

## Case Study

### Pavagada Solar Power Plant



#### PROJECT OVERVIEW

- Project Name: Pavagada Power Plant
- Location: Tumakuru, Karnataka
- System Size: 350MW (Suntech Supplied 210MW)
- Type of Solar Panel: STP335-24/Vfh
- Panel Quantity: 626,866 pieces
- Owner: Fortum Solar India Private Limited
- Installer: Belectric

#### BENEFITS

- Suntech's half-cell solar modules provide up to 210 megawatts of peak capacity for pavagada solar park, equivalent to the energy consumption by 25000 households.

#### The biggest solar power plant with half-cell modules

Pavagada solar power plant is the largest solar power plant with half-cell modules in the world, utilizing polycrystalline half-cell modules from Suntech.

Located in Tumakuru, Karnataka of India, the Pavagada Solar Park covers an area of 13,000 acres and is about 180 kilometers away from Bangalore - India's fifth largest city. It is one of the ultra-large solar parks in Asia. The project is at a place with abundant light supply, but suffers from harsh environmental conditions such as sand storm.

#### Withstand harsh environments

The Pavagada project, the largest of all the established and grid-connected solar power stations with half-cell modules worldwide, was completed and got connected after 7 months from January 2019 when the construction began. A total of 626,866 pieces of Suntech's high-efficiency, polycrystalline half-cell modules were put into the project. With excellent anti-soiling performance, these modules supplied by Suntech can enhance the self-cleaning ability of modules used in deserts and under harsh environments.

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In addition, the half-cell technology powering these modules can also reduce both the internal losses between modules and the operating temperature in the case of actually running the power station, thus supporting steady operation and lowering future maintaining costs.



### About Fortum:

Fortum is a leading clean-energy company that provides its customers with electricity, heating and cooling as well as smart solutions to improve resource efficiency. We want to engage our customers and society to join the change for a cleaner world. We employ some 9,000 professionals in the Nordic and Baltic countries, Russia, Poland and India, and 62% of our electricity generation is CO2 free. Our vision "For a cleaner world" reflects our ambition to drive the transformation towards a low-emission energy system and optimal resource efficiency. Our mission is to engage our customers and society to drive the change towards a cleaner world. Fortum in India is focused on 4 verticals (Solar, EV Charging infrastructure, Bio-ethanol and NOx reduction solutions for thermal power plants). Fortum Charge & Drive is a pioneer in electric vehicle charging. Presently it has a network of 2017 smart chargers in Europe out of which about 700 are DC quick chargers. Besides, post-acquisition of PlgSurfing, an EV user can access to 67,000 charging points across Europe. Fortum provides turnkey solution for B2B and B2G, creating public charging network as well as providing world-class cloud solutions for an interactive end-user interface and a comprehensive back-end system that supports charge point operators in the remote management of charging stations. We have set up and been operating 18 charging points (14 being DC and 4 being AC) in India at various locations in Hyderabad, Mumbai, and Delhi.