

220 kW Wind Generation in Walvis Bay

In November 2005, Emcon Consulting Group in Namibia was commissioned to project manage and supervise the connection of a utility-scale wind turbine to the electricity distribution grid of the ErongoRED to exploit the wind resources at the coastal town of **Walvis Bay, Namibia**. This project, which was headed by Axel Scholle, constituted the first renewable energy initiative based on wind generation by a Local Authority in Namibia and southern Africa.

The scope of work included a wind resource assessment, drafting of a business plan, EIA permissions, quality of supply assessment, technical design, generation license application and contract supervision.

A refurbished **220kW**, three-blade, stall-controlled **Wind World W-2500 turbine** (1989 manufacture), with a rotor diameter of 25m and a hub height of 31m was installed.

The key outcomes of this project are a wide range of **capacity building achievements**, **an operational wind turbine on the Namibian electricity grid**, **a clear business directive for future wind parks** and **valuable lessons learnt**.

