

**Solar / Wind / Diesel Hybrid project Nigeria**

Acergy West Africa (previously Stolt offshore) in cooperation with Tss4U ("The solar solutions for you", The Netherlands), installed and successfully commissioned on 23 December 2005 a solar/wind/diesel hybrid power system on the "AMD-3" Elf Petroleum Nigeria platform, under the Amenam Kpono project.

In this project, solar panels and wind turbines are chosen to provide the renewable energy due to their maturity and proven technology. The other reason is the complementary output provided by these three forms of energy under seasonal variation in weather conditions. During drilling activities, the diesel will recharge the batteries, while the solar modules are covered with sheets.

Complicated calculations were needed due to the influence of present shading of an existent crane.

The scope of the solar/wind/diesel hybrid power system for a continuous 300 W power in a safe area offshore environment consists of:

- 2.2 kW Wind Turbine
- 72 Solar Panels of 85 Wp each
- 2640 Ah/24VDC Battery storage
- Associated charge control and data monitoring systems

The modules and Wind turbine are installed on the upper deck of the platform and the control package is installed in a shelter at a lower deck.

