

Thailand Prepares to Install Floating Solar Plants at Eight Dams

Siam Cement Group hopes to win the first contract to install a 45-megawatt floating solar farm at Thailand's Sirindhorn Dam

By Prachi Patel

Solar farms take up land, which is especially precious in areas with dense populations—and those areas need renewable power most. To solve this paradox, populous countries short on land have started to turn to solar farms that float on reservoirs and dams. Of the world's 1.1 gigawatts of floating solar capacity, 450 megawatts exists in China, Japan, India, and South Korea.

Thailand now wants in, and an unlikely player is vying to get a big share of that market. Thailand's Siam Cement Group (SCG), one of Southeast Asia's largest building-material companies, has developed floating solar modules that it will build, install, and maintain. As the only large Thai company making floating panels, it hopes to land contracts to build at least some of the 1 GW of floating solar capacity that state-run Electricity Generating Authority of Thailand (EGAT) plans to install across eight dams over the next two decades.

EGAT announced in January that installation of the first project, a 45-MW farm at the Sirindhorn Dam on the country's eastern border, would begin in April, with four others following soon after. But the utility still hasn't picked a supplier. "Right now, EGAT is in a competitive bidding process, and we're trying to be one of the winners," says Chatree Kettong, energy development manager at SCG Chemicals Co., a subsidiary of Siam Cement Group. Floating solar is part of the petrochemical producer's goals to diversify its business, Kettong says. SCG makes the mounting platforms for its floating solar farms from durable and recyclable high-density polyethylene. The pontoons should last 50 years, twice the expected life-span of the encapsulated, water-resistant silicon solar panels that SCG buys from various suppliers. Each module generates 100 kilowatts, and they can be easily bolted together. Their design is also more streamlined, he says: A 1-MW floating plant takes 10 percent less space than competitors' plants.







12 Mar - Ms Loh Kin Heng, NRS Operation Director is handing over the donation to Prof Teo of Cancer Research Malaysia

If we have no peace, it is because we have forgotten that we belong to each other.

Mother Teresa



Sorry, I didn't mean to make you cry.

<u>Onions</u>

Source: Live Science.com

н**ealt**h в**enef**its

HEART HEALTH

Recently, health researchers have noticed a relationship between messaging molecules called oxylipins and high cholesterol management. A 2016 study in the journal Redox Biology found that consuming onions increases oxylipins that help regulate blood fat levels and levels of cholesterol.

ANTI-INFLAMMATORY

Quercetin has been found to relax the airway muscles and may provide relief of asthma symptoms, according to a 2013 study in the American Journal of Physiology.

IMMUNE SYSTEM

The polyphenols in onions act as antioxidants, protecting the body against free radicals.

CANCER

A 2015 meta-analysis found that intake of allium vegetables, including onions, were associated with reduced gastric cancer risk.

DIGESTION

The fiber in onions promotes good digestion and helps keep you regular.

REGULATING BLOOD SUGAR

The chromium in onions assists in regulating blood sugar. The sulfur in onions helps lower blood sugar by triggering increased insulin production.

BONE DENSITY IN OLDER WOMEN

A 2009 study in the journal Menopause found that daily consumption of onions improves bone density in women who are going through or have finished menopause. Women who ate onions frequently had a 20 percent lower risk of hip fracture than those who never ate onions.

HOW TO MAKE ONION SALAD RECIPE

1 slice 1 large onion into thin rings or rounds.



- add red chili powder, chaat masala (optional) and chopped mint leaves.
- 4 also add salt as required.
- 5 then add lemon juice or vinegar.
- 6 mix together everything very well.
- check the seasoning and add more salt, red chili powder or lemon juice if required.
- 8 serve the onion salad immediately.



