

What is Uganda Solar Energy Association (USEA)?

Uganda Solar Energy Association (USEA) is an independent nonprofit association dedicated to facilitating the growth and development of solar energy business in Uganda and the East African region.

Does Uganda have solar energy?

... In Uganda, there is a great potential for solar energy development, whereby about 200,000 km² out of 241,037 km² of Uganda's land area has solar radiation exceeding 2,000 kWh/m² /year (i.e. 5.48 kWh/m² /day) (Avellino et al., 2018).

Is solar energy a viable option in Uganda?

The solar energy resource on average is 5.2 kWh/m² /day on horizontal surface with average daily sunshine of around 8 h throughout the year, favourable for solar electricity generation. However, adoption of solar PV systems is intractably low in Uganda (Manjeri et al., 2021, Rahut et al., 2018). This raises an important question.

Should solar PV devices be adopted in Uganda?

Solar PV devices adoption is largely a rural phenomenon in Uganda. Policy intervention should focus on addressing affordability issues in rural areas. 1. Introduction Access to clean energy, such as electricity, is a prerequisite for economic and sustainable development of any economy (World Bank, 2018).

How many MW is a solar power plant in Uganda?

This study considered 1.4 hectares to represent 1 MW based on the area covered by the solar projects already existing in Uganda (Soroti and Tororo solar power plants).

How can Uganda address the energy access gap?

To address electricity access gap and the negative effects associated with unsustainable use of biomass and fossils, the government of Uganda is devising policies and programs to increase uptake of alternative renewable energies, such as solar photovoltaic devices (MEMD, 2019; Energy Africa, 2018).

Abstract-Solar energy is gaining attention worldwide as the most promising alternative and reliable source of energy. With increasing population and development, Solar energy in Uganda is ...

In recent years, the solar industry in Uganda has been steadily on the rise, powered by the country's abundant sunshine and a growing commitment to renewable energy sources. As we enter 2024, the market outlook for Uganda's solar ...

Abstract-Solar energy is gaining attention worldwide as the most promising alternative and reliable source of energy. With increasing population and development, Solar energy in Uganda is receiving increased energy demand which can only be met through exploring

The supply of sunshine in Uganda has a high potential for solar energy production. About 200,000 km² of Uganda's land area has solar radiation exceeding 2000 kWh/m² /year (Avellino et...

Our analysis offers insights on the challenges Uganda must address to achieve the potential associated with solar mini-grids and multi-scalar solar energy transitions to ...

The solar energy capacity was analyzed and discussed using both Uganda National Meteorological Authority (UNMA) ground data and MeteoNorm derived data. Performance of grid-connected photovoltaic power plants was investigated as an alternative renewable energy solution using PVsyst.

Uganda's abundant energy resources, primarily sourced from renewables, provide significant opportunities for further development. The country boasts untapped hydropower and solar resources, sizable petroleum deposits, ...

With over 70% of households without access to clean energy, Uganda presents a huge potential for increased adoption of solar photovoltaic (PV) technologies. However, their uptake is relatively low. This study employs a nationally representative data set from Uganda's National Electrification Survey of 2018 to analyze factors influencing ...

Uganda's abundant energy resources, primarily sourced from renewables, provide significant opportunities for further development. The country boasts untapped hydropower and solar resources, sizable petroleum deposits, and reserves of key minerals essential for rapidly growing clean energy technologies.

Our analysis offers insights on the challenges Uganda must address to achieve the potential associated with solar mini-grids and multi-scalar solar energy transitions to achieve universal clean energy access.

