

Study of floating solar park

What is the impact on water quality and aquatic life of a floating solar panel system that lets through sufficient light and air? How stable and storm-proof is such a system? What about the cost-effectiveness? And does it fit in with the surroundings?

A test setup on Marke Lake should help answer these questions. The lake adjoins WUR's experimental farm De Marke in Hengelo, Gelderland. Over 100 floating solar panels were recently installed there. De Marke has let the lake be used for the DRIVER project, in which the impact of various setups for floating solar arrays will be studied over three years.

Three small-scale solar arrays, with varying degrees of air and light permeability, are currently floating in the former sand-pit. The unusual feature of this system is that the angle and the distance from the panels to the water surface are adjustable.

Floating solar farms are a relatively new phenomenon, developed in response to the lack of suitable roofs and land and the search for alternatives. Solar panels on



Photo EasyFix Solar

water may also be more efficient thanks to the reflection from the water and its cooling effect: when solar panels heat up, that increases resistance and reduces the power.

Economics and ecology

As with solar farms on land, there is a great need for further knowledge about the economic and ecological effects of floating solar farms. That is what DRIVER will be looking into. This project is funded through the government's DEI+ scheme

(for energy innovation demonstration projects). In addition to the impact on water quality and ecology (measured by the Netherlands Institute of Ecology's Aquatic Knowledge Centre AKWA), the project also aims to learn more about public acceptance, permits and how to blend in the solar arrays with the surroundings. These insights will be shared through the national Sun on Water consortium. ME