

CLIMATE CENTRE FOR CITIES

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CITY IN FOCUS



2MW Floating Solar Plant, Mudasarlova Reservoir, Visakhapatnam, June 2019

Reduced evaporation from water reservoirs

3613.5 MWh of Electricity Generated/Year. **Improvements** algae growth

3,080 tons of CO2 Emissions per year Easy installation and with low anchoring and mooring requirements

Rs. 2,30,90,265 Bills/Year

VISAKHAPATNAM

Floating Solar power plant

Energy & Green Building

KVN Ravi, SE Engineering Department, **GVMC**

Resilient to varying changing levels of

impact of this plant is equivalent to 1,38,600 mature trees.

The Greater Visakhapatnam Smart City Corporation Limited (GVSCCL) has built the grid-connected floating solar power plant at the Mudasarlova reservoir over 20 acres, with an investment of around Rs 11.36 crores. With a capability to generate about 2 MW of power, the plant is deemed as the country's biggest floating solar power plant in 2019. This project was also chosen for award under the 'Innovative Idea' category at 3rd National Apex Conference of Smart Cities CEOs in January 2020. According to the Greater Visakhapatnam Municipal Corporation (GVMC) officials during field visit, the plant has been annually saving at least Rs 2.3 crore on electricity bills, thereby, recovering the investment made in nearly six years time.

Floating solar photovoltaic (FPV) installations open up new opportunities for scaling up solar generating capacity, especially in cities with high population density and competing uses for available land. They have certain advantages over land-based systems, including utilization of existing electricity transmission infrastructure at hydropower sites, close proximity to demand centers (in the case of water supply reservoirs), and improved energy efficiency due to cooling effects of water, thus providing better performance.

* Views are expressed in consultation with city officials during field visit

KNOWLEDGE HUB



ANNOUNCEMENTS



Top 5 podcasts

- Rooftop Solar in Urban Areas
- Carbon Credits for Cities
- Digital Urban Governance
- Gig Economy and Urbanisation
- Philanthropy and Climate Change

Season 2 of the podcast, Understanding the Future is coming soon. Till that time, check out our top 5 podcasts of all time to better understand the future. You can listen to the podcast here

Climate Centre for Cities

National Institute of Urban Affairs

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