

Green Power Market - Forecast from 2026 to 2031

<https://marketpublishers.com/r/G45D783013D9EN.html>

Date: January 2026

Pages: 140

Price: US\$ 3,950.00 (Single User License)

ID: G45D783013D9EN

Abstracts

Green Power Market is expected to grow at a 8.3% CAGR, increasing to USD 1422.169 billion in 2031 from USD 881.259 billion in 2025.

The green power market, encompassing electricity generated from renewable sources such as solar, wind, hydropower, geothermal, and biomass, is a central and rapidly expanding segment of the global energy transition. Defined by its minimal environmental impact and sustainability, green power is shifting from a complementary energy source to a primary driver of new electricity capacity worldwide. This transformation is propelled by a powerful convergence of climate imperatives, supportive policy frameworks, technological cost reductions, and structural shifts in electricity demand driven by urbanization and economic growth.

The most significant and enduring driver of market expansion is the heightened global awareness of climate change and the resulting imperative to decarbonize the energy sector. The environmental and social costs associated with fossil fuel-based generation have catalyzed a fundamental realignment of energy policy and corporate strategy. This has translated into concrete commitments from national governments, sub-national entities, and private corporations to achieve net-zero emissions, with the decarbonization of the power grid being the foundational step. This collective climate ambition provides a long-term, strategic demand signal for green power, ensuring sustained investment and market growth irrespective of short-term commodity price fluctuations.

A critical enabler of this transition is the comprehensive suite of government policies and institutional initiatives designed to accelerate green power deployment. These include renewable portfolio standards (RPS), feed-in tariffs, tax incentives, competitive auction mechanisms, and carbon pricing. Such frameworks reduce investment risk, improve project economics, and provide market certainty for developers and financiers.

The evolution of these policies from supporting early adoption to managing grid integration and ensuring system reliability is a key trend shaping market dynamics and technology choices.

Technological innovation and industrialization have been fundamental in making green power economically competitive. The levelized cost of electricity (LCOE) for utility-scale solar photovoltaics and onshore wind has declined precipitously, now often undercutting the marginal cost of existing fossil fuel plants in many markets. This cost parity, achieved through economies of scale, improved manufacturing, and efficiency gains, is the primary commercial driver displacing conventional generation. Continued advancements in areas such as next-generation solar cells, larger and more efficient wind turbines, and complementary technologies like green hydrogen and long-duration energy storage are further expanding the role and value proposition of renewables.

Demographic and economic trends are creating a structural increase in electricity demand that green power is poised to meet. Rapid urbanization and industrialization, particularly in emerging economies, are driving significant growth in power consumption. Meeting this new demand with green power avoids locking in carbon-intensive infrastructure for decades. Simultaneously, the electrification of end-use sectors—such as transportation via electric vehicles and heating via heat pumps—is increasing total electricity load, further amplifying the need for clean, scalable generation sources. This dual trend of rising and greening demand creates a massive addressable market for new renewable capacity.

The market also offers substantial economic co-benefits, which reinforce political and social support. The green power sector is a major engine of job creation across the value chain, from manufacturing and construction to operations and maintenance. It stimulates local economic development, enhances energy security by diversifying the fuel mix and utilizing domestic resources, and mitigates the health costs associated with air pollution from fossil fuel combustion. These socio-economic advantages strengthen the business case for green power beyond pure cost considerations.

Geographically, the Asia-Pacific region has emerged as the dominant growth market and manufacturing hub. This is driven by massive electricity demand growth in countries like China and India, severe local air quality challenges, strong industrial policy supporting renewable technology manufacturing, and ambitious national targets for renewable capacity. The region's scale and pace of deployment are critical to global cost reduction and technology diffusion, making it the epicenter of market activity.

The competitive landscape is characterized by a mix of large, integrated energy utilities with significant renewable portfolios, independent power producers (IPPs), and specialized technology manufacturers. Competition is intensifying on cost, technological performance, and the ability to secure offtake agreements through corporate power purchase agreements (PPAs) and competitive auctions. Success increasingly depends on integrating digital solutions for asset optimization and navigating complex regulatory and grid interconnection processes.

In conclusion, the green power market has matured from a niche, subsidy-dependent segment into the mainstream of global energy investment, driven by compelling economics and climate necessity. Its future growth trajectory will be defined by the successful integration of high variable renewable penetration into power grids, requiring advancements in grid flexibility, storage, and market design. The market's expansion is now central to achieving energy security, economic development, and climate stability, positioning it not as an alternative, but as the foundational pillar of the future global energy system.

Key Benefits of this Report:

Insightful Analysis: Gain detailed market insights covering major as well as emerging geographical regions, focusing on customer segments, government policies and socio-economic factors, consumer preferences, industry verticals, and other sub-segments.

