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Malta 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 Malta

KEY POINTS

All figures have been converted into USD

Yearly sunshine (sun hours per year)

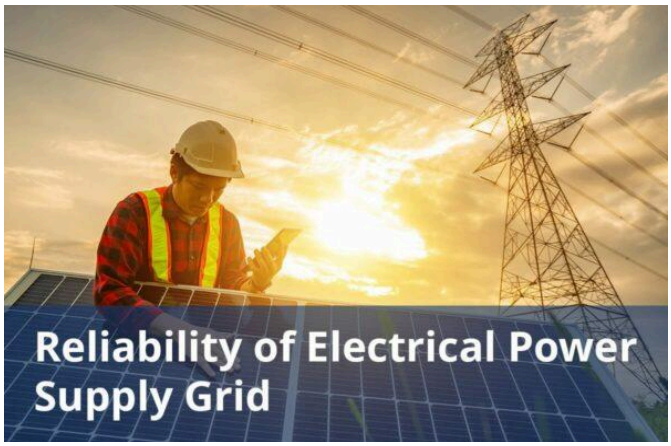
Annual average sunshine hours:
- 2500

kWh per kWp installed

Electricity generation per installed kilowatt peak (kWp):
- 1200 kWh/kWp/year

Average cost per kWh from utility company

Average cost of electricity:
- For residential customers: $0.138/kWh
- For commercial customers: $0.12/kWh



Reliability of electrical power supply grid

System reliability:
- 99.9%




DETAILED INFORMATION

All figures have been converted into USD

Total solar panel production capacity (installed)

Total solar panels installed:
- 300000

Total solar panel production capacity (projected)

Projected total solar panels in 5 years:
- 500000

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

Average installation cost of solar panels:
- $2.50/watt

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

Percentage of electricity generated from solar:
- 20%

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

Daily sunshine hours availability:
- 6 hours

Number of residential solar panel installations

Number of residential solar panels:
- 200000

Total number of solar farms (installed and projected)

Number of solar farms:
- 50

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

No Data found

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

Malta produced 231 MW of its electricity from Solar in 2023.
Its on-grid market is growing at a CAGR of 40.94% per year.

At this rate, the production capacity would be approximately 380.71 MW in 2030.

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

The average monthly salary for a solar energy system installer in Malta is about 2,701 USD.
The average monthly salary for a solar energy system engineer in Malta is about 3,424 USD.

Population of the country

Malta is the world's tenth-smallest country by area (316 km2) and the 9th most densely populated country whose population was estimated to be 540,760 on September 13, 2024.

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

Estimate for Factory Rent: The estimated factory rent in Malta is 7.81 USD /m2/month.
Industrial Electricity Rates: For industries, the average cost of electricity is 0.15 USD per kWh, besides this service charges of 399.73 USD have to be paid each year.
Water Costs: The average price of water for commercial use is 2.22 USD/m3, and a fix amount of 144.27 USD is to be paid per year as a service charge.

A summary of the energy infrastructure

Total installed electricity generation capacity: In Malta, 826.6 MW of power was installed and 200 MW of power was imported from Italy in 2023.
Total generation: In Malta, 2,189.5 GWh of electricity was generated and 648.35 GWh was imported in 2023.
Per capita generation: 4803 kWh.

Some of the government regulations surrounding solar panel production

CE Marking: This is essential for all solar panels sold within the European Union, including Malta. It ensures compliance with EU safety, health, and environmental protection standards.
MEPA Design Certification: The Malta Environment and Planning Authority (MEPA) requires a design certification to ensure that solar panel installations comply with local planning and aesthetic guidelines.

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

Households in Malta can get grants up to $3,300 for solar PV systems, $7,920 for home batteries, and $1,980 for hybrid inverter upgrades under the 2024 grants scheme from the government.
Households and businesses receive a fixed rate of $0.016 per kWh for renewable energy over 20 years, in terms of Feed-in Tariffs (FITs).

Notable solar projects in the country (installed and projected)

IMselliet Solar Farm
- Capacity: 5.4 MW
- Location: Mġarr, northern Malta

- Details: This is the largest solar farm in Malta, consist of 16,896 photovoltaic panels (generating power for 2,200 homes).

Bengħajsa Solar Farm

- Capacity: 2.4 MW
- Location: Bengħajsa, southern Malta
- Details: This solar farm covers 29,000 square meters, repurposing a disused quarry, and powers approximately 760 households annually.

Ta' Qali Solar Farm

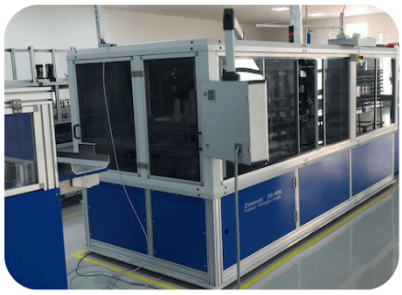
- Capacity: 1 MW
- Location: Ta' Qali, central Malta
- Details: Located on a reservoir, this solar farm spans 6,319 square meters with 2,198 panels, providing clean energy to over 300 homes.

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

Solar Solutions Ltd specializes in on-grid and off-grid photovoltaic (PV) systems, solar water heaters, and EV chargers.

Unit Energy Ltd focuses on solar panel and battery storage installations, helping homeowners and businesses reduce their carbon footprint.

Electrofix Group provides solar energy solutions for both homes and businesses.



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.

