

# Nuclear Power Plant Market to Reach USD \$37.73 Billion by 2029 at 2.9% CAGR

*The Business Research Company's  
Nuclear Power Plant Global Market  
Report 2025 – Market Size, Trends, And  
Global Forecast 2025-2034*

LONDON, GREATER LONDON, UNITED  
KINGDOM, August 26, 2025

/EINPresswire.com/ -- "Get 30% Off All

Global Market Reports With Code

ONLINE30 – Stay Ahead Of Trade Shifts, Macroeconomic Trends, And Industry Disruptors



The Business  
Research Company

The Business Research Company

What Is The Estimated Industry Size Of Nuclear Power Plant Market?

The [size of the nuclear power plant market](#) has seen a consistent increase over the past few

“

The Business Research  
Company's Latest Report  
Explores Market Driver,  
Trends, Regional Insights -  
Market Sizing & Forecasts  
Through 2034”

*The Business Research  
Company*

years. It is projected to rise from \$32.46 billion in 2024 to \$33.53 billion in 2025, recording a compound annual growth rate (CAGR) of 3.3%. This uptrend during the historic period can be ascribed to factors such as concerns about energy security, government funding, an upsurge in electricity needs, geopolitical energy diversification, and lower operation expenses.

In the coming years, the nuclear power plant market is poised to witness consistent expansion, reaching a value of \$37.73 billion by the year 2029. This growth, which

represents a compound annual growth rate (CAGR) of 3.0%, can be linked to factors such as decarbonization goals, enhancement in grid stability, obsolete fossil fuel infrastructures, rising public-private collaborations, and the life extension of existing reactors. The forecast period will see the emergence of key trends such as the evolution in reactor design technology, the advent of small modular reactors (SMRs), increased deployment of small modular reactors (SMR), incorporation with renewable energy sources, and the digitization of nuclear operations.

Download a free sample of the nuclear power plant market report:

<https://www.thebusinessresearchcompany.com/sample.aspx?id=25444&type=smp>

## What Are The Major Factors Driving The Nuclear Power Plant Global Market Growth?

The upward trend in electricity demand is predicted to boost the growth of the nuclear power plant market. Electricity, defined as the flow of electric charge typically through conductive materials like wires, powers various devices, machines, and systems. Urbanization is a major force driving the demand for electricity, with burgeoning cities requiring more power for residential, commercial, and industrial purposes. Nuclear power plants play a significant role in meeting this rising demand, providing a large-scale, stable, and low-carbon energy source, thereby ensuring a dependable supply for growing populations and industries. These power plants bolster energy infrastructure by delivering a consistent power output, efficiently and sustainably fulfilling ever-increasing consumption needs. For example, reports from the International Energy Agency, a France-based intergovernmental organization, revealed that in May 2025, total net electricity generation in the Organization for Economic Co-operation and Development (OECD) achieved 904.8 terawatt-hours (TWh) in February 2025, marking a 4.0% increase compared to February 2024. Hence, the escalating electricity demand is fueling the growth of the nuclear power plant market.

## Who Are The Leading Companies In The Nuclear Power Plant Market?

Major players in the Nuclear Power Plant Global Market Report 2025 include:

- Siemens Energy AG
- General Electric Company
- Korea Electric Power Corporation
- Mitsubishi Heavy Industries Ltd.
- Duke Energy Corporation
- Électricité de France S.A.
- Exelon Corporation
- Rolls-Royce Holdings plc
- Bechtel Corporation
- China National Nuclear Corporation

## What Are The Prominent Trends In The Nuclear Power Plant Market?

In an endeavor to enhance safety, improve efficiency, and cut down construction costs, leading corporations in the nuclear power plant industry are concentrating on the innovation of sophisticated reactor technologies, such as the single-loop pressurized water reactors. A single-loop pressurized water reactor (PWR) is a nuclear reactor design concept wherein the reactor coolant circulates around a single closed loop for the transfer of heat from the reactor core to the steam generator. As an example, in May 2023, the AP300 small modular reactor (SMR) was launched by Westinghouse Electric Company LLC, a nuclear power firm from the United States - a 300-MWe single-loop pressurized water reactor in essence. The AP300 utilizes the tried and tested technology of the AP1000 reactor, providing a sleek design, passive safety features that don't require operator intervention or alternate power source, and has an anticipated operational lifespan exceeding 80 years. The AP300 provides consistent, safe, and eco-friendly electricity, with potential further uses for district heating and water desalination. Its rapid load-following capabilities make it best matched for integration with renewable resources.

