustainable and reliable. The plant has no fuel costs nor emits harmful emissions ensuring a low carbon footprint. It is equipped with the SENERtrough® system of parabolic troughs, developed and patented by SENER and a molten salt storage system that allows five hours of energy storage, enabling the plant to continue producing electricity in the absence of sunlight. The commissioning of this plant by the EPC contractor has not only brought light and power, but has created employment opportunities for local residents in Upington and surrounding areas.

The EPC partners attained commercial operation of the turnkey solar thermal power plant project in November 2018, within the date scheduled under the Power Purchase Agreement (PPA) signed between the Owner and the off taker (Eskom). The plant has and continues to make a considerable impact on the national grid by supplying electricity to the country through Eskom, the national electricity public utility. This project is an example of a success of Government's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). With the current pressure on supply, this addition to the grid is especially welcomed.

"This is a historic moment in South Africa's energy transition as another renewable energy power plant supplying reliable and sustainable energy, has been operating with a noteworthy set of results and achievements, (energy for around 100,000 homes while saving 90,000 tons of CO2 each year over 20 years). Solar energy has a huge role to play in South Africa. This project represents a historic landmark in showcasing the results that the renewable sector can achieve and possibilities that exist when our climate realities are taken into account when selecting energy sources for the country and continent," said Siyabonga Mbanjwa, Regional Managing Director for SENER Southern Africa.

"This project idea was carried out in 2009, before IPP Program was launched, by our local partner EMVELO with the support of some of the key players in South African industry development, IDC and DBSA. This was the conception of Ilanga 1. Later on, COBRA entered in an agreement with these partners for co-developing the Project. Finally, our technological partner SENER incorporated the consortium forming the structure of the Contractor for the design, supply and construction of the Plant. In the end, the combination of technology know-how, construction background and local



expertise provided the consortium the resources make the project a success story", said Pedro J. Cuevas, Chairman of the EPC consortium, and Delegate for COBRA in Africa. "We believe that the economic impact of this project has exceeded the expectations of all the parties involved."

"Alongside our contribution to securing power, we are also satisfied with the societal impact of developing South Africa's first black-developed CSP power plant, the resulting skills development, job creation and the localisation this project rendered. Beyond the expected energy impact, we continue to combine the provision of power, with positive social and environmental outcomes," said Mbanjwa.

The consortium is proud to bring about community-focussed opportunities through its role as a technology provider and construction Contractor on such an impactful project. Consortium's engineers and employees continue being involved in the construction of solar plants worldwide, and in South Africa the members of the consortium have already assisted, and continue assisting, in the production of more than 400 MW of installed capacity through three solar thermal power plants and four photovoltaic power plants. The EPC Contractor consortium prides itself on creating quality, green solutions and hopes to keep on with the supporting of similar developments in future energy project opportunities, helping to create a better South Africa.

About SENER

SENER is a private engineering and technology business group founded in 1956. Its aim is to offer its clients the most advanced technological solutions and to achieve international recognition based on its independence and commitment to innovation and quality. SENER has 2,300 professionals across its centres in Algeria, Argentina, Brazil, South Korea, Canada, Colombia, Chile, China, the United Arab Emirates, Spain, the United States, Morocco, Mexico, Poland, Portugal, the United Kingdom and South Africa. The group's operating revenue exceeded 589 million Euros (2018 data).

SENER has excelled as a turnkey supplier of combined cycle and cogeneration plants and its portfolio of past works in this type of plant totals over 10,000 MWe of installed capacity throughout the world. Within the most outstanding references in the field of cogeneration and combined cycle plants, there are projects (all of them delivered as EPC construction contracts) for the Mexican energy sector, such as: the Cryonfra-Afranrent cogeneration plant; two cogeneration plants for the CYDSA group; TG-8 Madero cogeneration plant for Pemex; the Agua Prieta II combined cycle plant; and the Empalme I combined cycle plant.

In Energy, SENER has become a technology solutions and EPC projects' company recognized the world over for its execution of technologically complex turnkey projects in Europe, America, Africa and the Middle East.

Follow us on: Im You



