

Europe Solar Panel Market (By Technology, Connectivity, Installation, Application, and Country Analysis), Company Profiles and Market Dynamics - Forecast to 2030

<https://marketpublishers.com/r/E0D15B5920A8EN.html>

Date: December 2025

Pages: 93

Price: US\$ 1,990.00 (Single User License)

ID: E0D15B5920A8EN

Abstracts

The Europe solar panel market was valued at US\$ 63.1 Billion in 2024, and is predicted to reach US\$ 95.4 Billion by 2030. Solar photovoltaics have firmly transitioned into a mainstream energy source, playing a pivotal role in advancing the EU's carbon-neutrality objectives and strengthening energy security. Their modular nature, scalability, and declining costs position solar PV as one of the most effective levers for decarbonizing power generation.

The rising demand for clean, decentralized, and resilient energy solutions, coupled with heightened volatility in global fossil-fuel markets has accelerated the adoption of solar power across all major EU economies. This market momentum is reinforced by a robust policy ecosystem, including the EU Green Deal, the REPowerEU strategy, and the updated Renewable Energy Directive III, all of which aims to increase renewable energy penetration and lower reliance on imported energy.

The creation of the European Solar PV Industry Alliance underscores the EU's commitment to bolstering domestic manufacturing capabilities and enhancing supply-chain resilience. The European solar industry continues to attract investment from both utilities and private equity, with technological innovation driving efficiency gains through bifacial, TOPCon, and perovskite-silicon tandem modules. As a result, Europe solar sector stands at the forefront of the global clean-energy transition, offering both strategic energy independence and long-term economic opportunity across the value chain.

Recent Developments

In October 2025, Enphase Energy, Inc, a leading global energy technology company, partnered with Essent, a prominent residential energy provider in the Netherlands. This collaboration enables eligible Enphase solar customers to upgrade with IQ Batteries and join Essent's Smart Steering program to enhance self-consumption and reduce energy costs.

In August 2025, FIMER, a leading solar inverter manufacturer, joined SolarPower Europe, the top association for the European solar energy value chain. This move highlights FIMER's commitment to driving the global energy transition and advancing sustainable power solutions.

By Technology: Europe Solar Panel Market and Forecast – Key Takeaways

The crystalline silicon segment commands a dominant position in the European solar panel market. This technology is favoured for its proven efficiency, durability, and adaptability across applications ranging from large utility farms to residential rooftops. Countries such as Germany, Spain, and France lead in deploying monocrystalline and polycrystalline modules, supported by strong policies including the EU Green Deal and Renewable Energy Directive.

The thin-film solar panels are gaining traction for their flexibility, lightweight design, and aesthetic advantages. The market is being driven by expanding BIPV applications, urban solar mandates, and improved product efficiencies.

By Connectivity: Europe Solar Panel Market and Forecast – Key Takeaways

Based on connectivity, Europe's on-grid solar panel market remains a cornerstone of the continent's energy transition, accounting for maximum share of installed solar capacity in 2024. This segment supports the direct integration of solar systems with the electricity grid, enabling efficient energy flow and complementary balancing with traditional power sources.

The off-grid solar segment in Europe represents a vital but smaller portion of the market, focusing on power solutions independent of the public electricity grid. The off-grid systems serve remote and specialized applications, including rural

electrification, islands, telecom infrastructure, and emergency power backup.

By Installation: Europe Solar Panel Market and Forecast – Key Takeaways

Ground-mounted solar installations comprise the largest share of the European solar panel market. This segment is preferred for utility-scale projects given its flexibility in location, allowing deployment on agricultural lands, brownfields, and open spaces, particularly in countries like Germany, the Netherlands, France, and Italy.

Rooftop solar installations primarily serve residential and commercial sectors, enabling on-site energy generation that reduces grid dependence and electricity costs.

