

## PRESS RELEASE

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### **TNB SUPPORTS MALAYSIA ACHIEVING NET ZERO WITH LARGE SCALE FLOATING SOLAR, AS THE COUNTRY RACES TO CUT CARBON EMISSIONS**

- Green power that floats - TNB's floating solar asset in Manjung, Perak sets a template for Malaysia for a growing number of similar projects planned in the country and beyond.
- Powering the national grid - Floating solar farms can complement other renewable energy sources to power the national grid, potentially boosting clean power significantly.
- 2500MW of Hybrid Hydro-Floating Solar (HHFS) – TNB to utilise water surface area at its hydro dam reservoirs.

Motivated by the success of its floating solar pilot project in the ash pond of the Stesen Janakuasa Sultan Azlan Shah (SJSAS) in Manjung, Perak, **Tenaga Nasional Berhad (TNB)** is embarking on HHFS Photovoltaic (PV) projects under National Energy Transition Roadmap (NETR) at its hydro dam reservoirs.

"The pilot project in SJSAS was a remarkable success. We utilised the water's surface area. As the country moves towards a low-carbon future and environmental sustainability, TNB, through TNB Power Generation Sdn Bhd (TNB Genco), is planning to build 2500 Megawatt (MW) of HHFS. This responsible Energy Transition initiative offers sustainable energy solutions with positive ecological impacts," said TNB President and Chief Executive Officer Dato' Seri Ir. Baharin Din.

He explained that by utilising bodies of water for solar installations, TNB can conserve land usage, preserve land natural habitats, and reduce water evaporation. Unlike traditional thermal power plants, floating solar farms do not have water or air discharges that could negatively impact water or air quality. Hence, it minimises pollution and supports biodiversity with minimal disruption to the aquatic ecosystems.

"Floating solar aligns with sustainable energy development principles, mitigates climate change by reducing greenhouse gas emissions, and brings economic benefits to the local communities through job creation and investment. Overall, it presents a harmonious integration of renewable energy generation with environmental conservation."

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“Meticulous planning and environmental impact assessments are vital to ensure the sustainable integration of these installations into the water ecosystems. For TNB’s mini floating solar at SJSAS, we conducted an ecology study through TNB’s wholly-owned research arm, TNB Research Sdn Bhd (TNBR). Every component of the floating solar system was carefully chosen & designed. Even the floaters or pontoons were made of certified food-grade high-density polyethylene to minimise the impact on water quality. The project has shown no adverse impact on wildlife living in the surrounding area.”

Since 2019, the Floating Solar PV located on a 175-hectare ash pond in SJSAS has generated more than 600MWh of energy. The 288 solar PV modules installed comprise 105.12kWp of capacity, equivalent to a reduction of 390 tonnes of CO<sub>2</sub> during 4 years of operation or CO<sub>2</sub> uptake by 15,624 trees. The electricity generated from this system can meet the needs of 30 houses.

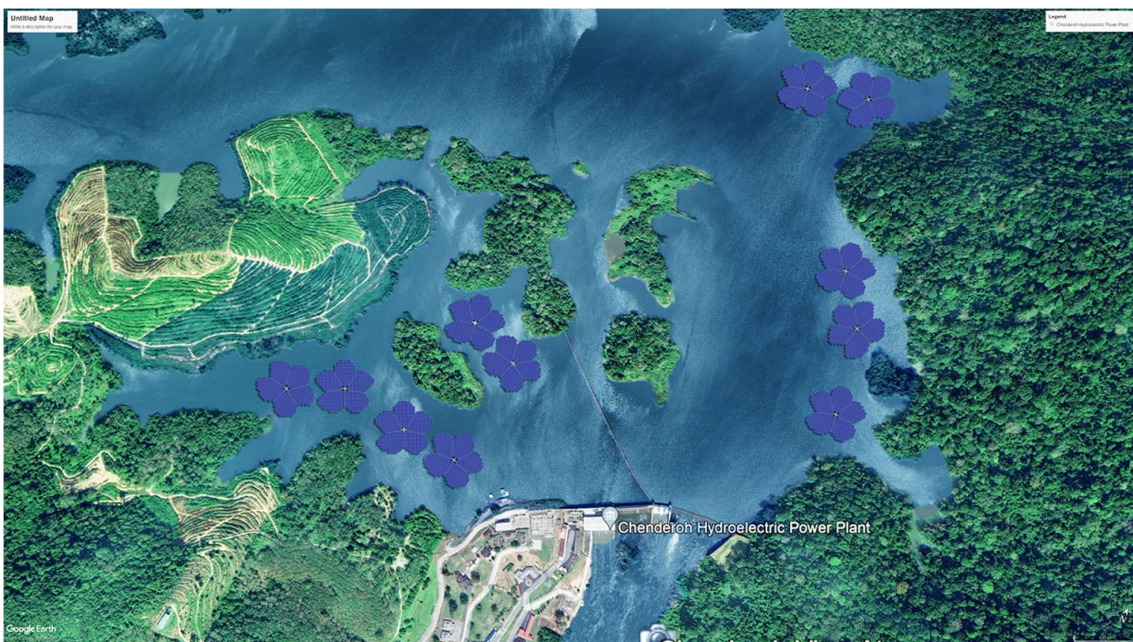
TNB plans to expedite the implementation of the 2500MW HHFS, beginning with 30MW at its Chenderoh Hydro-reservoir, to be closely followed by locations at its Temenggor and Kenyir Hydro-reservoirs. “Floating solar farms can complement other renewable energy sources to power the national grid with the potential to boost clean power significantly,” Baharin added.

As a key enabler, TNB has penned partnerships with the relevant state agencies with Perbadanan Kemajuan Negeri Perak (PKNPk) and Terengganu Incorporated (TI) to ensure that the HHFS development is carried out successfully and responsibly.

Baharin emphasised that TNB is making substantial strides in its commitment to driving large renewable energy (RE) and clean technology initiatives and spearheading pivotal flagship projects as outlined in the NETR. The floating solar venture is part of TNB’s strategy to accelerate the decarbonisation of its power generation business. The company, which has a sizeable exposure to coal, is also seeking to decarbonise by reducing dispatch from coal plants and swapping it with solar and gas capacity while ensuring electricity supply security. It will continue to explore new opportunities and solutions to create value for its customers, shareholders and stakeholders. At the same time, TNB will continue to enhance its Environmental, Social and Governance (ESG) performance.

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Artist illustration – TNB Genco and PKNP are studying the possibility to install up to 100MW Hydro Hybrid Floating Solar at Sg Perak Hydro Scheme.