Saudi arabia enphase energy

Saudi arabia enphase energy

RIYADH: With a goal of sourcing at least 50 percent of its electricity from renewables by 2030, Saudi Arabia has invested heavily in diversifying its energy mix toward renewable sources to meet its pledge to cut carbon emissions and promote sustainable development.

To promote public understanding of renewable energy technologies and to advance the goals of Vision 2030, the King Abdullah City for Atomic and Renewable Energy launched the Mishkat Interactive Center for Atomic and Renewable Energy in Riyadh in 2017.

"The National Renewable Energy Program, with all its achieved and under-construction projects, really reflects how promising this strategic initiative is to fulfill Vision 2030," Reham Aldous, the center"s content and program development manager, told Arab News.

Saudi Arabia has immense wind energy potential, particularly in its northwestern and coastal regions. The Kingdom has set a target of producing 50 gigawatts of wind energy capacity by 2030.

In 2021, Saudi Arabia inaugurated its first commercial-scale wind farm, the 400-megawatt Dumat Al-Jandal project, which is currently the largest in the Middle East. Additional large-scale wind projects are in the pipeline.

Major projects include the 300-MW Sakaka solar plant, the 420-MW Sudair solar park, and the planned 2-GW Al-Shuaibah solar project. Saudi Arabia is also exploring innovative applications like floating solar farms on its reservoirs.

Inaugurated in 2021, the Sakaka Solar Power Plant in Al-Jouf uses photovoltaic technology. Made up of more than 1.2 million solar panels arranged across 6 sq. km, it produces low-cost energy at just $0.023 per kWh.

Besides using photovoltaic cells to capture the sun"s rays, another method is thermal solar energy, where mirrors focus sunlight in a specific spot to collect and concentrate it, allowing for the production of very high temperatures, which are used to generate electricity.

Although Saudi Arabia"s hydropower potential is limited due to its limited moving bodies of water, the country does have some small-scale hydroelectric facilities.

The Baisha Dam in the southwest generates about 2.1 MW of power. Saudi Arabia is also investigating the potential for pumped storage hydropower projects.

Saudi Arabia has begun to explore its geothermal energy resources, particularly in the volcanic areas of the

Hijaz and Asir mountains.

Pilot projects are underway to assess the viability of geothermal power generation in the Kingdom. Early estimates suggest a potential of up to 3 GW of geothermal capacity.

Contact us for free full report

Web: https://kary.com.pl/contact-us/
Email: energystorage2000@gmail.com
WhatsApp: 8613816583346