

# CASE STUDY 1

## Wind Measurement Campaign, Egypt



The Zafarana 8 Wind Power Plant Project is a 120 MW wind power generation project located in Egypt. The project, which will be located in the Gulf of Suez, is part of Egypt's aim to derive 20% of its energy from renewable sources by 2020.

A framework agreement was signed between Masdar and the Egyptian New and Renewable Energy Authority (NREA) in February 2010 for a 200 MW wind power plant. Once launched, the project will be the first collaborative venture between Egypt and the UAE in the field of renewable energy.

The project is being developed by the New and Renewable Energy Authority (NREA) and Masdar. The electricity generated from the project will be supplied to the Unified Electric Grid in Egypt thereby replacing electricity that would otherwise have been generated from conventional power plants using fossil fuel.

The project will be implemented in cooperation between NREA and DANIDA and is located approx. 200 km south east of Cairo on the Red Sea coast approximately 80 km south of the Suez in a desert area with no settlements in direct vicinity.

**Because of the high level importance of this project and the remote region, Kintech Engineering was appointed by a consultant to supply 3 complete turn key wind measurement stations consisting of 90 meter lattice masts (installed by one of our partners) equipped with EOL Zenith data loggers, satellite modems for remote communication and high quality anemometers and wind vanes from Thies Clima.**

The EOL Zenith data logger has several new powerful features, including real 1 Hz measurement data, more channels for anemometers and wind vanes, GSM/GPRS or satellite communication, GPS controlled clock and synchronization, real time data, encrypted and password protected wind data and EOL Manager for managing your wind data loggers and checking your wind data.

The results after 13 months of wind measurement is a data availability of 99,98%.