



## Alcazar Projects in Benban

### Project Highlights

- ^ FINANCIAL CLOSE IN DECEMBER 2017
- ^ CONTRACTORS TSKE ELECTRÓNICA Y ELECTRICIDAD SA & ENVIROMENA POWER SYSTEM LLC
- ^ TOTAL RATED CAPACITY OF 200MW<sub>AC</sub> AND TOTAL PEAK CAPACITY OF 256MW<sub>P</sub>
- ^ EACH PLOT PRESENTS:
  - ^ 18 POWER ELECTRONICS INVERTERS
  - ^ 2,156 MOUNTING STRUCTURES
  - ^ 6,468 STRINGS
  - ^ 194,040 JINKO SOLAR MODULES
- ^ ESTIMATED ENERGY OUTPUT 560GWH/YEAR
- ^ TOTAL INVESTMENT OF US\$ 274.4MILLION



220,000+ TONES OF CO<sub>2</sub> EMISSIONS AVOIDED PER YEAR



407,000+ M<sup>3</sup> WATER SAVINGS PER YEAR



183,000 AVERAGE EGYPTIAN HOUSEHOLDS POWERED PER YEAR



1.4+ MILLION MAN-HOURS AND 1,000+ LOCAL WORKERS DURING CONSTRUCTION  
45% LOCAL CONTENT DURING OPERATION

### Alcazar Energy Egypt Solar 1 PV project was the first of 30 planned solar PV projects in the Round 2 of the Feed-in-Tariff (FIT) program of the Benban Solar Park to achieve Commercial Operation Date

The Benban Solar Park, located 50km north of the city of Aswan (Egypt), comprises of 32 solar plants built and operated by 17 different Developers on a 37.2 square kilometer area with a total capacity of 1,465 megawatts (MW) as governed by the conditions set in Round 2 of the FIT Program.

Alcazar Energy, through dedicated Special Purpose Vehicle companies, developed four projects in the Benban complex being: AEES1, Delta for Renewable Energy, Aten Solar Energy and Horus Solar Energy. The combined capacity of the four projects is 200 MW<sub>AC</sub> which represents approximately 13 percent of the total capacity of the Solar Park. The power generated is supplied to the Egyptian Electricity Transmission Company (EETC) under a long-term Power Purchase Agreement (PPA) contract for 25 years. These solar PV plants represent a significant contribution towards the national Solar PV Energy target of 2.8GW by 2022 as per the 'Egypt Renewable Energy Plan 2022' as well as directly supporting the Egyptian Government's efforts to enable energy diversification and to improve energy security. Project financing was provided by a consortium of development financial institutions as follows: the International Finance Corporation (IFC), Asian Development Bank, Asian Infrastructure Investment Bank (AIIB) and CDC Group for AEES1 and DELTA, and IFC, EuropeArab Bank, FinnFund, OeEB and CDC Group for ATEN and HORUS.

The construction works commenced in March 2018 reaching its peak in the month of November and December 2018. The 776,160 modules were assembled along 38.8 km of mounting structures. Over 25 specialized subcontractors and over 3,000 workers were engaged at different stages of construction across the four projects with 85 per cent of the workforce being from Egypt and over 30 per cent from the local communities of Benban. The environmental, social, health and safety and security aspects of the Projects were managed in a manner consistent with the IFC Performance Standards for Environmental & Social Sustainability. Water is a scarce and valuable resource in Benban and Aswan and Alcazar Energy worked with the contractor to ensure water is preserved as much as possible. As such, the over 776,160 solar PV modules across the four plants are continuously cleaned using dry methods via vehicles equipped with a four-meter-long brush head optimal for desert environments.

*Building a sustainable future together*