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Honduras 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 Honduras

KEY POINTS

All figures have been converted into USD

Yearly sunshine (sun hours per year)

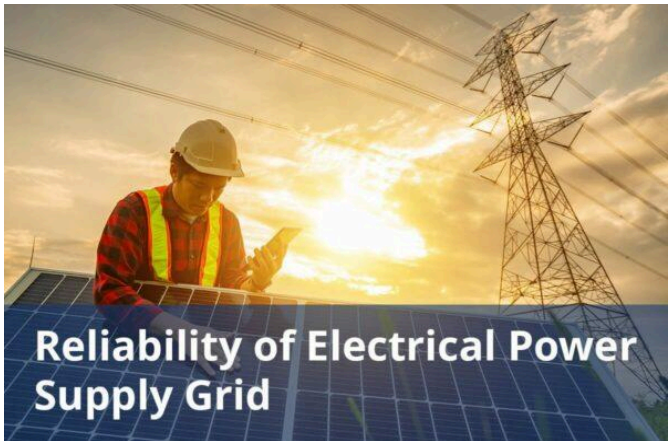
Annual Sunshine Hours:
- Average yearly sunshine: 2800 hours
- Peak sunshine hours: 5.6 hours/day

kWh per kWp installed

Energy Production:
- Average energy production: 1200 kWh/kWp/year
- Maximum energy production: 1600 kWh/kWp/year

Average cost per kWh from utility company

Electricity Costs:
- Average electricity cost: $0.12/kWh



Reliability of electrical power supply grid

Reliability Factors:
- System reliability: 98%
- Maintenance impact: 2%




DETAILED INFORMATION

All figures have been converted into USD

Total solar panel production capacity (installed)

Installed Capacity:
- Total solar panels installed: 1000000 panels
- Total capacity: 250 MW

Total solar panel production capacity (projected)

Projected Capacity:
- Total projected solar panels: 1500000 panels
- Expected capacity increment: 50 MW

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

Cost Breakdown:
- Average installation cost: $2000/panel
- Average maintenance cost: $100/panel/year

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

Electricity Sources:
- Percentage from solar: 20%
- Percentage from wind: 30%

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

Availability:
- Daily average availability: 90%

Number of residential solar panel installations

Residential Installations:
- Number of residential solar panels: 500000 panels

Total number of solar farms (installed and projected)

Solar Farms:
- Number of solar farms: 200 farms

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

Current Demand:
Honduras' off-grid solar market is booming, driven by a combination of factors. Government support and falling technology costs have made solar a more viable option. This growth is particularly important for improving energy security and independence in rural and remote communities that lack access to the traditional power grid.

Projected Demand:
The future of off-grid solar panels in Honduras looks promising, with a significant potential to expand access to electricity in rural areas, particularly due to the country's high solar radiation, growing government initiatives to address energy poverty, and increasing

investment in distributed solar and mini-grid solutions, making it a key component of the country's renewable energy strategy.

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

Honduras is aggressively expanding its solar power capacity with a goal of adding over 8 GW by 2030. Large-scale projects are underway, and a CIF-supported program is incentivizing private investment in grid-connected solar plants. These efforts aim to diversify energy sources, reduce fossil fuel dependence, lower electricity costs, and improve energy access.

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

Solar Engineer:
The average monthly income for a solar engineer in Honduras typically falls within the range of $1,000 and $2,100 USD.

Solar PV Installer:
The average monthly income for a Solar PV installer in Honduras typically ranges from $730 to $2,000 USD.

Project Manager:
The average monthly income for a project manager in Honduras typically ranges from $9,200 to $36,700 USD.

Population of the country

As of 2025, the population of Honduras is approximately 10,938,691.

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

Factory rent:
The average rent for factory space in Honduras can vary significantly based on location, size, and facilities.

Utilities (electricity, water, etc)
- Electricity:
As of June 2024, the average cost of electricity in Honduras is approximately $0.234/kWh for residential use and $0.229/kWh for businesses.
- Water:
The cost of water per cubic meter in Honduras is approximately $0.50 for residential use. This price can vary depending on the region and the specific water provider.

