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Floating Solar Panel on Agriculture Pond

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Abstract: Floating solar power plants present an innovative solution for farmers facing constraints of limited land and water resources. This study assesses the feasibility of on-grid floating solar power plants for farmers, offering a sustainable and cost-effective energy source while conserving land area and improving water quality. Through technical, economic, and environmental analyses, this study demonstrates the viability of on-grid floating solar power plants, highlighting their potential to enhance farmers' livelihoods and contribute to rural sustainable development. Additionally, this paper introduces a novel approach by estimating the technical potential of floating photovoltaic systems (FPV) at the province/municipality level, focusing on water irrigation ponds, thus offering insights for localized implementation strategies.

Keywords: Solar, PowerPlant, FPV, Ponds

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