

Solar power comes to the rescue

Pioneer green system at reservoir has cut PBAPP's electricity cost

SOLAR energy has been credited for the reduction of electricity cost at the Bukit Dumbar reservoir and pumping station compound over six months from last August.

Penang Water Supply Corporation (PBAPP) chief executive officer Datuk Jaseni Maidinsa said by installing a solar power system at Bukit Dumbar, the company could save an average of RM22,811 per month.

"Following the commissioning of the system on July 31 last year, PBAPP's electricity cost dropped by RM136,868 between last August and January this year.

"The projected cost savings for a full year is RM273,732," he said in a statement.

Jaseni said the 1.5 megawatt peak (MWp) solar power system was installed by a Penang-based company, PSB Energy Sdn Bhd (PSB), at no cost to PBAPP.

"PBAPP signed an agreement with PSB to pay a solar tariff of RM0.305/kWh for a tenure of 25 years.

"This solar tariff is lower than the commercial tariff billed by Tenaga Nasional Berhad (TNB).

"PSB will be responsible for the maintenance of the system.

"An online monitoring system has been installed on-site to monitor its performance," he said.

To capture solar energy, 4,586 photovoltaic solar panels were installed atop the enclosed Bukit Dumbar R2 and R3 reservoirs.

"These panels convert the solar energy into electricity that is fed to an on-site 415V/11kV step-up power transformer.

"Following the step-up process, the electricity is distributed into a power supply system for use by the Bukit Dumbar 1 and Bukit Dumbar 2 pumping stations.

"In this manner, the electricity generated from harnessing solar energy at the Bukit Dumbar reservoir and pumping station compound is consumed within the compound for treated water pumping operations 24/7."

He added that the yield from the solar power system was insufficient to power all the water supply pumping operations.

"PBAPP was still drawing an average of 864,197kWh per month from TNB's power grid for use in Bukit Dumbar from August 2020



The solar power system at Bukit Dumbar has generated electricity savings averaging RM22,811 per month.

"Following the success of this venture, we are looking at installing similar systems at our other facilities."

Datuk Jaseni Maidinsa

to January 2021.

"Following the success of this pioneer green energy venture, we are looking at installing similar systems at our other facilities in Penang," he said.



Solar panels installed on top of the enclosed Bukit Dumbar reservoir in Penang.