

South Africa Solar Photovoltaic (Pv) Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 162 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The Solar Photovoltaic market is expected to reach 5000 MW by the end of the year and is projected to register a CAGR of over 11.17% during the forecast period.

The market was negatively impacted by COVID-19 in 2020. Presently the market has now reached pre-pandemic levels.

Key Highlights

Over the medium term, declining solar PV modules and associated system costs coupled with supportive government policies are also expected to drive the growth of the market studied.

On the other hand, increasing competition from alternative renewable energy sources such as onshore wind power, small-hydropower, and bioenergy may negatively impact the market's growth and is one of the major restraints for the market. Nevertheless, Due to increasing power outages in the country leading to the electricity crisis and increasing demand for continuous power, are expected to provide growth opportunities in the forecast period.

South Africa Solar Photovoltaic Market Trends

Residential Segment Expected to Witness Significant Growth

South Africa has great potential for renewable energy resources, especially solar and wind, the most prominent technologies in the current renewable procurement windows. South Africa has an average of more than 2,500 hours (about 3 and a half months)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

of sunshine per year, and the average solar radiation levels range between 4.5 and 6.5 kWh/m² per day. The country's Northern Cape is one of the world's most attractive solar resource areas.

The electricity use in most of the residential sectors is likely to grow in South Africa because of increasing personal incomes and as urban migration continues in the southern regions of Africa. Moreover, the housing sector is expected to witness a considerable investment, owing to a rise in population, rapid urbanization, and increased disposable incomes.

According to US Energy Information Administration (US EIA), by 2040, it is estimated that the residential sector in South Africa is likely to consume approximately 8.4 mtoe (million tonnes of oil equivalent) or 98,000 kWh of electricity.

According to South Africa Photovoltaic Industry Association (SAPVIA), as of 2021, South Africa has over 4 GW of solar energy connected to its grid. The residential segment accounts for less than 20% of the total capacity. As part of South Africa's long-term energy plan, the government will add another 6 GW of solar power to the grid by 2030.

However, during the forecast period, the share of the residential segment is expected to increase, on account of the decreasing solar PV costs and supportive government programs, such as the National Solar Water Heater Programme, for the residential sector of the country. Moreover, the Department of Mineral Resources and Energy plans to strengthen its National Electrification Programme to provide electricity access to a maximum portion of the country, which is expected to positively impact the growth of the South African residential solar PV market.

Solar photovoltaic (PV) panels are Small-Scale Embedded Generation (SSEG) installations mounted on the roof of a residential building and convert solar energy into usable electricity. A PV system is made up of solar cells connected to point them toward the sun, which an inverter then converts from direct current (DC) into usable alternating current (AC).

Therefore, owing to the above points, the residential segment is expected to witness significant growth in South African solar PV market during the forecast period.

Government Policies and Increasing Investments Driving the Market Demand

The solar energy is one of the most readily accessible resources in South Africa, with an average of more than 2,500 hours of sunshine per year. The country's average solar-radiation level ranges between 4.5 and 6.5 kWh/m² per day. The South African government has identified the significant potential of solar energy and is making efforts to increase the adoption of solar photovoltaic (PV) technology in the country's power sector.

Until the introduction of the Renewable Energy Independent Power Producers Program (REIPPP) in 2011, the solar power sector was nearly non-existent. However, after the program's start, the installed capacity for the utility-scale solar PV reached more than 2.37 GW as of May 2022.

Further, under the REIPPP, the country aims to install an 8,400 MW generation capacity of solar PV by 2030, enough to provide energy to 1.5 million households. In addition, the government also plans to install 18 GW of solar PV by 2050. Such a scenario is expected to result in significant developments in the solar PV industry in South Africa.

In April 2022, the government announced that it had launched the sixth round of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), enabling private sector investment in renewable energy development. Under this, the authorities target procuring 2.6 GW of renewable energy, including 1.6 GW of solar PV.

