Solar energy storage cabinetized hybrid type for oil refineries

This paper proposes a solar-assisted method for a petrochemical refinery, considering hydrogen production deployed in Yanbu, Saudi Arabia, as a case study to greenize oil refineries.

The present study investigates the feasibility of solar hybrid system to generate steam in the oil refinery to maintain the temperature of heavy crude oil products before despatching from ...

The research team estimated that a CSP system with about 82 acres (330,000 square meters) of solar collectors could deliver steady-state solar heat for distillation, including adequate ...

ABSTRACT The purpose of this study is to investigate the potential use of solar energy within an oil refinery to reduce its fossil fuel consumption and greenhouse gas emissions. A validated...

This study aims to evaluate a proposed hybrid heating system for heavier refinery products in storage tanks, coupled with TES, including energy, cost, and GHG emission analysis.

Herein, a solar multi-energies-driven hybrid chemical oil refining system, exemplified by residual oil cracking, has been successfully developed and formulated in solar-driven thermo ...

A hybrid energy system is proposed and analyzed thermodynamically with a solar heliostat field, tower, and receiver integrated to support the decarbonization of a crude oil refinery for the city ...

Semantic Scholar extracted view of "Solar-assisted hybrid oil heating system for heavy refinery product storage" by Naseer Ahmad Khan et al.

The purpose of this study is to investigate the potential use of solar energy within an oil refinery to reduce its fossil fuel consumption and greenhouse gas emissions.

Solar energy storage cabinetized hybrid type for oil refineries

Web: https://www.klconsulting.co.za