



Dominican Republic 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.

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

KEY POINTS

All figures have been converted into USD



Yearly sunshine (sun hours per year)

Yearly Sunshine:

- Average annual sunshine: 300 days
- Peak sunshine hours: 5 hours/day



kWh per kWp installed

kWh per kWp:

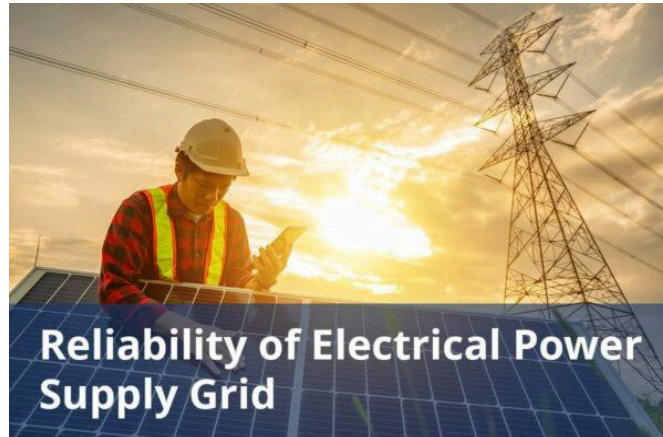
- Typical production: 1200 kWh/kWp/year
- Seasonal variations: Summer: 1400 kWh/kWp, Winter: 800 kWh/kWp



Average cost per kWh from utility company

Average Cost per kWh:

- Residential: \$0.135/kWh
- Commercial: \$0.110/kWh
- Industrial: \$0.095/kWh



Reliability of electrical power supply grid

Reliability:

- System availability: 98%
- Average downtime: 2 days/year



DETAILED INFORMATION

All figures have been converted into USD

Total solar panel production capacity (installed)

Total Solar Panels Installed:

- Total number of panels: 1 million
- Capacity: 3 GW

Total solar panel production capacity (projected)

Total Solar Panels Projected:

- Expected installations by 2030: 5 million
- Capacity increase: 15 GW

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

Average Costs:

- Installation cost: \$2.50/W
- Maintenance cost: \$20/year

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

Percentages of Electricity:

- Generated from solar: 15%
- Expected increase in renewable sources: 30%

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

Daily Availability:

- Average daily solar generation: 4 kWh/household
- Peak monthly generation: 150 kWh

Number of residential solar panel installations

Number of Residential Panels:

- Average per home: 25 panels
- Total homes with solar: 40,000

Total number of solar farms (installed and projected)

Number of Solar Farms:

- Total solar farms: 50
- Average size: 5 MW each

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

In the Dominican Republic, significant strides are being made in off-grid and microgrid solar projects aimed at electrifying rural areas and schools.

Recently, the Ministries of Education and Energy and Mines announced plans to install solar panels in 314 schools across the country, enhancing energy access for students.

Additionally, various rural villages are pursuing solar microgrids to achieve reliable electricity, reflecting a global trend toward sustainable energy solutions.

One notable example is the microgrid project in Sabana Real, which serves around 225 people, providing them with a consistent power supply. These initiatives are particularly crucial given the challenges posed by hurricanes, which often disrupt traditional power sources.

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

There are currently over 1300 MW of solar photovoltaic projects under construction across various locations in the country. This includes significant projects like the 83.4-MW Ardavin Solar plant and the 58.48-MW La Victoria solar farm, which are set to enhance the overall solar capacity and meet rising electricity demand.

Companies such as F&S Solar plan to install over 500 MW of solar capacity by 2025, indicating strong future demand for solar panels as part of the country's broader renewable energy strategy.

The rising costs of fossil fuel imports and a historical record of electricity demand exceeding 80 GWh per day further drive the need for increased solar installations.

The Dominican Republic aims for 25% of its electricity consumption to come from renewable sources by 2025, up from around 19% in 2023.

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

The average monthly salary in Dominican Republic is approximately \$404.

- Solar Energy Installation Manager: the average monthly salary is approximately \$466.
- Solar Photovoltaic Technician: the average monthly salary is approximately \$189.
- Generation Engineer: the average monthly salary is approximately \$288.

Population of the country

The current population of Dominican Republic is 11451520.

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

Estimate for Factory Rent

Monthly industrial and logistics rent prices in Santo Domingo are approximately \$5 per m² to \$11 per m², depending on the location and specific characteristics of the property.

Industrial Electricity Rates

As of December 2023, the average electricity price for businesses in Dominican Republic is approximately \$0.169/kWh.

