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Mauritius Solar Report

Prepared by J.v.G. Technology GmbH

J.v.G. Technology GmbH is a German engineering company specializing in turnkey solar module production lines and manufacturing consulting, with project experience ranging from 20 MW to 500 MW per production line, including multi-line and gigafactory projects exceeding this scale.

This Solar Report is part of the **PVKnowHow** Knowledge Network.
The data, analysis, and conclusions in this document are based on real research, consulting insights, and international solar market data.

Gain comprehensive insights into the statistics and metrics surrounding the solar production industry in Mauritius

KEY POINTS

All figures have been converted into USD

Yearly sunshine (sun hours per year)

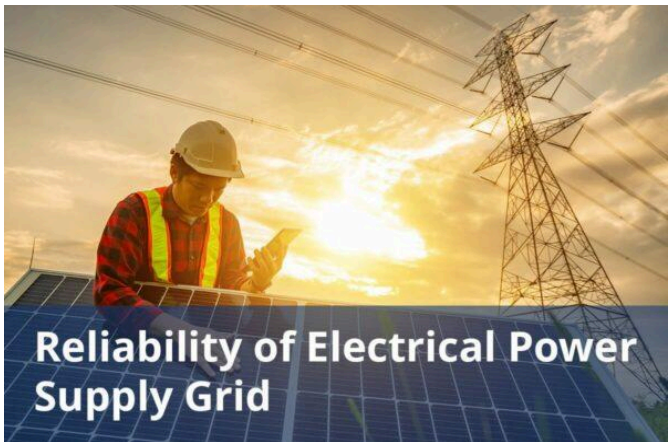
Annual sunshine hours vary by region,
- Average of 2000 hours per year in sunny states.
- Northern regions average around 1500 hours per year.
- Coastal areas typically experience less sunshine.
- Urbanization can reduce local sunshine exposure.

kWh per kWp installed

Conversion efficiency is crucial,
- Generally, 1 kWp produces 1000-1500 kWh annually.
- Dependent on sun exposure and panel quality.
- Average systems yield about 1200 kWh/kWp.

Average cost per kWh from utility company

Electricity pricing varies,
- Average residential prices might be around $0.120/kWh.
- Commercial rates generally lower at $0.110/kWh.
- Industrial users could see rates as low as $0.090/kWh.



Reliability of electrical power supply grid

Solar panel reliability is important,
- Typically offers 20-25 years of effective service.
- Performance warranties usually cover the lifespan.
- Monitoring systems enhance reliability.




DETAILED INFORMATION

All figures have been converted into USD

Total solar panel production capacity (installed)

Total solar panel installed capacity is growing,
- Estimated at over 100 GW nationwide.
- Residential installations represent a growing share.
- Utility-scale projects are leading capacity increases.

Total solar panel production capacity (projected)

Future solar capacity projections are optimistic,
- Expected to double by 2030.
- New technologies will further enhance capacities.
- Policy changes may accelerate installations.

Average costs of various electricity generation sources (coal, natural gas, solar, etc)

Average costs of solar installations continue to drop,
- Residential systems average around $3.00/watt.
- Commercial systems range from $2.50/watt to $2.00/watt.
- Utility-scale systems can be even less expensive.

Percentages of various electricity generation sources (coal, natural gas, solar, etc)

Renewable energy contributions are increasing,
- Solar power now accounts for around 5% of total energy.
- Wind energy is also contributing significantly in recent years.
- Expect solar's share to grow with new policies.

Average daily availability of electricity from the national grid (measured in hours)

Daily solar energy availability fluctuates,
- Peaks during noon hours on sunny days.
- Early mornings and late afternoons have reduced generation.
- Seasonal variations affect overall daily energy generation.

Number of residential solar panel installations

Number of residential solar panels installed continues to rise,
- Currently estimated at over 2 million residential systems.
- Growth seen in suburban and rural areas.
- Urban installations are gaining interest for sustainability.

Total number of solar farms (installed and projected)

The number of solar farms is increasing nationwide,
- Currently over 500 utility-scale solar farms are operational.
- The trend continues upwards as demand for renewable energy grows.
- States with abundant land support more farms.