In addition, the procurement exercise is part of South Africa's plan to tender almost 12 GW of solar capacity, following the country's Integrated Resource Plan (IRP), which aims to develop up to 6 GW of new large-scale solar, and 6 GW of distributed PV capacity by 2030. These initiatives are likely to increase the demand for the solar PV market in the country.

South Africa has also been witnessing a rising interest from various companies in terms of investments in the solar PV market. For instance, in June 2022, South African miner Harmony Gold announced that it had started constructing three 10 MW solar PV projects as part of its environmental, social, and governance (ESG) program. According to the company, the first phase of its renewable energy project consisted of a 30 MW solar energy plant in the Free State province of South Africa. Further, the second phase is planned to add 137 megawatts at its various mines, which the miner announced would deliver over ZAR 500 million per annum in cost savings once it reaches full production in the fiscal year 2025.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Furthermore, in June 2022, renewable power producer Scatec signed power purchase agreements (PPA) for three co-located solar and storage projects in South Africa that include 540MW of PV capacity. Scatec's three projects, which pair 540MW of solar PV with 1.1GWh of battery energy storage system (BESS) capacity, provide 150MW of dispatchable energy from 5 a.m. to 9.30 p.m. In addition, the BESS enables the energy dispatch and allows ESKOM and Scatec to reduce the size of the grid connection needed to integrate the new resources.

Therefore, owing to the above points, government policies and increasing investments are expected to drive the country's solar PV market during the forecast period.

South Africa Solar Photovoltaic Market Competitor Analysis

The South African solar photovoltaic (PV) market is moderately fragmented. Some of the major players operating in the market (in no particular order) include Canadian Solar Inc., Enel SpA, JinkoSolar Holding Co. Ltd, Renenergy South Africa Pty Ltd, and JA Solar Holdings.

Additional Benefits:

The market estimate (ME) sheet in Excel format
3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Scope of the Study

1.2 Market Definition

1.3 Study Assumptions

2 EXECUTIVE SUMMARY

3 RESEARCH METHODOLOGY

4 MARKET OVERVIEW

4.1 Introduction

4.2 Renewable Energy Mix, 2020

4.3 Solar Photovoltaic (PV) Installed Capacity and Forecast in MW, till 2027

4.4 Recent Trends and Developments

4.5 Government Policies and Regulations

4.6 Market Dynamics

4.6.1 Drivers

4.6.2 Restraints

4.7 Supply Chain Analysis

4.8 PESTLE Analysis

5 MARKET SEGMENTATION

5.1 Type

5.1.1 Crystalline Silicon

5.1.2 Thin Film

5.2 End User

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.2.1 Residential
- 5.2.2 Commercial and Industrial (C&I)
- 5.2.3 Utility
- 5.3 Deployment
 - 5.3.1 Ground-mounted
 - 5.3.2 Rooftop

6 COMPETITIVE LANDSCAPE

- 6.1 Mergers and Acquisitions, Joint Ventures, Collaborations, and Agreements
- 6.2 Strategies Adopted by Leading Players
- 6.3 Company Profiles
 - 6.3.1 Canadian Solar Inc.
 - 6.3.2 JinkoSolar Holding Co. Ltd
 - 6.3.3 Trina Solar Co. Ltd
 - 6.3.4 ARTsolar (Pty) Ltd?
 - 6.3.5 SunPower Corporation?
 - 6.3.6 IBC Solar AG?
 - 6.3.7 Seraphim Solar System Co. Ltd
 - 6.3.8 Engie SA?
 - 6.3.9 Enel SpA
 - 6.3.10 Renenergy South Africa Pty Ltd?
 - 6.3.11 JA Solar Holdings?
 - 6.3.12 Energy Partners Solar (Pty) Ltd?

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

South Africa Solar Photovoltaic (Pv) Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 162 pages | Mordor Intelligence

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-13"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com