



Off-grid AC System

A hybrid energy system combining PV module and wind turbine works well in the place where is windy. In the season when solar energy is weak or at night, wind power ensures the system meets the need.

Application: **Oil production well in Jidong Oil Field (Northern China)**

Load: **18 kWh per day**

PV nominal power: **4.4kWp**

Wind turbine power: **1kW**

Battery storage: **75 kWh**

The amount of autonomous day: **5**

Annual produced energy: **6700kWh**

In this project, the oil production well consumes roughly 18 kWh electricity every day. We installed 4.4 kWp PV modules and 1 kW wind turbine to cover the electrical consumption of the tool. This hybrid system produced 6700 kWh annually and backup battery can support it 5 days even no sunshine and wind at all.