By Application: Europe Solar Panel Market and Forecast – Key Takeaways

The power utility segment dominates the European solar panel market, owing to large-scale solar farms and utility projects driven by independent power producers and utilities who are incorporating solar PV into their energy mix to meet stringent renewable targets.

The commercial and industrial (C&I) segment remains a primary engine of growth for the European solar panel market. Demand is being propelled by several factors, including rising electricity prices, the increasing need for energy security, and corporate sustainability targets set by large industrial groups and commercial enterprises.

By Country: Europe Solar Panel Market and Forecast – Key Takeaways

Germany remains the leading market for solar panels in Europe, supported by continued declines in solar panel costs, rapid expansion of battery storage capacity, a strong regulatory environment, and rising renewable-energy demand across residential, commercial, and utility segments.

The UK represented the second-largest market for the European solar panel market in 2024. Ongoing investment and technological innovation, coupled with

the country's ambition to double its solar capacity by 2030, continue to reinforce its position as one of Europe's leading solar markets.

Russia has experienced notable expansion in solar capacity in recent years, supported by favourable government policies and a broader strategic push to diversify its energy mix through increased deployment of renewable sources.

iGATE RESEARCH report titled "Europe Solar Panel Market (By Technology, Connectivity, Installation, Application, and Country), Key Company Profiles, Recent Developments, and Market Dynamics - Forecast to 2030" provides a comprehensive assessment of the fast-evolving, high-growth Europe Solar Panel Market.

This 93 Pages report with 40 Figures and 10 Tables has been analyzed from 10 viewpoints:

- 1) Europe – Solar Panel Market and Forecast (2021 – 2030)
- 2) Europe – Solar Panel Market Share and Forecast (2021 – 2030)
- 3) By Technology – Europe Solar Panel Market and Forecast (2021 – 2030)
- 4) By Connectivity – Europe Solar Panel Market and Forecast (2021 – 2030)
- 5) By Installation – Europe Solar Panel Market and Forecast (2021 – 2030)
- 6) By Application – Europe Solar Panel Market and Forecast (2021 – 2030)
- 7) By Country – Europe Solar Panel Market and Forecast (2021 – 2030)
- 8) Europe Solar Panel Market – Company Profiles
- 9) Europe Solar Panel Market – Recent Developments
- 10) Europe Solar Panel – Market Dynamics

By Technology - Europe Solar Panel Market and Forecast

Crystalline Silicon

Thin Film

By Connectivity - Europe Solar Panel Market and Forecast

On Grid

Off Grid

By Installation - Europe Solar Panel Market and Forecast

Ground mounted

Rooftop

By Connectivity - Europe Solar Panel Market and Forecast

Power Utility

Commercial & Industrial

Residential

By Country - Europe Solar Panel Market and Forecast

1. Germany
2. UK
3. Russia
4. France
5. Italy
6. Spain
7. Luxembourg
8. Portugal
9. Greece
10. Rest of Europe

Europe Solar Panel Market – Key Company Profiles

1. Canadian Solar, Inc.
2. First Solar, Inc.
3. JA Solar Technology Co., Ltd.
4. JinkoSolar Holding Co., Ltd.
5. LG Electronics, Inc.
6. LONGi Green Energy Technology Co., Ltd.

7. Emeren Group Ltd.
8. Shunfeng International Clean Energy Limited
9. Trina Solar Co., Ltd.
10. Vikram Solar Limited

Data Sources

iGATE RESEARCH employs rigorous primary and secondary research techniques in developing distinctive data sets and research material for business reports. This report is built by using data and information sourced from Proprietary Information Database, Primary and Secondary Research Methodologies, and In house analysis by iGATE Research dedicated team of qualified professionals with deep industry experience and expertise.

Research Methodologies

Primary Research Methodologies: Questionnaires, Surveys, Interviews with Individuals, Small Groups, Telephonic Interview, etc.