Water Costs

The water tariff for drinking water in Dominican Republic rose from approximately \$5.79 per cubic meter to around \$8.29 per cubic meter. This adjustment reflects ongoing changes in water pricing, driven by higher-than-expected leakage losses in 2022.

Salaries and Wages

Monthly salaries of workers in solar industry in Dominican Republic ranges from \$189 to \$466, depending on the position.

- Rent for Office Space

The monthly rent for office space in Dominican Republic varies significantly based on location, size, and specific features of the properties, ranging approximately \$12 per m² to \$35 per m².

- Insurance

The average spending per capita on non-life insurance in Dominican Republic is projected to be approximately \$344 in 2024.

A summary of the energy infrastructure

The current energy generation relies heavily on fossil fuels, but recent developments indicate a growing commitment to diversifying the energy mix towards renewables.

As of September 2023, the country has 10 wind farms, 9 solar plants, and 1 biomass plant, which collectively account for approximately 19% of the total installed capacity. The aim is to raise this figure to 25% by 2025.

Several key institutions oversee the energy sector in the Dominican Republic:

- National Energy Commission (CNE): Responsible for policy-making and implementing national energy plans.

- Superintendency of Electricity (SIE): Regulates the electricity sector and ensures compliance with legal frameworks.
- Ministry of Energy and Mines (MEM): Oversees energy policy and regulation.

The country's electricity infrastructure includes the National Interconnected Electric System (SENI), which connects various generation sources to distribution networks. The total installed generation capacity connected to SENI is around 5631.47 MW, with average peak demand at approximately 3312 MW.

Some of the government regulations surrounding solar panel production

The regulatory landscape for solar panel production in the Dominican Republic is currently evolving, driven by the increasing demand for solar energy and the need to address operational challenges faced by electricity distribution companies.

The primary legislation governing renewable energy, including solar power, is Law 57-07, which was established to promote the development of renewable energy sources. This law provides various incentives such as a 100% customs tax exemption on imported equipment and materials, and a 10-year income tax exemption for profits derived from renewable energy production.

The new regulations are expected to be published by the end of 2024 and will focus on the approval, interconnection, and operation of solar panel installations.

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

Renewable Energy Incentives Law: a cornerstone of the government's strategy to boost renewable energy investments. This law provides tax incentives for businesses involved in renewable energy projects, including a 100% customs tax exemption on imported equipment and materials, as well as a 10-year income tax exemption on profits from renewable energy production.

Public-Private Partnerships: the government has facilitated partnerships with private investors to develop large-scale Dominican Republic solar projects. Significant Investments:

- Montecristi Solar Farm: a major investment of approximately \$62 million.
- El Soco Photovoltaic Solar Park: completed in 2022 with an investment of \$93 million.

Notable solar projects in the country (installed and projected)

Current Solar Projects

- Montecristi Solar Farm:
 - Capacity: 116 MW
 - Location: Montecristi Province
- La Victoria Solar Farm:
 - Capacity: 58.48 MW
 - Investment: \$82 million
- Ardavin Solar Plant:
 - Capacity: 83.4 MW
 - Location: Gaspar Hernandez

- Pedro Corto Solar Plant:
 - Capacity: 63.35 MW
 - Location: San Juan de la Maguana
 - Projected Operation: By the end of 2025
- Cotoperí Photovoltaic Project:
 - Capacity: 162 MW (combined across three plants)
 - Location: San Juan de la Maguana

Projected Solar Initiatives

- Canoa Solar Park:
 - Capacity: 25 MW (first phase)
 - Status: Under construction
- Sabana Yegua and Sabaneta Projects:
 - Status: Bidding initiated by Egehid for execution and management of these projects.

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

EDP Energías Renovables

- Headquarters: Lisboa, Portugal
- Website: <https://www.edp.com/es>
- Details: Developer of the EDP-Baní Solar Project with a proposed capacity of 200 MW.

AES Andrés

- Headquarters: Santo Domingo, Dominican Republic
- Website: <https://www.aesdominicana.com/en>
- Details: Leading energy company in the Dominican Republic.

EGE Haina

- Headquarters: Santo Domingo, Dominican Republic

- Website: <https://www.egehaina.com/>
- Details: Manages multiple renewable energy initiatives.

Solarta

- Headquarters: Santo Domingo, Dominican Republic
- Website: <https://solarta.com.do/>
- Details: Specializes in solar panel installation and renewable energy solutions.



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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<https://www.pvknowhow.com/solar-report/dominican-republic/>

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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