## What Are The Primary Segments Covered In [The Global Nuclear Power Plant Market Report?](#)

The nuclear power plant market covered in this report is segmented –

- 1) By Reactor Type: Pressurized Water Reactor (PWR), Boiling Water Reactor (BWR), Pressurized Heavy Water Reactor (PHWR), Gas-Cooled Reactor (GCR), Other Reactor Types
- 2) By Component: Reactor Core, Steam Generator, Control Rods, Other Components
- 3) By Technology Adoption: Conventional Nuclear Technology, Advanced Nuclear Technology, Generation IV Reactors, Small Modular Reactor Technology, Research And Development In Next-Generation Reactors
- 4) By Application: Electricity Generation, Desalination, Research Reactors, Other Applications
- 5) By End-User Industry: Electric Power Generation, Industrial Manufacturing, Desalination Plants, Research Facilities, Healthcare And Medical Applications

Subsegments:

- 1) By Pressurized Water Reactor (PWR): Generation II Pressurized Water Reactor, Generation III Pressurized Water Reactor, Generation III+ Pressurized Water Reactor, Small Modular Reactor (SMR) - Pressurized Water Reactor
- 2) By Boiling Water Reactor (BWR): Generation II Boiling Water Reactor, Generation III Boiling Water Reactor, Advanced Boiling Water Reactor (ABWR), Small Modular Reactor (SMR) - Boiling Water Reactor
- 3) By Pressurized Heavy Water Reactor (PHWR): Canada Deuterium Uranium (CANDU) Reactor, Advanced Pressurized Heavy Water Reactor, Small Modular Reactor (SMR) - Pressurized Heavy Water Reactor
- 4) By Gas-Cooled Reactor (GCR): Magnox Gas-Cooled Reactor, Advanced Gas-Cooled Reactor (AGR), High-Temperature Gas-Cooled Reactor (HTGR)
- 5) By Other Reactor Types: Fast Breeder Reactor (FBR), Liquid Metal-cooled Reactor (LMR), Molten Salt Reactor (MSR), Small Modular Reactor (SMR)

View the full nuclear power plant market report:

<https://www.thebusinessresearchcompany.com/report/nuclear-power-plant-global-market-report>

## Which Region Is Forecasted To Grow The Fastest In The Nuclear Power Plant Industry?

In 2024, the nuclear power plant market was dominated by Asia-Pacific. The market is forecasted to grow the fastest in North America. The regions considered in the 2025 Global Market Report for Nuclear Power Plants include Asia-Pacific, Western Europe, Eastern Europe, North America, South America, the Middle East, and Africa.

Browse Through More Reports Similar to the Global Nuclear Power Plant Market 2025, By The Business Research Company

Nuclear Fuel Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/nuclear-fuel-global-market-report>

Nuclear Medicine Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/nuclear-medicine-global-market-report>

Nuclear Power Reactor Decommissioning Global Market Report 2025

<https://www.thebusinessresearchcompany.com/report/nuclear-power-reactor-decommissioning-global-market-report>

Speak With Our Expert:

Saumya Sahay

Americas +1 310-496-7795

Asia +44 7882 955267 & +91 8897263534

Europe +44 7882 955267

Email: [saumyas@tbrc.info](mailto:saumyas@tbrc.info)

[The Business Research Company - www.thebusinessresearchcompany.com](https://www.thebusinessresearchcompany.com)

Follow Us On:

• LinkedIn: <https://in.linkedin.com/company/the-business-research-company>"

Oliver Guirdham

The Business Research Company

+44 7882 955267

[info@tbrc.info](mailto:info@tbrc.info)

Visit us on social media:

[LinkedIn](#)

[Facebook](#)

[X](#)

---

This press release can be viewed online at: <https://www.einpresswire.com/article/843187349>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.