## Solar water distillation system

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## **Abstract**

A solar water distillation device cleans water by removing impurities from fresh water. According to market research, water distillers in the market often have poor production rates and also they are expensive. In this project, the production rate was enhanced with sustainable solar energy by adopting several mechanisms. The goal of this project was to gather the most solar energy possible while minimizing heat loss in order to produce a highly efficient result. Testing was done to identify any weaknesses and parts that should be changed, and the majority of research papers found during the literature review offered helpful insights to improve the system and achieve the desired results. With the help of an improved solar distiller and solar reflector, the desired results were produced with the lowest possible cost using the solar water distillation system that can heat water to the boiling point and a solar tracking parabolic mirror that gathers solar rays and concentrates them into the water heating chamber with the minimum possible losses.

**Keywords:** Customize Product, Cost-effective, Solar Energy, Water distillation