Off-grid market demand for solar panels (current and projected)

Off-grid market demand for solar panels (current and projected)

- Installed:
Under the Home Solar Project, approximately 10 MW of rooftop solar systems are being installed on 10,000 households, primarily focusing on social housing. By early 2024, systems had been implemented in

2,000 homes, with the initiative expected to significantly reduce electricity costs and carbon emissions.

- Projected:
The projected off-grid solar panel market demand in Mauritius is set to grow steadily, driven by increasing interest in renewable energy solutions and government initiatives to support solar adoption. By 2030, the off-grid segment is expected to account for a significant portion of the market share, with the residential, commercial, and industrial sectors contributing to this growth.

On-grid market demand for solar panels (current and projected)

On-grid market demand for solar panels (current and projected)

- Installed:
As of recent years, Mauritius has installed approximately 87.2 MWp of large-scale utility solar PV capacity. Including smaller installations, the total committed capacity stood at 125.5 MWdc, primarily driven by private sector investments.

- Projected:
By 2030, Mauritius is expected to increase its utility-scale solar farms significantly. Six additional solar farms have been commissioned, and public-private partnerships aim to add hybrid renewable energy facilities with capacities exceeding 140 MW.

Average monthly income of workers in solar industry (labor cost)

Average monthly income of workers in solar industry (labor cost)

The average monthly income for workers in the solar industry in Mauritius varies by job role and experience. For example, solar engineers earn an average of approximately $858 to $880 USD per month, with experienced professionals earning higher salaries. Entry-level roles, such as installation technicians, typically earn less, while senior roles or specialized engineers may command more. Overall, the average wage across all industries in Mauritius was reported to be $864 USD per month as of late 2023, indicating that solar industry roles are competitive with national averages

Population of the country

Population of the country

The population of Mauritius is approximately 1.26 million as of 2024.

Average overhead costs of solar panel production (with a brief breakdown)

Average overhead costs of solar panel production (with a brief breakdown)

- Rent and Mortgage:
Renting a small-scale industrial facility costs approximately $660 to $1,760 USD per month, depending on size and location. Mortgage costs for purchasing such spaces depend on financing terms, with monthly payments varying based on local interest rate.

- Utilities:
Basic utilities for industrial use include electricity, water, and waste management, which average $150–$200 per month for smaller operations. Larger-scale facilities may incur proportionally higher utility costs.

- Labor Costs:
The average monthly income for workers in the solar manufacturing industry in Mauritius is around $870–$1,000, influenced by skills and expertise levels.

- Maintenance:
Annual maintenance costs typically include cleaning and system checks, ranging from $990 to $2,640 USD annually for small- to medium-scale setups. These costs may rise for larger or more complex operations.

A summary of the energy infrastructure

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Mauritius is actively working to enhance its energy infrastructure with a focus on renewable energy and sustainability. The country is transitioning from reliance on imported fossil fuels toward a greener energy mix, aligning with its target of achieving 60% renewable energy in its electricity generation by 2030. This includes substantial investments in solar, wind, and bioenergy projects, along with battery energy storage systems to support grid stability and increased renewable capacity. Solar energy has gained significant momentum in Mauritius, with initiatives like free rooftop photovoltaic kits for low-income households and investments in large-scale solar farms.

Other projects include the integration of smart grids and the deployment of renewable energy training programs for communities to promote technical skills and employment in the sector.

Some of the government regulations surrounding solar panel production

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- Feed-in Tariffs (FiTs) and Tax Credits:
The government encourages investment in solar energy through FiTs, which allow producers to sell surplus electricity to the grid, and tax credits for renewable energy installations. These policies aim to reduce reliance on fossil fuels and support private sector participation in the solar energy market.

- National Renewable Energy Roadmap:
The “Roadmap 2030” targets increasing solar energy capacity to over 375 MW, requiring significant investment in infrastructure. It is part of Mauritius’ broader strategy to achieve 35% renewable energy in its mix by 2025.

- Central Electricity Board (CEB) Initiatives:
The CEB supports solar adoption through projects like the Home Solar Project, which provides households with subsidized solar systems and encourages injecting surplus energy into the grid. This program also includes outreach campaigns to boost adoption.

- Land Use and Environmental Regulations:
Due to limited land availability, large-scale solar projects face challenges. Authorities emphasize careful planning and land use,

sometimes integrating solar systems with agricultural activities. However, the use of state and private lands for renewable energy is tightly regulated to avoid environmental degradation.

