

Renewable Portfolio Standard (RPS) Market Forecasts to 2034 – Global Analysis By Energy Source (Wind Power, Solar Power, Biomass Power, Geothermal Power, Hydropower and Other Energy Sources), Compliance Type, Market Participant and By Geography

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Abstracts

According to Statistics MRC, the Global Renewable Portfolio Standard (RPS) Market is accounted for \$64.8 billion in 2026 and is expected to reach \$119.9 billion by 2034 growing at a CAGR of 8.0% during the forecast period. A Renewable Portfolio Standard (RPS) is a policy mechanism that obligates power providers to obtain a defined portion of electricity from renewable sources like solar, wind, hydroelectric, and biomass energy. Its purpose is to promote clean energy growth, cut carbon emissions, and ensure a balanced energy mix. Authorities establish targets and deadlines, and compliance is achieved through renewable energy certificates or direct renewable production. RPS policies drive investments in green technologies, foster innovation, and generate employment opportunities. By steadily increasing renewable energy requirements, RPS contributes to environmental sustainability, strengthens energy independence, and lowers reliance on conventional fossil-based power generation.

According to the U.S. Energy Information Administration (EIA), as of December 2025, 28 states and the District of Columbia have mandatory Renewable Portfolio Standards (RPS), 7 states have renewable portfolio goals, and 23 states plus D.C. have set requirements or goals for 100% renewable or clean electricity by 2050 or earlier.

Market Dynamics:

Driver:**Rising demand for clean and sustainable energy**

A growing preference for environmentally sustainable energy solutions is fueling the expansion of the Renewable Portfolio Standard (RPS) market. Heightened awareness about climate change and ecological concerns has increased the adoption of renewable power among consumers, businesses, and governments. RPS frameworks support this shift by mandating a greater proportion of clean energy in electricity supply. Companies are also embracing green energy to fulfill sustainability commitments. This rising demand motivates utilities to scale up renewable generation, invest in innovative technologies, and pursue long-term carbon reduction strategies, thereby strengthening the development of the renewable energy industry.

Restraint:**High initial investment and infrastructure costs**

Significant capital requirements and infrastructure expenses hinder the growth of the Renewable Portfolio Standard (RPS) market. Establishing renewable energy facilities involves high spending on technology, installation, land, and grid connectivity. In many regions, especially developing economies, limited financing options create obstacles for utilities and investors. Moreover, modernizing grid systems to support intermittent renewable sources increases overall costs. These financial challenges can delay project execution and limit market participation. Although renewable energy offers long-term savings, the heavy initial investment makes it difficult for energy providers to quickly meet RPS obligations and scale up clean energy deployment.

Opportunity:**Expansion of renewable energy capacity**

Increasing the scale of renewable energy generation offers significant potential for the Renewable Portfolio Standard (RPS) market. Governments and utilities are investing more in sustainable power sources such as solar, wind, hydropower, and biomass to meet regulatory requirements. Advancements in technology and favorable policies support widespread adoption of these energy systems. This growth reduces reliance on conventional fuels and helps maintain stable energy pricing over time. With rising global electricity demand, expanding renewable capacity provides an eco-friendly solution,

boosting RPS implementation and accelerating the shift toward a cleaner and more sustainable energy landscape.

Threat:

Competition from low-cost fossil fuels

The availability of inexpensive fossil fuels presents a major challenge to the Renewable Portfolio Standard (RPS) market. In areas where coal, oil, or gas are easily accessible and affordable, renewable energy may struggle to compete on cost. Without adequate financial support or incentives, utilities may favor traditional energy sources to minimize expenses. This economic pressure can slow down investment in renewable projects and reduce the urgency to meet RPS requirements. Continued reliance on cheaper fossil fuels limits the growth of clean energy adoption and diminishes the overall effectiveness of policies aimed at promoting renewable energy development.

Covid-19 Impact:

The Renewable Portfolio Standard (RPS) market experienced both challenges and opportunities during the COVID-19 pandemic. Early disruptions included halted project development, workforce limitations, and supply chain issues, which delayed renewable energy installations. Reduced power consumption during lockdowns impacted financial performance of utilities, slowing investments. Despite these setbacks, many governments introduced recovery programs that prioritized renewable energy and upheld RPS targets. The pandemic underscored the need for reliable and sustainable energy systems. As economic activities resumed, the renewable sector rebounded with stronger policy support and renewed investments, leading to a more resilient and forward-looking RPS market environment.

