

49.5 MW Sachal Energy Wind Power Project

Reliable and Green Wind Energy Supply for Pakistan



Pakistan's energy sector has been in a perpetual state of crisis for many years. Electricity outages last from 6-8 hours at a time and occur daily throughout the country. These blackouts cost the economy billions of dollars annually. Pakistan currently produces an average of 25,000 megawatts (MW) and during peak seasons it has an average electricity shortage of up to 7,000 MW, mainly due to inefficient and outdated power plants and infrastructure. To deal with this shortage, industries and households are forced to use diesel electric generators to meet their daily energy demands.

Project Description:

The 49.5 MW Sachal Wind Power Project is owned by Sachal Energy Development (Pvt) Ltd. and is located in Jhimpir around 90 km northeast of Karachi city. It has installed 33 wind turbines of 1.5MW each. These provide a total installed capacity of 49.5 MW, with a predicted power supply to the grid of 136,500 MWh per annum. The wind turbine provider is the Chinese Company Goldwind Science and Technology Co. LTD.

The project utilizes wind resources for electricity generation through the construction of a wind farm with a total capacity of 49.5 MW and feeds the generated electricity into the grid of Pakistan's National Transmission & Dispatch Company Limited (NTDC). By replacing the electricity supplied by the NTDC grid, which is heavily dominated by fossil fuel fired power plants, with electricity generated from wind power the project reduces Pakistan's CO2 emissions by nearly 85,000 tCO2e per year.

The Benefits:

In addition to the pure climate protection effect, the project contributes to the achievement of the 17 Sustainable Development Goals (SDGs). The global goals for sustainable development developed by the United Nations consider all three dimensions of sustainability: social justice, environmental protection and sustainable economic activity. Pakistan has set ambitious targets in regards to the 17 UN SDGs. In this context, the Sachal Wind Project contributes notably to achieving three UN SDGs (7, 8 and 13). Pakistan's fragile energy supply is still mainly based on expensive and dirty fossil fuels. More renewable wind power in Pakistan's energy mix reduces this country's costly dependency on imports of oil and coal, closes serious electricity supply gaps and promotes a sustainable and climate-friendly energy sector in Pakistan that supplies more people with affordable and clean energy. Furthermore, the project creates new quality jobs and income opportunities for local employees both temporarily, during construction, and permanently, throughout ongoing operation. After commissioning of the wind power plants, 20 qualified full-time employees that have been specifically trained for this task are working for the Sachal wind farm.

Portfolio

Wind

Project Standard

Gold Standard
Climate Security & Sustainable Development

Emission Reduction

approx. 85,000 tCO2e

Project Status

VER, Certified

Project Location

Jhimpir, District Thatta, Sindh Province, Pakistan

Project Verification

The Gold Standard Foundation

Project Developer

UPM Umwelt-Projekt-Management GmbH

Sustainable Development Goals

