



An artist's impression of the upcoming floating solar farm at Tengeh Reservoir. The farm is expected to offset about 32 kilotonnes of carbon emissions each year, equivalent to taking some 7,000 cars off the road. PHOTO: PUB/SEMBCORP

# One of world's largest floating solar farms coming up in Tuas

Jessie Lim

Sunny Singapore will have a floating solar farm in Tuas next year able to generate enough energy to power about 16,000 four-room Housing Board flats for a year.

Work has begun on the project at Tengeh Reservoir, which will convert solar energy into electricity and have a maximum capacity of 60MW.

The system will help reduce the Republic's dependence on fossil fuels, slash carbon emissions and strengthen national climate resilience, said national water agency PUB and Sembcorp Industries in a statement yesterday.

Once commercial operations are

in full swing next year, the solar farm, which is being built by Sembcorp Industries subsidiary Sembcorp Floating Solar Singapore, will meet 7 per cent of PUB's annual energy needs.

The solar farm is expected to offset about 32 kilotonnes of carbon emissions annually, equivalent to taking some 7,000 cars off Singapore's roads.

The floating solar farm, covering an area of about 45 football fields, will be Singapore's largest, as well as one of the biggest in the world.

Sembcorp Industries group president and chief executive Wong Kim Yim said: "This large-scale floating solar platform, which features the deployment of advanced technological and system innovations, will also enhance Singapore's global position in renewable energy production."

Smart technologies and sustainable materials feature strongly in the solar plant's design, said the statement from PUB and Sembcorp.

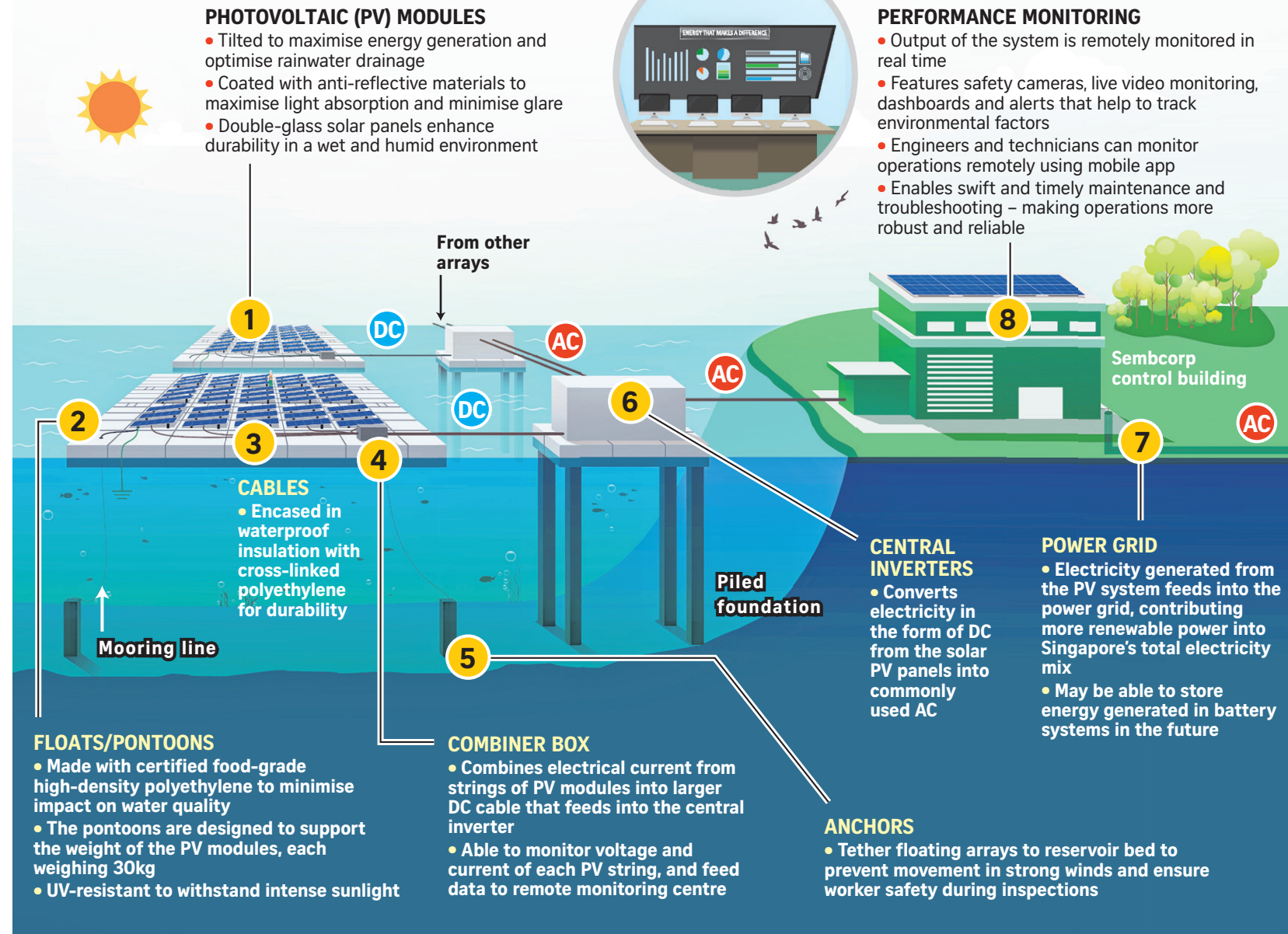
"Every component of the system was carefully designed and selected based on Singapore's climate condi-

# Supporting a more sustainable future

Singapore's largest floating solar farm at Tengeh Reservoir



**DC** Direct current (DC)    **AC** Alternating current (AC)



Sources: PUB, SEMBCORP INDUSTRIES STRAITS TIMES GRAPHICS

# 16,000

The solar farm will be able to generate enough energy to power this number of four-room HDB flats for a year.

tions in order to maximise energy generation, minimise environmental and water quality impact, and be durable enough to fulfil a service lifespan of 25 years."

For instance, the solar plant will use more durable double-glass pan-

els, instead of single-glass ones commonly used in rooftop installations.

Smart technologies incorporated into the system include safety cameras, live video monitoring, dashboards, as well as alerts that help to track environmental factors such

as wind speed, solar irradiation and ambient temperature.

PUB chief executive Ng Joo Hee said: "With this floating solar power plant, which we believe to be one of the largest in the world, PUB takes a big step towards enduring energy

sustainability in water treatment. Solar energy is plentiful, clean and green, and is key to reducing PUB's and also Singapore's carbon footprint."

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