

Floating solar power plant in China connected to grid

May 29 2017, by Nancy Owano



40MW Floating PV Power Plant. Credit: Sungrow

(Tech Xplore)—China is addressing its environmental future. One sign is a floating solar farm power plant built on a former coal-mining area, and the floating power plant has been successfully connected to the grid, in Huainan.

The announcement came from Sungrow earlier this month. According to



designboom it can now start supplying solar energy to homes in the area.

The Sungrow press release said that the power plant was based "in a subsided area of mining which is flooded due to the rainy weather with depth of water ranging from 4 to 10 meters in Huainan, a coal-rich city in south Anhui province." The release pointed out that "the seriously mineralized water makes this area valueless."

The facility takes the title of the world's largest floating solar plant, said *designboom*, overtaking other <u>floating</u> farms in India and Australia.

Sungrow is a Chinese photovoltaic inverter manufacturer.

A number of sites carried a picture of the 40 MW-capacity facility.

Sungrow's central inverter unit SG2500-MV was used in the project, as were its combiner boxes.

What is this "inverter system"? It's the inverter, transformer and switchgear, as a turnkey station. Also, Sungrow noted the combiner box SunBox PVS-8M/16M-W, which was customized for floating <u>power</u> plants. The release noted stability in environments with high levels of humidity and salt spray.

Sungrow works on research and development in solar inverters, and has a product portfolio of PV inverter systems as well as energy storage systems for various applications.

Founded in 1997 by University Professor Renxian Cao, Sungrow, said *pv magazine*, has more projects in the pipeline

"<u>Renewable</u> energy and clean tech are very big business in China and India right now," said Sami Grover in *TreeHugger*.



Why put a solar farm out on the water? *Cleantech Canada* highlighted three key advantages of the floating farms.

1-Floating solar farms can reduce water evaporation and restrain the growth of algae. 2. Water can cool down modules and cables; improves the efficiency of <u>power</u> generation. 3. These farms have an advantage of not taking up valuable <u>land</u>.

In the bigger picture, the floating farm points to China's resolve to carry out projects that address clean energy. A report in *iDrop News*:

"The Huainan facility is part of Beijing's quest to transform China– one of the world's worst polluters– into a clean energy <u>giant</u> and a world leader in the fight against climate change."

Actually, a report in *Digital Trends* said, "This is just the first of many solar energy operations popping up around China. In 2016, the country unveiled a similar 20MW floating facility in the same area. China is also home to the Longyangxia Dam Solar Park, a massive 10-square-mile, land-based facility touted as the largest <u>solar power plant</u> on earth."

More information: <u>www.prnewswire.com/news-releas</u> ... <u>rters-300458111.html</u>

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