

Land Based Solar PV Power Project for a Fortune 500 Oil Major

Capacity: 4MW

Client: Bharat Petroleum Corporation Limited



On March 2016, Jakson successfully commissioned a 4MW grid connected solar PV plant for Bharat Petroleum Corporation Limited (BPCL), a Fortune 500 company at its refinery located at Bina, Madhya Pradesh, India. It is a first of its kind project to be constructed within the proximity of a refinery complex in India, exemplifying the ability of Jakson to design and deliver a solar PV project having complex design requirements. Powered by more than fourteen thousand high efficiency solar panels, this plant delivers power to run HT motors that are used to transport petroleum products through pipelines in the refinery. The project is estimated to generate more than 6.5 million kWh and offset 5916 tCo2 contributing significantly to the sustainability of refinery operations.

Innovative Canal Top Solar PV Power Plants

Capacity: 6MW

Client: Department of Irrigation, Uttar Pradesh (India)



Jakson successfully bagged two canal top solar power plant projects with a total installed capacity of 6MW for the Department of Irrigation, Uttar Pradesh, India. It includes delivering a complete turnkey EPC solution and is a first-of-its kind, solar power project built on top of canal walls in India. The project will involve dealing with numerous technical challenges in design and engineering as well as in execution. Thousands of solar PV modules will be covered over a portion of the canal measuring 7 kilometres in length to generate electricity which will be supplied to the utility grid. Besides offsetting more than 5000 tCo2 equivalents, this project will help in reducing the evaporation of water to a significant extent, benefiting farmers and domestic users of water.

CASE STUDIES



Powering the Coaches of Indian Railways

Capacity: 180KW

Client: Indian Railways

Jakson showcased its innovative engineering capabilities by successfully integrating solar panels on the roof of 50 coaches of Indian Railways. It was a complex design and engineering challenge to integrate solar panels on the roof of coaches that run up-to speeds of 120 km per hour. Each single coach was installed with twelve high efficiency polycrystalline solar panels. These solar panels were fitted on the rooftop using specially designed U-channels that were

welded to the body of the coach. So far 50 coaches have been successfully integrated with solar panels and currently undergoing rigorous performance tests by the Indian Railways. The generated power will be used to power lights and fans inside the coaches for use by the passengers. On completion, this solar PV project will help Indian Railways to offset 221 tonnes of Co2 emissions and also achieve significant savings in diesel costs.

Innovative Klip Lock Solar Mounting Structure for a Solar PV Rooftop Project

Capacity: 400KW

Client: Delhi Development Authority



Jakson successfully commissioned a 400KW Solar Rooftop power plant on a metal roof without piercing the surface by using innovative Klip Lock mounting system. The plant was installed at the Yamuna Sports Complex (YSC) in New Delhi, India. YSC is an international sports complex which is owned by the Delhi Development Authority (DDA). It was a venue for the 2010 Commonwealth Games. YSC wanted to harvest the power of solar. However, the metal roofing of the complex posed a challenge for installing solar panels. This was overcome by Jakson using innovative engineering capabilities. The plant consists of 1600 modules of 250 Wp capacity which generates approximately 5.84 lakh units per year. Bi-directional meters are installed for sale of power to the grid in case of surplus.

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