



#### **Top Solar Projects**

# 15 Biggest Solar Projects in South Africa **■** 0 Comments

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South Africa is a leader in the development of renewable energy. A wealth of renewable energy resources such as solar photovoltaic (PV) and concentrated solar power (CSP).

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These have provided the resource-rich continent the opportunity to offer utility-scale electricity to the 600 million people who currently lack access to reliable power.

Well, South Africa has completed the building of a number of ambitious solar farms in recent years, contributing to the country's burgeoning renewable energy sector.

It had over 1.5 gigawatts (GW) of installed capacity, and this figure is predicted to skyrocket to more than 8GW within the next decade.

There are more than 100 **independent power producers** in the Northern Cape region alone, with around 20 projects connected to the grid and a total capacity of 900MW.

## Top 15 Solar Projects and Power Plants in South Africa

Many diverse initiatives are already in the works around South Africa, and the number is anticipated to grow in the not-too-distant future.

<u>Solar power technology</u> will play an important role in South Africa's shift to greener electricity generation due to the country's year-round sunshine.

Let's take a look at 15 inspiring projects, as well as the distinctive qualities of each, to get a sense of Africa's solar power!

# De Aar project-175MW

The De Aar project in the Northern Cape is the largest solar farm in South Africa and Sub-Saharan Africa.

The highest potential generating capacity of this photovoltaic (PV) solar project is 175MW.

Its project site, which spans 473 hectares of a 2,674-hectare farm, has more than half a million modules that convert sunlight into power.

The plant generates enough electricity to power 75,000 houses annually. It was built in two stages, the first of which was finished in August 2014.

The first phase of the project provided 85.26MW of producing capacity. A second phase, which provided an additional 90MW of power, was completed less than two years later. The project was completed in 28 months at a total cost of R4.8 billion.

#### KaXu Solar One - 100MW

KaXu Solar One is a 100MW solar power facility located near Pofadder in South Africa's Northern Cape Province. It is South Africa's first commercially functioning solar thermal electric power plant.

The public-private partnership (PPP) project, which was completed in March 2015, provides sustainable energy to South Africa's power provider Eskom under a 20-year power purchase agreement. Abengoa owns 51 percent of the project, while the IDC and KaXu Community Trust control 29 percent and 20 percent, respectively.

The KaXu Solar One power plant has the capacity to provide clean, green energy to 80,000 South African households.

## Jasper Solar Power Project—96MW

The Jasper Solar Power Project is another solar farm in the Northern Cape. It is a 96MW plant with solar panel installation of 325,000 that has been operational since October 2014.

SolarReserve, an American business, built the facility for ZAR2.3 billion.

The facility generates 180 GWh of electricity per year, enough to power 80,000 South African homes, and offsets approximately 145,000 tons of  $CO_2$ .

Jasper has a 20-year power purchase agreement (PPA) with Eskom, like many of the other solar projects mentioned.