

## North America Nuclear Power Plant and Equipment Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 110 pages | Mordor Intelligence

#### **AVAILABLE LICENSES:**

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

#### Report description:

The North American nuclear power plant and equipment market is expected to register a CAGR of more than 3% during the forecast period of 2022-2027. The COVID-19 pandemic impacted the nuclear power and nuclear fuel industries in terms of supply and demand. The major impact was on the supply side for uranium as mining and nuclear fuel cycle facilities suspended operations due to the lockdowns imposed in various nations. An increase in energy demand, specifically cleaner generation of power, and innovative headways in nuclear power equipment are expected to drive the North American nuclear power plant and equipment market. However, difficulties in handling the highly radioactive atomic waste generated from nuclear fuel are expected to hinder the market growth.

? The pressurized water reactor (PWR) is the most widely used reactor in North America and dominates the nuclear power plant and equipment market.

? The Office of Nuclear Energy in the United States is collaborating with various technological universities along with industrial and international partners like the International Atomic Energy Agency (IAEA) for developing 4th generation nuclear energy technologies like Next Generation Nuclear Plant (NGNP), Advanced Reactor Concepts (ARC), and Advanced Small Modular Reactor (ASMR), which are expected to create abundant opportunities for the North American nuclear power plant and equipment market.?

? The United States is the major contributor to nuclear power, and the country is highly active in increasing the number of nuclear reactors and implementing new policies and regulations supporting clean energy generation. Therefore, the United States is expected to dominate the nuclear power plant and equipment market in North America during the forecast period.

North America Nuclear Power Plant & Equipment Market Trends

Pressurized Water Reactor (PWR) Type to Dominate the Market

? North America has a strong focus on nuclear power. The United States and Canada are focusing on nuclear power plant life extensions while also discovering the potential for small modular reactors.

? As of November 2021, the United States operated the largest fleet of nuclear power reactors globally, with 93 units in almost 30 states with a combined capacity of 96.5 GW. ??

? The pressurized water reactor (PWR) is the most widely-deployed nuclear reactor model globally. The United States is one of the largest markets for nuclear plants using PWR reactors.

? According to the World Nuclear Organization, as of November 2021, of the 93 operational reactors in the country, 62 were PWR reactors, accounting for nearly 65.7% of the total installed nuclear capacity in the country.

? Additionally, the only two units under construction in the United States, the Vogtle 3 and 4 nuclear reactors with a gross installed capacity of 2500 MW, will be using Westinghouse AP1000 PWRs.

? PWR is the most commercialized nuclear reactor design type, and due to this, PWR type reactor is dominant in the nuclear power plant and equipment market. Despite lower efficiency and high initial investments, PWR is a mature technology with relatively lower operational costs. Due to this, most countries with both mature and young nuclear energy sectors are investing in PWR technology, and the reactor type is expected to dominate the market during the forecast period. ?

United States to Dominate the Market

? The United States is among the largest nuclear power producers across the world and accounted for almost 31% of the global nuclear power generated in 2020. The country's nuclear reactors produced 96.55 GW of electricity in 2020, representing a slight decrease of 2.3% over the previous year's value. ?

? As of December 2020, the United States had 94 operating commercial nuclear reactors at 56 nuclear power plants in 28 states.

? The United States is building two new Westinghouse AP1000 reactors at Vogtle in Georgia, which are scheduled to start operating in Q2 2022 and November 2022, respectively. Both the plants have a power generating capacity of 1,250 MW each.?

? As of November 2021, the country had two planned nuclear power plants, namely Turkey Point 6&7 and UAMPS Carbon-Free Power Project, with power generation capacities of 2x1250 MW and 6x77 MW, respectively. In addition to planned nuclear power plants, around seven large and eleven small units are proposed in the country.?

? Therefore, with the construction of new power plants, the demand for nuclear power plants and equipment is projected to increase in the country during the forecast period.