Secondary Research Methodologies: Printable and Non–printable sources, Newspaper, Magazine and Journal Content, Government and NGO Statistics, white Papers, Information on the Web, Information from Agencies Such as Industry Bodies, Companies Annual Report, Government Agencies, Libraries and Local Councils and a large number of Paid Databases.

Contents

1. EXECUTIVE SUMMARY

2. RESEARCH METHODOLOGY

- 2.1 Research Design
- 2.2 Research Approach
- 2.3 Data Collection Methods
- 2.4 Market Assumptions

3. EUROPE – SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

4. EUROPE – SOLAR PANEL MARKET SHARE AND FORECAST (2021 – 2030)

- 4.1 By Technology – Europe Solar Panel Market Share and Forecast
- 4.2 By Connectivity – Europe Solar Panel Market Share and Forecast (2021 – 2030)
- 4.3 By Installation – Europe Solar Panel Market Share and Forecast (2021 – 2030)
- 4.4 By Application – Europe Solar Panel Market Share and Forecast (2021 – 2030)
- 4.5 By Country – Europe Solar Panel Market Share and Forecast (2021 – 2030)

5. BY TECHNOLOGY – EUROPE SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

- 5.1 Europe Solar Panel – Crystalline Silicon Market and Forecast
- 5.2 Europe Solar Panel – Thin Film Market and Forecast

6. BY CONNECTIVITY – EUROPE SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

- 6.1 Europe Solar Panel – On Grid Market and Forecast
- 6.2 Europe Solar Panel – Off Grid Market and Forecast

7. BY INSTALLATION – EUROPE SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

- 7.1 Europe Solar Panel – Ground mounted Market and Forecast
- 7.2 Europe Solar Panel – Rooftop Market and Forecast

8. BY APPLICATION – EUROPE SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

8.1 Europe Solar Panel – Power Utility Market and Forecast

8.2 Europe Solar Panel – Commercial & Industrial Market and Forecast

8.3 Europe Solar Panel – Residential Market and Forecast

9. BY REGION – EUROPE SOLAR PANEL MARKET AND FORECAST (2021 – 2030)

9.1 Germany – Solar Panel Market and Forecast

9.2 UK – Solar Panel Market and Forecast

9.3 Russia – Solar Panel Market and Forecast

9.4 France – Solar Panel Market and Forecast

9.5 Italy – Solar Panel Market and Forecast

9.6 Spain – Solar Panel Market and Forecast

9.7 Luxembourg – Solar Panel Market and Forecast

9.8 Portugal – Solar Panel Market and Forecast

9.9 Greece – Solar Panel Market and Forecast

9.10 Rest of Europe – Solar Panel Market and Forecast

10. EUROPE SOLAR PANEL MARKET – COMPANY PROFILES

10.1 Canadian Solar, Inc.

10.2 First Solar, Inc.

10.3 JA Solar Technology Co., Ltd.

10.4 JinkoSolar Holding Co., Ltd.

10.5 LG Electronics, Inc.

10.6 LONGi Green Energy Technology Co., Ltd.

10.7 Emeren Group Ltd.

10.8 Shunfeng International Clean Energy Limited

10.9 Trina Solar Co., Ltd.

10.10 Vikram Solar Limited

11. EUROPE SOLAR PANEL MARKET – RECENT DEVELOPMENTS

12. EUROPE SOLAR PANEL – MARKET DYNAMICS

12.1 Europe Solar Panel Market – Growth Drivers

12.2 Europe Solar Panel Market – Challenges

List Of Tables

LIST OF TABLES

Table 4-1: By Technology – Europe Solar Panel Market Share (Percent), 2021 – 2024

Table 4-2: By Technology – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030

Table 4-3: By Connectivity – Europe Solar Panel Market Share (Percent), 2021 – 2024

Table 4-4: By Connectivity – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030

Table 4-5: By Installation – Europe Solar Panel Market Share (Percent), 2021 – 2024

Table 4-6: By Installation - Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030

