

QUICK FACTS

- ❖ Location: Pune (Jejuri)
- ❖ Capacity: 730 kWp
- ❖ Electricity cost reduction: up to Rs 25 lacs annually
- ❖ Type of system: Metal roof
- ❖ Type of modules: Polycrystalline
- ❖ Type of inverters: String
- ❖ Annual generation: 11 lac units
- ❖ Carbon dioxide abated: 1096 MT annually
- ❖ Date of commissioning: August 2016

OVERVIEW

Sustainable growth is what drives the management at Konecranes. It's the same aspiration to adopt eco-friendly business practices that convinced Konecranes to go solar by bringing their first ever solar plant at Jejuri near Pune, Maharashtra. The company collaborated with CleanMax Solar to achieve their dream of sustainable growth. Thus began a partnership, which gave Konecranes its first ever solar plant globally at Jejuri near Pune, Maharashtra.

Konecranes management was highly impressed with the BOO (Build Own Operate) model. Under this arrangement, Konecranes could get solar power plant with no investment or operational risks, and the billing would be done as per the plant generation. CleanMax Solar took upon itself the responsibility to maintain the plant and ensure uninterrupted power generation. Subsequently, structural stability analysis was done which suggested that the company could install 730 kWp solar power plant on its roof and generate approximately 11 lac units annually.



SOLUTIONS

• Sustainable business practice

The plant is spread across an area of 7,300 sq m and is expected to generate 11 lac units annually. To ensure smooth functioning and on par performance, high-quality Delta inverters have been used. The plant was commissioned in August 2016 and is expected to reduce Konecranes' carbon footprints by 2,575 tons during the lifetime of the project. This is equivalent to saving almost 11,500 trees. In fact, the plant will also help reduce the temperature in shop floor work area by 1.5 to 2 degrees as heat absorption shall take place at roof by solar panels.

• Net metering

The plant has been working in accordance with net metering, allowing periodic surpluses, such as on weekly holidays to be exported back to the grid in a manner where Konecranes gets credit for the units exported to the grid. The plant is expected to save around 17% of electricity bills, starting right from the first day of generation, amounting to more than Rs 25 lacs annually.

• Remote Monitoring

In order to ensure hassle-free power generation, the plant will be monitored 24X7 through remote monitoring system installed by CleanMax Solar. This will provide crucial data such as live energy generation, plant performance over the years and the saving achieved so far. This will help quick decision making and turn around time for operations & maintenance team to resolve any plant performance issues that may arise.

CHALLENGES

- ❖ As an organisational policy, CleanMax Solar takes efficient safety measures during plant installation to avoid any work-related accident. End to end harnesses, safety gears, lifelines and high-quality personnel protection equipment (PPE) were used. Executive ladders were placed for people inspecting the plant and skylight demarcation was highlighted.
- ❖ Getting required approvals and permissions from various State govt. departments for Net Metering is a time-consuming process, so CleanMax Solar liaising team ensured a hassle-free experience by taking the ownership of getting all the necessary statutory approvals.

HIGHLIGHTS

- ❖ Konecranes' first facility to go solar across continents
- ❖ Electricity cost reduction of up to Rs 25 lacs annually
- ❖ Plant performance will be monitored 24*7 through remote monitoring system
- ❖ Solar plant with net metering for additional cost saving

ABOUT KONECRANES



With over 12,000 employees at 600 locations in 48 countries, Konecranes is a world-leading group of lifting businesses, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals.

ABOUT CLEANMAX SOLAR



CleanMax Solar is India's #1 provider of solar energy to corporates. Since 2011, the company has successfully installed more than 200 projects, with a combined capacity of 100MWp of onsite solar plants. It has been recognized by the Ministry of New & Renewable Energy (Govt. of India) with National Excellency awards for the Rooftop solar developer and rooftop solar EPC player in the country.

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Website:
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CASE STUDY