## How good, or bad, is this idea?

## **Brazil Announces Huge 350 MW Floating Solar Powe**

Brazil's energy ministry has ranked the country's various sources of energy as per their abundance, cheapness, renewability, and availability of the necessary technology. Among the available options, hydropower comes top, followed by wind power and biomass (mostly bagasse).

However the country has been reeling under its worst drought in 80 years. The Cantareira reservoir system, which serves more than nine million people in the state, is only 5% full. At the Alto Tietê reservoir network, which supplies three million people in greater Sao Paulo (South

America's largest city), water levels are below 15%.

A number of cities have taken to water rationing. With the reservoir levels falling too low to generate electricity, energy crises could be next in line due to the country's dependence on hydropower on which it relies for up to 80% of its energy.

For sometime now, Brazil has been warming up to solar energy. Last year, Brazil's National Electric Energy Agency (ANEEL), <u>concluded its first exclusive solar power auction</u>, providing 20-year PPAs to companies that will invest over \$1.66 billion in 1,048 MW of solar power spread over 31 solar parks. Power production is expected to start by 2017. The country has now decided to further push solar energy.

According to reports, Brazil's energy minister Eduardo Braga recently announced his government's intentions to begin a series of pilot tests of floating solar power plants on hydroelectric dam reservoirs within a period of four months.

A 350 MW pilot project is being planned at the Balbina hydroelectric plant in the Amazon. The electricity thus generated is expected to cost between approximately \$69 and \$77 per MWh.

Ironically, the host for the project, the 250 MW Balbina hydroelectric plant, has long been a controversial project. In addition to the loss of habitat that occurred with its construction, it is claimed that methane released from the dam reservoir spread over 2,360 square kilometres, causing the facility to emit more greenhouse gases than most coal plants.

Floating PV systems have been gaining a lot of traction across several solar markets, those in the foray include <u>Australia</u>, <u>India</u>, <u>Japan</u>, <u>Korea</u>, and <u>the US</u>.

Source: http://cleantechnica.com/2015/04/06/brazil-announces-huge-350-mw-floating-solar-power-plant/