

# **Cost-Effectiveness Analysis of 120-foot Solar-Powered Containers for Wastewater Treatment Plants**





## Overview

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What is the difference between solar energy and wastewater treatment plant?

The solar Energy faces the drawback to treat wastewater only during day time, whereas wastewater treatment plants are underperformed during night. Need for energy storage systems increases the overall cost of the WWT plant.

What is solar-powered wastewater treatment?

Solar-powered wastewater treatment can vary from simpler one (solar still and SODIS) to mature technology (MD, MSF and RO). Selection of these technologies is very site specific. Solar still and SODIS are suitable for tropical countries having abundant solar energy but lacking investment and skilled manpower.

Can solar energy be used for wastewater treatment?

Recent trends on wastewater treatment using solar energy were reviewed. Solar photocatalysis methods of wastewater treatment was studied and analysed. Advanced oxidation methods using solar energy are found to be effective. Technical limitations and environmental benefits are discussed.

Are solar photocatalytic wastewater treatment plants environmentally friendly?

There do exist very few medium scale solar photocatalytic wastewater treatment plants which are environment friendly compared to the existing conventional systems. Treatment of wastewater using solar energy reduces the use of conventional power there by reduces emission of GHG.



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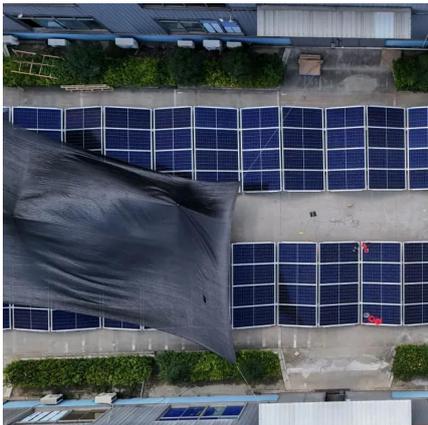
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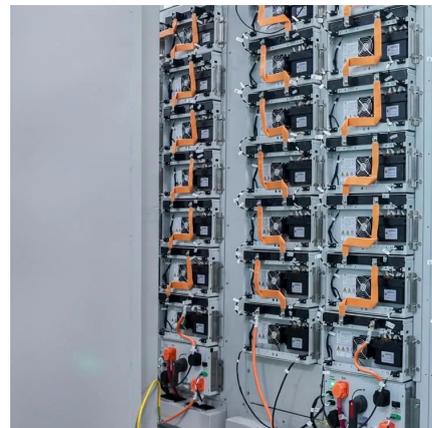
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