Competitive Landscape: Understand the strategic maneuvers employed by key players globally to understand possible market penetration with the correct strategy.

Market Drivers & Future Trends: Explore the dynamic factors and pivotal market trends and how they will shape future market developments.

Actionable Recommendations: Utilize the insights to exercise strategic decisions to uncover new business streams and revenues in a dynamic environment.

Caters to a Wide Audience: Beneficial and cost-effective for startups, research institutions, consultants, SMEs, and large enterprises.

What do businesses use our reports for?

Industry and Market Insights, Opportunity Assessment, Product Demand Forecasting, Market Entry Strategy, Geographical Expansion, Capital Investment Decisions, Regulatory Framework & Implications, New Product Development, Competitive Intelligence

Report Coverage:

Historical data from 2021 to 2025 & forecast data from 2026 to 2031

Growth Opportunities, Challenges, Supply Chain Outlook, Regulatory Framework, and Trend Analysis

Competitive Positioning, Strategies, and Market Share Analysis

Revenue Growth and Forecast Assessment of segments and regions including countries

Company Profiling (Strategies, Products, Financial Information, and Key Developments among others.

Green Power Market Segmentation

By Power Source

Hydroelectric Power

Wind Power

Bioenergy

Solar Energy

Geothermal Energy

By Application

Electricity Generation

Heating

Transportation

By End-User

Utility

Residential

Commercial

Industrial

By Geography

North America

USA

Canada

Mexico

South America

Brazil

Argentina

Others

Europe

Germany

France

United Kingdom

Spain

Others

Middle East and Africa

Saudi Arabia

UAE

Others

Asia Pacific

China

India

Japan

South Korea

Indonesia

Thailand

Others

Contents

1. EXECUTIVE SUMMARY

2. MARKET SNAPSHOT

- 2.1. Market Overview
- 2.2. Market Definition
- 2.3. Scope of the Study
- 2.4. Market Segmentation

3. BUSINESS LANDSCAPE

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Porter's Five Forces Analysis
- 3.5. Industry Value Chain Analysis
- 3.6. Policies and Regulations
- 3.7. Strategic Recommendations

4. TECHNOLOGICAL OUTLOOK

5. GREEN POWER MARKET BY POWER SOURCE

- 5.1. Introduction
- 5.2. Hydroelectric Power
- 5.3. Wind Power
- 5.4. Bioenergy
- 5.5. Solar Energy
- 5.6. Geothermal Energy

6. GREEN POWER MARKET BY APPLICATION

- 6.1. Introduction
- 6.2. Electricity Generation
- 6.3. Heating
- 6.4. Transportation

7. GREEN POWER MARKET BY END-USER

- 7.1. Introduction
- 7.2. Utility
- 7.3. Residential
- 7.4. Commercial
- 7.5. Industrial

8. GREEN POWER MARKET BY GEOGRAPHY

- 8.1. Introduction
- 8.2. North America
 - 8.2.1. USA
 - 8.2.2. Canada
 - 8.2.3. Mexico
- 8.3. South America
 - 8.3.1. Brazil
 - 8.3.2. Argentina
 - 8.3.3. Others
- 8.4. Europe
 - 8.4.1. Germany
 - 8.4.2. France
 - 8.4.3. United Kingdom
 - 8.4.4. Spain
 - 8.4.5. Others
- 8.5. Middle East and Africa
 - 8.5.1. Saudi Arabia
 - 8.5.2. UAE
 - 8.5.3. Others
- 8.6. Asia Pacific
 - 8.6.1. China
 - 8.6.2. India
 - 8.6.3. Japan
 - 8.6.4. South Korea
 - 8.6.5. Indonesia
 - 8.6.6. Thailand
 - 8.6.7. Others

9. COMPETITIVE ENVIRONMENT AND ANALYSIS

- 9.1. Major Players and Strategy Analysis
- 9.2. Market Share Analysis
- 9.3. Mergers, Acquisitions, Agreements, and Collaborations
- 9.4. Competitive Dashboard

10. COMPANY PROFILES

- 10.1. Adani Green Energy Limited
- 10.2. Iberdrola SA
- 10.3. JinkoSolar Holding Co. Ltd.
- 10.4. NextEra Energy, Inc.
- 10.5. Orsted A/S
- 10.6. Siemens Gamesa Renewable Energy
- 10.7. Suzlon Energy Limited
- 10.8. Tata Power

11. APPENDIX

- 11.1. Currency
- 11.2. Assumptions
- 11.3. Base and Forecast Years Timeline
- 11.4. Key Benefits for the Stakeholders
- 11.5. Research Methodology
- 11.6. Abbreviations

I would like to order

Product name: Green Power Market - Forecast from 2026 to 2031

Product link: <https://marketpublishers.com/r/G45D783013D9EN.html>

Price: US\$ 3,950.00 (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/G45D783013D9EN.html>