REFERENCES

All References

1. <https://en.wikipedia.org/wiki/Climate%5Fof%5FMalta>, w., “Sunshine hours in Malta”, Retrieved on 16 September 2024.
2. <https://solargis.com/resources/free-maps-and-gis-data?locality=malta>, s., “Solar Radiation in Malta”, Retrieved on 16 September 2024.
3. <https://www.globalpetrolprices.com/Malta/electricity%5Fprices/>, g., “Electricity Price in Malta”, Retrieved on 13 September 2024.
4. <https://www.ceer.eu/wp-content/uploads/2024/07/C24%5FMalta-EN.pdf>, c., “SAIDI, SAIFI, CAIDI of Malta”, Retrieved on 19 September 2024.
5. <https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2024/Jul/IRENA%5FRenewable%5FEnergy%5FStatistics%5F2024.pdf>, i., “Solar installed Capcity in Malta”, Retrieved on 18 September 2024.
6. https://nso.gov.mt/renewable-energy-from-photovoltaic-panels-pvs-2022/, n., “Solar installed capacity in Malta”, Retrieved on 18 September 2024.

7. <https://clean-energy-islands.ec.europa.eu/countries/malta>, c., “Projected Renewable Energy”,Retrieved on 17 September 2024.
8. <https://enemalta.com.mt/planned-power-cuts/>, e., “Power Cuts in Malta”, Retrieved on 18 September 2024.
9. <https://www.salaryexpert.com/salary/job/solar-energy-system-installer/malta>, s., “Salary of solar installer in Malta”, Retrieved on 17 September 2024.
10. <https://www.salaryexpert.com/salary/job/solar-engineer/malta>, s., “Solar Engineer Salary in Malta”, Retrieved on 17 September 2024.
11. <https://www.worldometers.info/world-population/malta-population/>, w., “Population of Malta”, Retrieved on 13 September 2024.
12. <https://www.indomio.com.mt/to-rent/industrial-premises/malta-malta>, i., “Average factory rent in Malta”, Retrieved on 19 September 2024.
13. <https://www.rews.org.mt/?ts=1726713439215#/en/a/13-regulated-electricity-tariffs>, r., “Industrial Electricity tariffs in Malta”, Retrieved on 19 September 2024.
14. <https://www.rews.org.mt/?ts=1726713439215#/en/a/14-regulated-water-tariffs> , r., “Commercial Water Tariff in Malta”, Retrieved on 19 September 2024.
15. <https://officespace.rent/>, o., “Office Space Rent in Malta”, Retrieved on 19 September 2024.
16. <https://ourworldindata.org/energy/country/malta>, o., “Electricity access in Malta”, Retrieved on 19 September 2024.
17. <https://enemalta.com.mt/> en, O.W., Retrieved on 18 September 2024.
18. <https://www.enemalta.com.mt/2017/11/16/delimara-power-station/>, e., “Thermal Power Plant in Malta”, Retrieved on 20 September 2024.

19.
<https://oec.world/en/profile/bilateral-product/electricity/reporter/mlt>, o., “Energy imports in Malta “, Retrieved on 18 September 2024.
20. <https://www.mccaa.org.mt/Section/Content?contentId=1132>, m., “CE marking for solar panels in Malta”, Retrieved on 21 September 2024.
21.
<https://timesofmalta.com/article/solar-panel-eyesores-now-require-mepa-design-certification.567278>, t., “Solar Certifications in Malta”, Retrieved on 21 September 2024.
22. <https://www.virtuesolaris.com/government-grants/>, v., “Grants for solar Energy installations”, Retrieved on 17 July 2024.
23.
<https://www.pv-magazine.com/2024/02/23/malta-extends-fits-rebates-for-residential-solar-and-batteries/>, p., “Feed in Tariff”, Retrieved on 17 September 2024.
24.
<https://newsbook.com.mt/en/maltas-largest-solar-farm-ready-to-power-2200-homes/>, n., “Solar Farm”, Retrieved on 20 September 2024.
25.
<https://happeninginmalta.com/imselliet-solar-power-plant-inaugurated/>, h., “Solar Farm”, Retrieved on 20 September 2024.
26.
<https://tvmnews.mt/en/news/first-solar-farm-in-malta-started-operating-in-benghasa/>, t., “Solar Farm”, Retrieved on 20 September 2024.
27. <https://www.wsc.com.mt/solar%5Ffarm%5Ftaqali/>, w., “Solar Farm”, Retrieved on 20 September 2024.
28.
<https://www.independent.com.mt/articles/2023-01-21/local-news/Three-solar-farms-generated-enough-clean-energy-for-over-750-families-in-the-last-12-months-6736249041>, i., “Solar Farm”, Retrieved on 20 September 2024.

29. <https://medservregis.com/maltas-first-solar-farm-launched-at-medserv/>, m., “Solar Farm”, Retrieved on 20 September 2024.
30. <https://timesofmalta.com/article/site-off-delimara-identified-floating-solar-farm.1081266>, t., “Solar Farm”, Retrieved on 20 September 2024.
31. <https://solarsolutions.com.mt/>, s., “Official Website”, Retrieved on 20 September 2024.
32. <https://www.unitenergy-ltd.com/>, u., “Official Website”, Retrieved on 20 September 2024.
33. <https://www.electrofixgroup.com/>, e., “Official Website”, Retrieved on 20 September 2024.
34. <https://recowatt.com>, r., “Official Website”, Retrieved on 20 September 2024.
35. <https://www.powersolutions.com.mt/>, p., “Official Website”, Retrieved on 20 September 2024.
36. <https://www.virtuesolaris.com/>, v., “Official Website”, Retrieved on 20 September 2024.

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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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