+357 96 030922
info@marketpublishers.com

Distributed Energy Resources Market Forecasts to 2032 – Global Analysis By Type (Control Architecture, and Installation Type), Model, Technology, End User, and By Geography.

https://marketpublishers.com/r/DF51E48F2BA4EN.html
Date: January 2026
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: DF51E48F2BA4EN

Abstracts

According to Stratistics MRC, the Global Distributed Energy Resources Market is accounted for $4.7 billion in 2025 and is expected to reach $5.6 billion by 2032 growing at a CAGR of 2.6% during the forecast period. Distributed energy resources (DERs) are small-scale power generation or storage technologies located close to the point of consumption rather than centralized plants. Examples include rooftop solar panels, wind micro-turbines, battery storage, and fuel cells. DERs enhance grid resilience, reduce transmission losses, and enable consumers to participate in energy markets. They support renewable integration, demand response, and microgrid development, creating a decentralized energy ecosystem. By diversifying supply and empowering prosumers, DERs play a critical role in modernizing electricity systems worldwide.

Market Dynamics:

Driver:

Rising demand for grid flexibility and resilience

The growing penetration of renewable energy and electrification of transport is driving demand for grid flexibility and resilience. Distributed Energy Resources (DERs) such as solar, storage, and demand response provide decentralized solutions that balance supply and demand in real time. Utilities and regulators increasingly rely on DERs to mitigate outages, stabilize voltage, and support peak load management. This dynamic positions DERs as essential enablers of modern power systems, ensuring reliable,

+357 96 030922
info@marketpublishers.com

sustainable, and adaptive energy delivery across diverse regions.

Restraint:

Interconnection delays and grid congestion

Despite strong momentum, DER deployment faces significant challenges from interconnection delays and grid congestion. Lengthy approval processes, technical bottlenecks, and limited transmission capacity slow the integration of distributed assets. Utilities often struggle with visibility and control over decentralized resources, creating operational inefficiencies. These barriers increase project costs and discourage investment, particularly for smaller developers. Without streamlined regulatory frameworks and upgraded grid infrastructure, DER adoption risks stagnation, limiting its potential to deliver flexibility and resilience at scale.

Opportunity:

Growth in data center and EV fleet microgrids

The rapid expansion of hyperscale data centers and electrified vehicle fleets presents a major opportunity for DERs. Microgrids powered by solar, storage, and advanced controls can deliver reliable, resilient, and sustainable energy for mission-critical operations. EV fleet depots increasingly require localized generation and storage to manage charging demand, while data centers seek carbon-neutral power solutions. These sectors create high-value markets for DER providers, enabling scalable deployment, new revenue streams, and enhanced energy independence in rapidly growing digital and mobility ecosystems.

Threat:

Supply chain disruptions for inverters and batteries

Supply chain disruptions for critical components such as inverters and batteries pose a serious threat to DER market growth. Global shortages, geopolitical tensions, and raw material constraints can delay projects and inflate costs. Inverters are essential for grid integration, while batteries underpin storage and flexibility. Any disruption undermines reliability, investor confidence, and deployment timelines. Without diversified sourcing strategies and resilient supply chains, DER adoption could face setbacks, slowing the transition toward decentralized, sustainable, and resilient energy systems worldwide.

+357 96 030922
info@marketpublishers.com

Covid-19 Impact:

COVID-19 initially disrupted Distributed Energy Resources (DER) deployment due to lockdowns, labor shortages, and delayed permitting. However, the pandemic underscored the need for resilient, decentralized energy systems as grid vulnerabilities became evident. Remote work and digitalization accelerated interest in home solar, battery storage, and microgrids. Utilities began investing in virtual power plants and DERMS to manage distributed assets more effectively. Post-pandemic recovery plans prioritized clean energy, positioning DERs as critical infrastructure for reliability, sustainability, and energy independence in future crises.