The solar power segment is expected to be the largest during the forecast period

The solar power segment is expected to account for the largest market share during the forecast period owing to its extensive utilization, cost efficiency, and adaptable deployment options. It is widely preferred by energy providers and policymakers due to its ability to be implemented in both utility-scale projects and smaller distributed systems. High solar resource availability in various regions enhances its adoption. Improvements in technology along with favourable regulations have strengthened its position as a dependable energy source. Additionally, its quick installation process and compatibility with current grid systems make it an ideal choice for fulfilling RPS

requirements, reinforcing its leading role in the market.

The commercial & industrial consumers segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the commercial & industrial consumers segment is predicted to witness the highest growth rate, driven by strong corporate focus on sustainability and energy transition. Organizations from various industries are increasingly adopting renewable energy solutions to lower their carbon footprint and comply with environmental standards. The expansion of mechanisms such as power purchase agreements and in-house renewable systems supports this growth. Furthermore, increasing electricity expenses and strict regulations are pushing businesses toward cleaner energy alternatives, positioning this segment as a major contributor to the accelerated expansion of the RPS market.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, primarily due to its mature policy environment and early implementation of renewable energy mandates. Numerous states in the United States have well-defined RPS regulations that ensure steady growth in renewable energy usage. Strong governmental support, modernized grid systems, and high investments in wind and solar power enhance the region's leadership. Energy providers effectively meet compliance targets through structured mechanisms such as certificate trading. Moreover, rising corporate interest in sustainability and growing environmental awareness among consumers continue to strengthen renewable energy adoption, maintaining the region's top position in the market.

Region with highest CAGR:

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR, driven by increasing industrial activities and a surge in electricity consumption. Governments in the region are actively promoting renewable energy through favourable regulations and ambitious targets aimed at lowering emissions and strengthening energy independence. Significant investments in renewable technologies and ongoing improvements in power infrastructure support this growth. Furthermore, rising environmental consciousness and active involvement of private enterprises are boosting adoption, making Asia-Pacific the most rapidly expanding region in the RPS market.

Key players in the market

Some of the key players in Renewable Portfolio Standard (RPS) Market include Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E), Bear Valley Electric Service, Liberty Utilities, PacifiCorp, Marin Clean Energy (MCE), Silicon Valley Clean Energy (SVCE), Clean Power Alliance of Southern California, Peninsula Clean Energy, San Diego Community Power, 3 Phases Renewables, Calpine Energy Solutions, Constellation NewEnergy, Shell Energy North America, BP Energy Retail Company, Direct Energy Business and NextEra Energy Resources.

Key Developments:

In June 2026, San Diego Gas & Electric (SDG&E), Qualcomm Technologies, Inc. and the University of California San Diego's Scripps Institution of Oceanography announced Edge Alert Sentinel (EAS), a new collaboration that will bring artificial intelligence (AI) directly to the front lines of wildfire and extreme-weather response.

In February 2026, Pacific Gas and Electric Company (PG&E) and Itron are embarking on the next phase of their collaboration to transform the energy landscape, enhance the customer experience, reduce wildfire risk and create a more reliable and flexible grid. This collaboration is about innovating to improve the lives of California's families and businesses.

In February 2026, PacifiCorp announced it has entered into an agreement with Portland General Electric Company to sell its wind, natural gas generation and distribution assets and infrastructure in the state of Washington for \$1.9 billion, subject to customary purchase price adjustments. The agreement outlines the sale of PacifiCorp's assets, including the Chehalis thermal plant, Marengo wind facility, Goodnoe Hills wind facility and the distribution infrastructure required to serve customers in the current Pacific Power service area in Yakima, Walla Walla and surrounding communities.

Energy Sources Covered:

Wind Power

Solar Power

Biomass Power

Geothermal Power

Hydropower

Other Energy Sources

Compliance Types Covered:

Mandatory RPS

Voluntary RPS

Market Participants Covered:

Utilities

Independent Power Producers (IPPs)

Commercial & Industrial Consumers

Residential Consumers

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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