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Long-lasting solar-powered container for wastewater treatment plants in Congo





Overview

Can solar-driven water treatment be used in rural areas?

The technical and economic potential assessment for using solar-driven water treatment sets the course for further research and development projects in the most significant industrial sectors and municipal wastewater treatment, but also for use in rural areas (e.g., Africa) for applications like drinking water production.

Can solar energy be used in wastewater treatment?

The work within SHC Task 62 shows solar energy's great potential in wastewater treatment. Nevertheless, there is still the need to take further action. Using separation technologies such as membrane distillation in combination with solar process heat represents an innovative leap in the industry.

Can solar thermal collectors be used for wastewater treatment?

Applications in various industrial sectors for solar water treatment. One research focus area of the Task was the combination of solar thermal collectors with technologies for wastewater treatment. This work aimed to create an innovative and, above all, economically attractive solution for industry.

How does solar energy affect biological wastewater treatment?

Electromagnetic radiation emitted by the Sun as sunlight encompasses ultraviolet (UV), visible and infrared (IR) spectral components. In biological wastewater treatment, bacteria cannot directly utilize solar energy for metabolic degradation of pollutants, as sunlight exposure introduces operational challenges.



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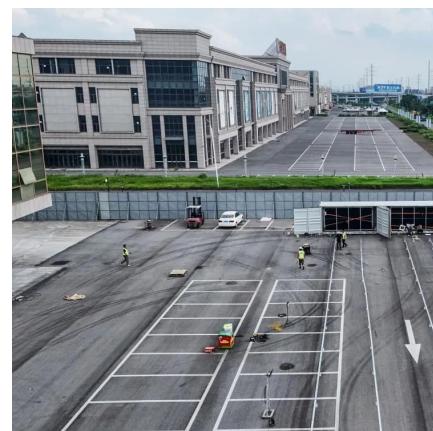
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