



GOODWE
YOUR SOLAR ENGINE

CASE STUDY



GoodWe shines at 6MW India refinery site

Background:

Mangalore Refinery and Petrochemicals Limited (MRPL) has successfully commissioned the largest solar power project in a refinery site in the country. The solar power project commissioned by TATA power solar has a total capacity of 6.063 MWp and is spread across 34 roof-tops within the refinery premises.

Challenges:

The refinery area has huge premises comprising of 34+ buildings. There is no internal transport available for commuting from one end to another. Outside vehicles are also not allowed. It was therefore a significant challenge for the team to cover such a large area without transportation.

There are also defined protocols and strict guidelines for entering the premise and each plant requires a different work permit.

There are some sites inside the plant where the inverter had to be installed. These sites are dangerous as there is presence of chemical gases and the inverters are also at a risk of rusting due to chemical reactions that can take place in a gaseous environment. But GoodWe inverters still perform well in this kind of difficult environments.



Installation details

Project Name: Mangalore Refinery & Petrochemicals Ltd. (MRPL)

Total Capacity: 6 MW

Inverter Models and Quantity: * 95Nos. 50K-MT G2 and
60K-MT G2 model

Commissioning Date: May -2018

Detailed Location: Mangalore, India

Buyer (EPC/Developer) Info: TATA Power Solar

Solutions:

GoodWe installed 95 inverters of 50K-MT G2 and 60K-MT G2 model. Our MT Series is equipped with IP66 enclosures, which means the inverter is protected from total dust ingress and high pressure water jets from any direction. The C5 corrosion class perfectly protects the inverters from chemical gases and adverse atmospheric conditions.

This is a part of MRPL's commitment to sustainable development with a focus on reduction in carbon emissions and renewable energy generation. Solar panels were fitted on the rooftop of the car bay in front of the international terminal which has an installed capacity of 2.5 MW. These solar plants generate more than 24,000 units per day amounting to more than 8.8 million units per annum.

Environmental effect:

PV generation spares 10,613,229 kg of Carbon Dioxide, equivalent to



52,621,274

Square meters of forest in a year



2,308 Cars driven for 1 year



5,321 tonnes of coal burned



4,520,698 liters of gasoline consumed



1,291,021,235 smartphone charges



1,928 home's annual electricity consumption

About GoodWe

GoodWe is a world-leading PV inverter and energy storage solutions manufacturer and is listed as a public limited company on the Shanghai Stock Exchange (Stock Code: 688390).

With an accumulative delivery of more than two million inverters and installation of 23GW in more than 100 countries and regions, GoodWe was ranked as the Global No.1 storage inverter by Wood Mackenzie in 2020.

GoodWe has also ranked as one of the Top 10 inverter suppliers by IHS Markit and has achieved six consecutive TÜV Rheinland "All Quality Matters" Awards. The great reputation of the MT-Series is spreading across continents and the pace of our global deployments is expanding rapidly.