The installation type segment is expected to be the largest during the forecast period

The installation type segment is expected to account for the largest market share during the forecast period, supported by widespread deployment of rooftop, ground-mounted, and mobile DER systems across residential, commercial, and industrial settings. Fueled by declining solar PV and energy storage costs, organizations are increasingly investing in site-specific installations to improve energy resilience. Grid modernization initiatives, favorable interconnection policies, and rising demand for localized power generation further strengthen the segment's revenue contribution.

The ownership model segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the ownership model segment is predicted to witness the highest growth rate, driven by flexible financing structures and innovative business models. Third-party ownership, community-based systems, and prosumer assets lower upfront capital barriers while enhancing participation in distributed generation. Motivated by energy independence goals and supportive net metering policies, consumers and enterprises are increasingly shifting toward diversified ownership frameworks, accelerating overall segment growth.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, attributed to rapid urbanization, strong renewable energy targets, and expanding electricity demand. Countries such as China, India, Japan, and Australia are investing heavily in solar, storage, and microgrid deployments. Government incentives, grid

+357 96 030922
info@marketpublishers.com

reliability concerns, and cost-competitive manufacturing ecosystems further reinforce the region's leadership in distributed energy resources.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR associated with accelerating grid decentralization and clean energy investments. Increasing adoption of residential solar-plus-storage, electric vehicle integration, and virtual power plants is reshaping energy consumption patterns. Supported by favorable policies, advanced digital infrastructure, and strong private sector participation, the region is emerging as a high-growth market for DER solutions.

Key players in the market

Some of the key players in Distributed Energy Resources Market include NextEra Energy, Enel, Iberdrola, Schneider Electric, Siemens Energy, ABB Ltd., Bloom Energy, Sunrun, Tesla, Sunnova, AutoGrid, Stem, Inc., EDF Renewables, Eaton Corporation, Enphase Energy, and Siemens Smart Infrastructure.

Key Developments:

In December 2025, Tesla revealed its Powerwall fleet delivered 1.6 TWh of clean energy storage in 2025, saving homeowners $1B while enabling 89,000 virtual power plant events, showcasing DER scalability and resilience.

In August 2025, NextEra Energy announced a $50B investment program (2025–2029) to deploy 25 GW of battery storage capacity, addressing AI-driven electricity demand growth and reinforcing leadership in renewable generation and distributed energy resource integration.

In Jul 2025, Enel committed €26B through 2027 for grid modernization, emphasizing bidirectional energy flows and virtual power plants (VPPs) to accelerate DER adoption, strengthen European energy resilience, and support electrification across multiple regions.

Types Covered:

Control Architecture

+357 96 030922
info@marketpublishers.com

Installation Type

Models Covered:

Ownership Model

Revenue Model

Technologies Covered:

Solar PV

Wind Micro-Turbines

Fuel Cells

Battery Energy Storage

Micro-CHP Units

Distributed Hydro & Other Renewables

End Users Covered:

Households

Commercial Establishments

Industrial Enterprises

Utility Operators

Government & Municipal Bodies

Regions Covered:

+357 96 030922
info@marketpublishers.com

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

+357 96 030922
info@marketpublishers.com

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & 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 2024, 2025, 2026, 2028, and 2032
- 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:

+357 96 030922
info@marketpublishers.com

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

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

5 GLOBAL DISTRIBUTED ENERGY RESOURCES MARKET, BY TYPE

6 GLOBAL DISTRIBUTED ENERGY RESOURCES MARKET, BY MODEL

7 GLOBAL DISTRIBUTED ENERGY RESOURCES MARKET, BY TECHNOLOGY

8 GLOBAL DISTRIBUTED ENERGY RESOURCES MARKET, BY END USER

+357 96 030922
info@marketpublishers.com

9 GLOBAL DISTRIBUTED ENERGY RESOURCES MARKET, BY GEOGRAPHY

+357 96 030922
info@marketpublishers.com

10 KEY DEVELOPMENTS

11 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Distributed Energy Resources Market Forecasts to 2032 – Global Analysis By Type (Control Architecture, and Installation Type), Model, Technology, End User, and By Geography.

Product link: https://marketpublishers.com/r/DF51E48F2BA4EN.html

Price: US$ 4,150.00 (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/DF51E48F2BA4EN.html