

# Solar energy to the fore in Karnataka

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The sun has been smiling upon the solar energy sector in Karnataka, with the State topping the country overall in the renewable energy sector.

As on March 2018, Karnataka generated 12,169.37 MW from renewable energy products (4,884.56 MW from solar power), according to Karnataka Renewable Energy Department Ltd. (KREDL).

Tumakuru tops in solar power with 47 projects generating 1,084.88 MW having already commissioned. The overall capacity of the 70 solar projects allotted in the district is 3,771.90 MW. The other districts attracting solar projects are Chitradurga (62 projects, capacity 677 MW) and Ballari (24 projects, capacity 431 MW).

In contrast, Bengaluru Urban has only one project of 1 MW capacity though overall two projects with 2 MW capacity have been allotted. Bangalore Rural fares better with two projects of 12.5 MW capacity having been commissioned out of the four projects with 33.5 MW capacity that were allotted.

Bescom officials said that areas under it had solar rooftops instead, with the total capacity since 2014 having reached 98 MW.

“Even for solar rooftops, though the number of consumers is higher in Bengaluru Urban, the capacity is lower as consumers require a shadow-free area and other requirements to generate power. Consumers in rural areas will have more capacity,” said an official.

D. Nagaraj, Managing Director, KREDL, said that factors such as land, radiation and other constraints, such as accessibility, played a key

role. “In Bengaluru Urban, for example, it is mostly solar rooftops, as availability of land is an issue. Installing ground solar plants to generate 1 MW requires five acres. In other districts, where there are no solar projects, the problems include litigation, the availability of ample sunlight and accessibility,” he added.

Tumakuru was propelled to the top position by the 2,000 MW Pavagada solar plant. “This is the only government solar project. All other projects are run by private players,” he said.

The companies executing these projects agreed. Andrew Hines, co-founder, CleanMax Solar, which built what is touted to be Karnataka’s first open access solar farm, and has solar farms in Tumakuru, Ballari and Kalaburagi districts, said, “Besides the availability and cost of land, there are two sets of factors and criteria for site selection, like physical characteristics, including solar irradiation at the site, along with topography, and soil type. The second would be power evacuation, i.e. the proximity to a substation, which can accommodate the solar power that would be generated.”

They supply power to many IT companies, manufacturers and corporates, largely in Bengaluru.

Rajendra Parakh, Chief Financial Officer, Vikram Solar Ltd., said: “Availability of solar radiation, close proximity to power evacuation system, easy land availability without problems like local resistance, reasonable soil conditions and captive consumption are the key factors to decide a project location.” Vikram Solar Ltd. has three solar projects in Karnataka in Davangere and Gundlupet.

## Bright spots in the State

District	No. of projects commissioned	Capacity
Tumakuru	47	1084.88 MW
Chitradurga	62	677 MW
Ballari	24	431 MW
<b>Bengaluru Urban</b>	<b>1</b>	<b>1 MW</b>

### NO PROJECTS

Kodagu, Chikkamagaluru, Udipi, Dakshina Kannada and Uttara Kannada

Figures as on 31.7.2018



Source: KREDL