Government initiatives in solar panel production (includes investments and subsidies)

Government initiatives in solar panel production (includes investments and subsidies)

- Home Solar Project (HSP):
Under the Ministry of Energy and Public Utilities and the Central Electricity Board (CEB), this project received $10 million in concessional funding from the Abu Dhabi Fund for Development (ADFD) and is part of the IRENA/ADFD Project Facility. It plans to install 10,000 rooftop solar PV systems, focusing on social housing, with systems provided and installed free for eligible households.

- Investment in Solar Photovoltaics and Battery Systems:
Companies like Qair have partnered with Mauritius to develop solar PV and battery storage facilities. Their projects contribute to grid stability and align with the national goal of renewable energy expansion, helping to phase out coal-powered plants.

- Subsidized Renewable Energy Projects:
Mauritius offers incentives to households hosting solar installations, such as reduced electricity costs and injection of surplus electricity into the grid. This has been accompanied by awareness campaigns to encourage participation.

Notable solar projects in the country (installed and projected)

Notable solar projects in the country (installed and projected)

- Arsenal Solar Plant:
Developed by GreenYellow Indian Ocean Green, this 10 MW solar plant was inaugurated in 2024. It spans 12 hectares and contributes 22.5 GWh annually to the grid. This project supports Mauritius' goal of achieving 60% renewable energy by 2030.

- Qair Hybrid Solar Projects:
Qair has initiated four solar PV and battery storage hybrid projects across Mauritius, totaling 60 MW. These projects include facilities in Trou d'Eau Douce, Balaclava, and Petite-Rivière. They are designed to provide renewable energy during peak evening hours and enhance grid stability, with commissioning planned for 2024.

- AfDB-Backed Solar-Plus-Storage Projects:
A 100 MW solar PV initiative with integrated battery storage is under development, supported by the African Development Bank. This project aims to bolster renewable energy capacity, helping Mauritius reach its 2025 target of 35% renewable energy in the energy mix.

Some of the notable solar companies (plus brief details on what they do)

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- Reneworld Lt

Founded: 2012
Services: Full grid-tied solar systems, solar power, EV charging, home solar solutions
Specialization: Hybrid PV systems, off-grid PV systems

- Solaire Maurice
Founded: 2015
Services: On-grid and off-grid solar solutions for homes and businesses
Specialization: Solar panels, inverters, energy storage solutions

- AFC Trading
Founded: 2019
Services: Import and distribution of quality solar products
Specialization: Solar lights, home improvement products

- GO SOLAR LTD
Founded: 2018
Services: Solar panel installations, maintenance, and consultancy
Specialization: Residential and commercial solar solutions

- Solar Center
Founded: 2016
Services: Custom solar solutions, energy audits, installations
Specialization: Photovoltaic systems, solar energy consulting

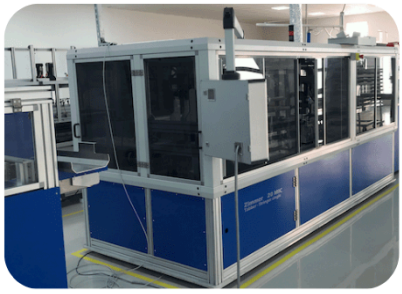
- Synnove Energy
Founded: 2017
Services: Solar panel installations, energy efficiency solutions
Specialization: Sustainable energy solutions for homes and businesses

- Corexsolar International
Founded: 2014

Services: Solar panel sales, installation, and maintenance
Specialization: High-efficiency solar panels, renewable energy solutions

- CSI Energy Group
Founded: 2013
Services: Solar energy systems, energy audits, consultancy
Specialization: Large-scale solar projects, industrial solar solutions

- Daystar Power
Founded: 2015
Services: Solar power solutions, energy management
Specialization: Solar farms, commercial solar installations



ABOUT THIS REPORT

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All market data, analysis, and conclusions follow JvG's internal consulting standards and international PV market research practices.

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About J.v.G. Technology GmbH

J.v.G. Technology GmbH is a European engineering and advisory specialist for solar production lines and manufacturing equipment, supporting investors and operators with market, location and production-focused decision frameworks.
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