Table 4-7: By Application – Europe Solar Panel Market Share (Percent), 2021 – 2024

Table 4-8: By Application – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030

Table 4-9: By Country – Europe Solar Panel Market Share (Percent), 2021 – 2024

Table 4-10: By Country – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030

List Of Figures

LIST OF FIGURES

Figure 3-1: Europe – Solar Panel Market (Billion US\$), 2021 - 2024

Figure 3-2: Europe – Forecast for Solar Panel Market (Billion US\$), 2025 – 2030

Figure 5-1: Europe Solar Panel – Crystalline Silicon Market (Billion US\$), 2021 - 2024

Figure 5-2: Europe Solar Panel – Forecast for Crystalline Silicon Market (Billion US\$), 2025 - 2030

Figure 5-3: Europe Solar Panel – Thin Film Market (Billion US\$), 2021 - 2024

Figure 5-4: Europe Solar Panel – Forecast for Thin Film Market (Billion US\$), 2025 - 2030

Figure 6-1: Europe Solar Panel – On Grid Market (Billion US\$), 2021 - 2024

Figure 6-2: Europe Solar Panel – Forecast for On Grid Market (Billion US\$), 2025 - 2030

Figure 6-3: Europe Solar Panel – Off Grid Market (Billion US\$), 2021 - 2024

Figure 6-4: Europe Solar Panel – Forecast for Off Grid Market (Billion US\$), 2025 - 2030

Figure 7-1: Europe Solar Panel – Ground mounted Market (Billion US\$), 2021 - 2024

Figure 7-2: Europe Solar Panel – Forecast for Ground mounted Market (Billion US\$), 2025 - 2030

Figure 7-3: Europe Solar Panel – Rooftop Market (Billion US\$), 2021 - 2024

Figure 7-4: Europe Solar Panel – Forecast for Rooftop Market (Billion US\$), 2025 - 2030

Figure 8-1: Europe Solar Panel – Power Utility Market (Billion US\$), 2021 - 2024

Figure 8-2: Europe Solar Panel – Forecast for Power Utility Market (Billion US\$), 2025 - 2030

Figure 8-3: Europe Solar Panel – Commercial & Industrial Market (Billion US\$), 2021 - 2024

Figure 8-4: Europe Solar Panel – Forecast for Commercial & Industrial Market (Billion US\$), 2025 - 2030

Figure 8-5: Europe Solar Panel – Residential Market (Billion US\$), 2021 - 2024

Figure 8-6: Europe Solar Panel – Forecast for Residential Market (Billion US\$), 2025 - 2030

- Figure 9-1: Germany – Solar Panel Market (Million US\$), 2021 – 2024
Figure 9-2: Germany – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-3: UK – Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-4: UK – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-5: Russia – Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-6: Russia – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-7: France - Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-8: France – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-9: Italy – Solar Panel Market (Million US\$), 2021 - 2024
Figure 9-10: Italy – Forecast for Solar Panel Market (Million US\$), 2025 - 2030
Figure 9-11: Spain – Solar Panel Market (Billion US\$), 2021 – 2024
Figure 9-12: Spain – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-13: Luxembourg – Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-14: Luxembourg – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-15: Portugal – Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-16: Portugal– Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-17: Greece - Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-18: Greece – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
Figure 9-19: Rest of Europe – Solar Panel Market (Billion US\$), 2021 - 2024
Figure 9-20: Rest of Europe – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030

List of Tables:

- Table 4-1: By Technology – Europe Solar Panel Market Share (Percent), 2021 – 2024
Table 4-2: By Technology – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030
Table 4-3: By Connectivity – Europe Solar Panel Market Share (Percent), 2021 – 2024
Table 4-4: By Connectivity – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030
Table 4-5: By Installation – Europe Solar Panel Market Share (Percent), 2021 – 2024
Table 4-6: By Installation - Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030
Table 4-7: By Application – Europe Solar Panel Market Share (Percent), 2021 – 2024
Table 4-8: By Application – Forecast for Europe Solar Panel Market Share (Percent), 2025 - 2030
Table 4-9: By Country – Europe Solar Panel Market Share (Percent), 2021 – 2024
Table 4-10: By Country – Forecast for Europe Solar Panel Market Share (Percent),