North America Nuclear Power Plant & Equipment Market Competitor Analysis

The North American nuclear power plant and equipment market is moderately consolidated. Some of the major players in the market include BWX Technologies Inc., Doosan Heavy Industries & Construction Co. Ltd, Mitsubishi Heavy Industries Ltd?, Westinghouse Electric Company LLC, and GE-Hitachi Nuclear Energy Inc.?

Scotts International, EU Vat number: PL 6772247784

#### Additional Benefits:

The market estimate (ME) sheet in Excel format 3 months of analyst support

#### **Table of Contents:**

- 1 INTRODUCTION
- 1.1 Scope of the Study
- 1.2 Market Definition
- 1.3 Study Assumptions
- 2 EXECUTIVE SUMMARY
- 3 RESEARCH METHODOLOGY
- **4 MARKET OVERVIEW**
- 4.1 Introduction
- 4.2 Market Size and Demand Forecast in USD billion, till 2027
- 4.3 Recent Trends and Developments
- 4.4 Government Policies and Regulations
- 4.5 Market Dynamics
- 4.5.1 Drivers
- 4.5.2 Restraints
- 4.6 Supply Chain Analysis
- 4.7 Porter's Five Forces Analysis
- 4.7.1 Bargaining Power of Suppliers
- 4.7.2 Bargaining Power of Consumers
- 4.7.3 Threat of New Entrants
- 4.7.4 Threat of Substitute Products and Services
- 4.7.5 Intensity of Competitive Rivalry
- **5 MARKET SEGMENTATION**
- 5.1 Reactor Type
- 5.1.1 Pressurized Water Reactor
- 5.1.2 Pressurized Heavy Water Reactor
- 5.1.3 Boiling Water Reactor
- 5.1.4 Other Reactor Types
- 5.2 Carrier Type
- 5.2.1 Island Equipment
- 5.2.2 Auxiliary Equipment
- 5.3 Geography
- 5.3.1 United States
- 5.3.2 Canada
- 5.3.3 Rest of North America
- 6 COMPETITIVE LANDSCAPE

Scotts International. EU Vat number: PL 6772247784

- 6.1 Mergers and Acquisitions, Joint Ventures, Collaborations, and Agreements
- 6.2 Strategies Adopted by Leading Players
- 6.3 Company Profiles
- 6.3.1 BWX Technologies Inc.
- 6.3.2 Doosan Heavy Industries & Construction Co. Ltd
- 6.3.3 Mitsubishi Heavy Industries Ltd
- 6.3.4 GE-Hitachi Nuclear Energy Inc.
- 6.3.5 Westinghouse Electric Company LLC

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784



To place an Order with Scotts International:

Print this form

# North America Nuclear Power Plant and Equipment Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 110 pages | Mordor Intelligence

ORDER FORM:			
Select license	License	l p	Price
Sciece ficerise	Single User License		\$4750.00
	Team License (1-7 Users)		\$5250.00
	Site License		\$6500.00
	Corporate License		\$8750.00
		VAT	
		Total	
	ant license option. For any questions please contact su It 23% for Polish based companies, individuals and EU b		
]** VAT will be added	t 23% for Polish based companies, individuals and EU b		
]** VAT will be added	t 23% for Polish based companies, individuals and EU b	based companies who are unable to provide a va	
** VAT will be added	t 23% for Polish based companies, individuals and EU b	based companies who are unable to provide a va	
** VAT will be added Email* First Name*	t 23% for Polish based companies, individuals and EU b	based companies who are unable to provide a va	
** VAT will be added Email* First Name* ob title*	t 23% for Polish based companies, individuals and EU b	based companies who are unable to provide a va	
** VAT will be added Email* First Name* ob title* Company Name*	Phone*  Last Name	based companies who are unable to provide a va	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com www.scotts-international.com

Signature

### Scotts International. EU Vat number: PL 6772247784