Equipment maintenance
The cost of maintaining solar equipment in Honduras can vary depending on the type and scale of the system, as well as the specific maintenance requirements. Generally, maintenance costs include regular cleaning, inspection, and occasional repairs or replacements of components like batteries and inverters.

Administrative costs
- Salaries & wages:
The average monthly salary for a Project Manager in Honduras typically ranges from $9,200 to $36,700 USD. The average salary for an engineer in Honduras is approximately between $1,000 and $2,100 USD. The average salary for an installer in Honduras is approximately within the range of $730 and $2,000 USD.

A summary of the energy infrastructure

Total Installed Capacity:
As of 2024, the total installed electricity capacity in Honduras is approximately 3,159 MW. This includes capacity from various sources such as fossil fuels, hydroelectric power, and other renewable energy sources.

Electricity Generation:
The energy composition includes 62% fossil fuels and 38% renewable sources, predominantly hydroelectric power. The country generates approximately 6,539 GWh of electricity annually, with the majority (53%) coming from petrol power plants and 42% from hydroelectric plants. Despite significant electricity production, Honduras faces challenges like high transmission and distribution losses (about 21%) and limited rural electrification, with only 45% coverage.

Electricity Consumption:
Honduras has seen...

Some of the government regulations surrounding solar panel production

Renewable Energy Law:
Honduras passed reforms in 2012 to accelerate the adoption of renewable energy. The law aims to increase the share of renewable energy in the country's energy mix.

Energy Roadmap 2050:
This roadmap outlines the country's long-term goals for energy self-sufficiency and sustainability, with a focus on increasing the use of renewable energy sources. The roadmap was developed in

collaboration with the Honduran Energy Secretariat (SEN) and various stakeholders from the national energy sector.

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

Incentives for Solar Projects:
The government offers tax benefits and subsidies to encourage investments in solar energy projects. Honduras' Decree 70 (2007) incentivizes renewable energy projects by offering a 10% price premium for the first 15 years of operation and exempting generators from import, income, and sales taxes.

Rural Electrification Projects:
The Honduran Renewable Energy Project for Rural Development has been implemented to bring electricity to rural communities through solar energy projects. This project has already benefited numerous communities across the country.

Feed-in Tariff:
The government has introduced feed-in tariffs to encourage the generation of electricity from renewable sources, including solar.

Notable solar projects in the country (installed and projected)

Installed Projects
- Aura II Solar PV Park:
Location: Choluteca, Honduras
Capacity: 61.48MW
Details: The Aura II Solar PV Park, a 145-hectare ground-mounted project in Honduras, was developed by Gauss Energia and is currently

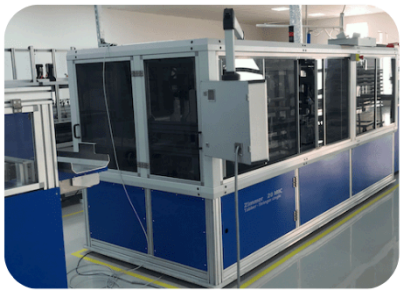
owned by Corporacion Aura Solar. Commissioned in August 2015, this 200,000-module facility generates 109,000 MWh of clean energy annually, powering approximately 80,000 households.
- SERNA Pavana Solar PV Park:
Location: San Lorenzo, Choluteca, Honduras
Capacity: 24.5MW
Details: The SERNA Pavana Solar PV Park, a 103-acre ground-mounted project, was developed by Energia Basica and SB Energy Holdings and is now owned solely by Energia Basica. It generates 42,000 MWh of electricity, powering 61,000 homes.

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

Grupo Rio:
They specialize in providing energy solutions, including the sale, rental, and technical support of generators. They are known for their commitment to quality, competitive pricing, and agile service.

Sielsol:
They specialize in the sale of solar panels, equipment, accessories, and installation services. Sielsol offers customizable solar kits suitable for diverse applications, from urban residences to remote communities where solar power is often the sole electricity source.

Pacific Solar Energy:
They are a leading solar energy company based in Tegucigalpa, Honduras. They are dedicated to promoting sustainable development and clean 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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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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