2025 - 2030

Figure 3-1: Europe – Solar Panel Market (Billion US\$), 2021 - 2024

Figure 3-2: Europe – Forecast for Solar Panel Market (Billion US\$), 2025 – 2030

Figure 5-1: Europe Solar Panel – Crystalline Silicon Market (Billion US\$), 2021 - 2024

Figure 5-2: Europe Solar Panel – Forecast for Crystalline Silicon Market (Billion US\$), 2025 - 2030

Figure 5-3: Europe Solar Panel – Thin Film Market (Billion US\$), 2021 - 2024

Figure 5-4: Europe Solar Panel – Forecast for Thin Film Market (Billion US\$), 2025 - 2030

Figure 6-1: Europe Solar Panel – On Grid Market (Billion US\$), 2021 - 2024

Figure 6-2: Europe Solar Panel – Forecast for On Grid Market (Billion US\$), 2025 - 2030

Figure 6-3: Europe Solar Panel – Off Grid Market (Billion US\$), 2021 - 2024

Figure 6-4: Europe Solar Panel – Forecast for Off Grid Market (Billion US\$), 2025 - 2030

Figure 7-1: Europe Solar Panel – Ground mounted Market (Billion US\$), 2021 - 2024

Figure 7-2: Europe Solar Panel – Forecast for Ground mounted Market (Billion US\$), 2025 - 2030

Figure 7-3: Europe Solar Panel – Rooftop Market (Billion US\$), 2021 - 2024

Figure 7-4: Europe Solar Panel – Forecast for Rooftop Market (Billion US\$), 2025 - 2030

Figure 8-1: Europe Solar Panel – Power Utility Market (Billion US\$), 2021 - 2024

Figure 8-2: Europe Solar Panel – Forecast for Power Utility Market (Billion US\$), 2025 - 2030

Figure 8-3: Europe Solar Panel – Commercial & Industrial Market (Billion US\$), 2021 - 2024

Figure 8-4: Europe Solar Panel – Forecast for Commercial & Industrial Market (Billion US\$), 2025 - 2030

Figure 8-5: Europe Solar Panel – Residential Market (Billion US\$), 2021 - 2024

Figure 8-6: Europe Solar Panel – Forecast for Residential Market (Billion US\$), 2025 - 2030

Figure 9-1: Germany – Solar Panel Market (Million US\$), 2021 – 2024

Figure 9-2: Germany – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030

- Figure 9-3: UK – Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-4: UK – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-5: Russia – Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-6: Russia – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-7: France - Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-8: France – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-9: Italy – Solar Panel Market (Million US\$), 2021 - 2024
- Figure 9-10: Italy – Forecast for Solar Panel Market (Million US\$), 2025 - 2030
- Figure 9-11: Spain – Solar Panel Market (Billion US\$), 2021 – 2024
- Figure 9-12: Spain – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-13: Luxembourg – Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-14: Luxembourg – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-15: Portugal – Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-16: Portugal– Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-17: Greece - Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-18: Greece – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030
- Figure 9-19: Rest of Europe – Solar Panel Market (Billion US\$), 2021 - 2024
- Figure 9-20: Rest of Europe – Forecast for Solar Panel Market (Billion US\$), 2025 - 2030

I would like to order

Product name: Europe Solar Panel Market (By Technology, Connectivity, Installation, Application, and Country Analysis), Company Profiles and Market Dynamics - Forecast to 2030

Product link: <https://marketpublishers.com/r/E0D15B5920A8EN.html>

Price: US\$ 1,990.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/E0D15B5920A8EN.html>