



Al Rajef Wind Farm

The first large utility-scale wind farm to become operational under the Feed-in-tariff (FiT) scheme to promote and facilitate renewable Energy development in Jordan

Project Highlights

- ⤴ FINANCIAL CLOSE IN NOVEMBER 2016
- ⤴ COMMERCIAL OPERATIONAL DATE ON 30TH OCTOBER 2018
- ⤴ TURNKEY EPC CONTRACT WITH ELECNOR AND SIEMENS GAMESA RENEWABLE ENERGY (SGRE)
- ⤴ O&M CONTRACTOR ELECNOR AND SGRE
- ⤴ TURBINE MODEL G114, 2.1MW, 80 M HUB HEIGHT AND 57M BLADES
- ⤴ ESTIMATED ENERGY OUTPUT 263GWH/YEAR
- ⤴ TOTAL INVESTMENT OF U\$ 184.6MILLION



EST. 110,000+ TONNES OF CO₂ EMISSIONS AVOIDED PER YEAR



EST. 245,000+ M³ WATER SAVINGS PER YEAR



EST. 28,000+ AVERAGE JORDANIAN HOUSEHOLDS POWERED PER YEAR



550,000+ MAN-HOURS AND 125+ LOCAL WORKERS DURING CONSTRUCTION
70+% LOCAL CONTENT DURING OPERATION

The 86.1 megawatt (MW) Wind Farm consists of 41 Wind Turbine Generators (WTGs) across 850 hectares and is located near the village of Al Rajef in the Ma'an Governorate, approximately 200km south of Amman, in the Hashemite Kingdom of Jordan. The Project became fully operational in October 2018, representing almost 15 per cent of the contribution towards the National Wind Energy target of 600MW of generation capacity by 2020 as per Master Strategy of Energy Sector in Jordan (2007-2020) (at the time), being a key enabler power sector diversification away from its current energy mix with near full dependence on thermal generation fueled by imported oil and gas.

The Project was developed by Jordan Green Watts Renewable Energy LLC which was 100 per cent owned by Alcazar Energy. Project financing was provided by: the European Bank for Reconstruction and Development (EBRD), the German Development Institution (DEG) and the French Financial Development Institution (Proparco). The Power Purchase Agreement (PPA) with the National Electrical Power Company (NEPCO), off-taker of the power produced, was signed for 20 years.

The Project is Category A as per the EBRD Environmental and Social Policy (2014) and as such it was subject to a comprehensive Environmental and Social Impact Assessment (ESIA). Given the proximity of the Wind Farm to the Rift Valley flyway, an Avifauna Monitoring and Shutdown on-demand Protocol was developed in line with international best practice and was implemented by Alcazar Energy since the beginning of operations. The protocol entailed bird monitoring, the identification of individuals of 'Priority Bird' populations and/or flocks of 'non-Priority Migratory Soaring Birds (MSB)' species at risk of collision with turbines and the selective temporary shutdown of specific WTGs as well carcass fatality monitoring.

China Three Gorges South Asia Investment Ltd (CSAIL), in consortium with other Chinese investors, acquired Alcazar Energy Partners, including Al Rajef Wind Farm, in August 2021.

Unlocking sustainable investment, enabling the energy transition