Metro harnesses sun’s power to run 3 stations

New Delhi: With a daily generation of 3,000 units of solar power, the Delhi Metro may not be meeting all its electrical needs. But it’s enough to run three stations—Dwarka sector 21, Pragati Maidan and Anand Vihar.

In an effort to go green, DMRC had last year started the solar power project. At present, it is generating a total of 750kW which is approximately 3,000 units per day from four locations. The plants at Dwarka sector 21, Anand Vihar and Pragati Maidan Metro stations produce 500kW, 150kW and 65kW respectively. The other one at the residential complex in Pushp Vihar produces 50kW.

To get an idea of what this means, here’s an example: the daily power consumption of an elevated station is 1,200 units per day while it is 3,000 units for an underground station. The monthly power consumption of a household is between 400 and 700 units on an average. Said director (electrical) A.K. Gupta, “At present, the 750kW power is being generated from four locations, including a residential complex at Pushp Vihar. Our aim is to generate 20MW by March next year.”

One MW is equivalent to around 4,000 units per day. With a target to generate 20MW, Delhi Metro is planning to install these solar power panels at four stations in Gurgaon as well as Yamuna Bank depot and station, Sarita Vihar and Subhanpuri stations and sub stations. The energy from the solar plants is used primarily for lighting and other such purposes, added Gupta.

“While the amount of energy produced is a fraction of the annual amount used by the system, the fact that we are generating enough energy to operate a station is a step towards self-sustenance,” said Gupta.

According to figures provided by the Delhi Metro, the 3,000 units produced every day can light up 10 underground stations during the daytime or 14 elevated stations.

The designed capacity at the four stations in Gurgaon as well as Sarita Vihar, Subhanpuri and the substations is much higher, added the Delhi Metro official.

The roof-top plant project is the largest of its kind in NCR under the renewable energy service model and is a result of cooperation between DMRC and Deutsche Gesellschaft für Internationale Zusammenarbeit through the project ‘ComSolar’.