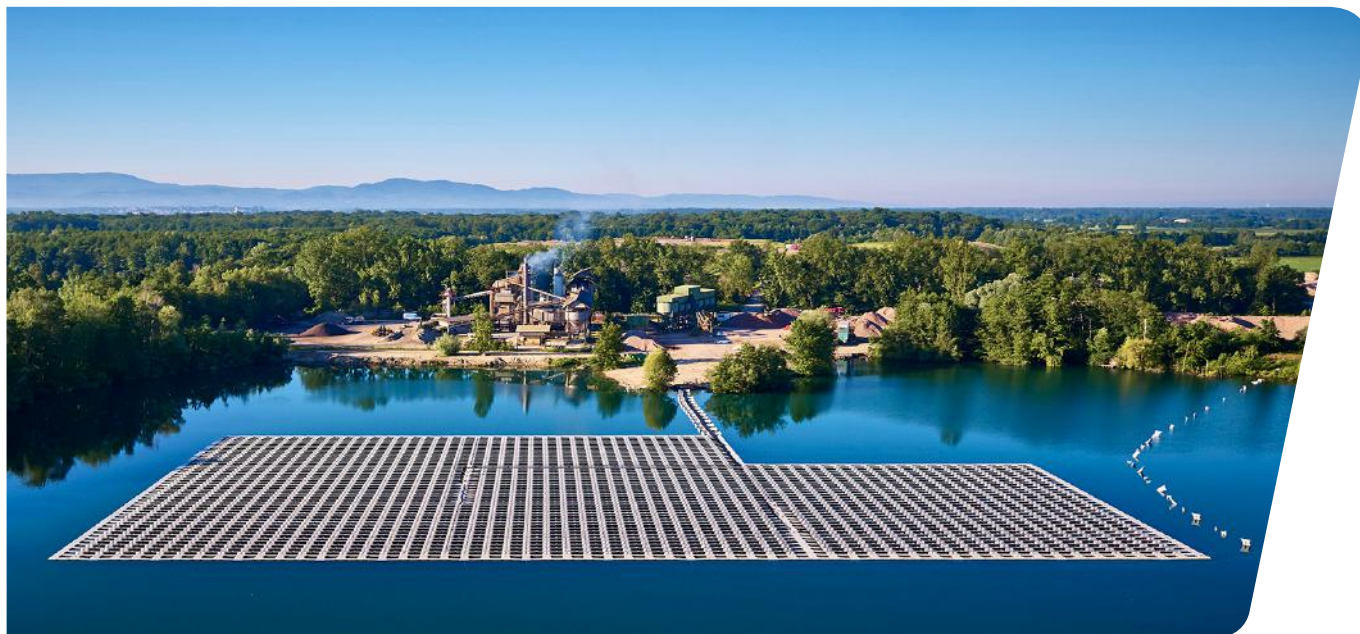


Case Study

Germany Baggersee Maiwald Floating Plant



PROJECT OVERVIEW

- Project Name: Baggersee Maiwald Project
- Location: Germany, Renchen
- System Size: 750 KW
- Type of Solar Panel: STP 325-24/Vfw
- Panel Quantity: 2,345 pieces
- Owner: Ossola GmbH
- Installer: Erdgas Südwest GmbH

BENEFITS

- Deliver around 800,000 kWh of green electricity per year
- Reduction of 560000 kg of carbon dioxide every year

The largest floating solar power plant in Germany

This project marks the start of using new types of surface areas for more climate protection in the stone and earth industry in Germany and also significantly promotes the application of Suntech's PV modules and technology.

Germany's largest floating photovoltaic plant has been built on an artificial lake, the Baggersee Maiwald in the municipality of Renchen near Achern. Only two percent of the lake area is covered by the PV modules, wherewith a total of 750 kWp of Suntech's high-efficiency polycrystalline PV modules with IP68 waterproof rating, ensures the power plant can continuously deliver around 800,000 kWh of green electricity per year.

Application scenarios of new photovoltaic technology

Armin Ossola and Erdgas Südwest, have realized this project together and set a new example for the energy transition with PV modules from Suntech. The gravel works operator Armin Ossola, can use around two-thirds of this electricity because the load profile of its large electricity-operated equipment is a good match for the production times of the photovoltaic power plant. The other third, produced at weekends, for example, is fed into the public grid and distributed directly by project partner Erdgas Südwest.

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“By using the green electricity I produce myself, I can significantly reduce my electricity costs and use the existing flooded gravel pit for more climate protection”, Armin Ossola explained. This changeover will save around 560,000 kilograms of harmful CO₂ per year. “I have found a very competent partner in Erdgas Südwest, whom I worked with to develop the idea and make it a reality.”

As a trusted PV brand and reliable partner, Suntech is enjoying a good reputation in the German market, producing PV modules not only with better performance but also reliable quality. The successfully completed floating photovoltaic plant reinforces partnership with Erdgas Südwest and Ossola, and further strengthens Suntech’s position in the German PV market. Mr. Vincent Cao, Vice President of Suntech, said “Since launching 19 years ago, Suntech has striven to deliver high-quality, reliable and cost-effective PV products. Suntech will keep on developing German market to wholeheartedly provide high cost performance for customers.”



New trends in the future development

Compared with traditional ones, floating power plant with PV modules installed on floating structures, not only does not occupy land resources but also limit water evaporation. On the other hand, such PV power plant that can shade some sunlight may effectively inhibit the growth of plankton, thus partly protecting the aquatic environment. At the same time, the cooling effect of water bodies on PV modules and cables can significantly enhance the efficiency of power generation.