

# WHITE PAPER

## Research on the Global & Chinese Generator Market in 2025

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### Background

With the continuous growth of the global economy and the acceleration of industrialization and urbanization, the demand for electricity continues to rise. Generators, as important power supply equipment, play a key role in various fields. This report aims to deeply analyze the industry production, sales, supply and demand of the global and Chinese generator markets in 2025, and predict future development trends and investment prospects.

### Overview of the Global Generator Market

#### Market Size and Growth

The global power generation equipment market size in 2024 is approximately US\$13.36 billion, and it is expected to reach US\$16.05 billion in 2031, with a compound annual growth rate (CAGR) of 2.7% during 2025-2031. The global generator market has shown a steady growth trend, mainly due to factors such as the increase in electricity demand driven by economic growth, the shift to renewable energy, technological progress, and economic growth in emerging markets.

#### Market classification

The global generator market can be classified according to the power source, mainly including fuel generator sets, gas generator sets, wind

generator sets, solar generator sets, hydroelectric generator sets, coal-fired generator sets, etc. Different types of generators occupy different shares in the market, and their market shares are constantly changing with the adjustment of energy structure and the development of technology.

#### Competition pattern

The global generator market is highly competitive, and the main manufacturers include Caterpillar, Cummins Power Systems, Generac and Honda Power, etc. These manufacturers are mainly distributed in the United States, Europe, China, Japan and South Korea. International companies dominate the high-end market with their brand influence and technical strength, and continue to expand their market share through globalization strategies and localized services.

### Overview of China's generator market

#### Market size and growth

In recent years, the market size of China's generator industry has continued to expand, and it has become one of the world's largest generator producers and consumers. In the first half of 2024, the national output of power generation equipment reached 91.72 million kilowatts, a year-on-year increase of 24.6%. With the acceleration of national infrastructure

construction and the advancement of industrial upgrading, the demand for electricity continues to grow, providing a broad market space for the generator industry.

### Market demand

**Key industry demand:** Key industries such as data centers, medical institutions, and banks have a high demand for stable power supply, which has promoted the continued development of the standby diesel generator market.

Especially in places such as data centers, communication base stations, hospitals, and commercial complexes that have high requirements for power supply quality, 380V silent diesel generators have broad application prospects due to their high efficiency, stability, and low noise.

**Demand for infrastructure construction:** With the continued growth of the global economy and the continuous acceleration of infrastructure construction, the demand for generators will continue to grow. Especially in remote areas and areas with unstable power supply, generators, as the main source of supplementary power, will continue to exist and may grow further.

**Demand for new energy power generation:** With the development and application of clean energy, the new energy generator market has ushered in rapid growth. Generators of renewable energy such as wind power and solar energy occupy an increasingly important share. At the same time, through the combination of new energy generators and backup power sources such as diesel generators, complementary utilization of energy can be achieved and energy utilization efficiency can be improved.

**Demand for emergency power supply:** With the acceleration of urbanization and the deepening of the trend of population aging, the demand for emergency power supply will continue to increase.

Especially in areas where natural disasters occur frequently and important infrastructure sites, the application of generators will be more extensive.

### Competition pattern

In the Chinese market, well-known brands such as Taihao Technology, Shanghai Ketai, Weichai, and Yuchai occupy a dominant position in the market. These companies have gradually broken the monopoly of foreign brands and increased their market share through technological innovation and cost-effectiveness. At the same time, a large number of emerging companies have gradually emerged through technological innovation and market development.

## Technological trends in the generator industry

### Technological innovation

With the advancement of science and technology, generators have made significant progress in energy efficiency, environmental protection and intelligence. For example, the application of intelligent monitoring systems enables generators to realize functions such as remote monitoring and fault prediction, improving user experience and equipment utilization.

### Application of new energy technologies

The promotion of new energy policies has also promoted the increase in demand for clean energy power generation equipment such as wind power generation and hydropower generation, further promoting the development of the generator market. In the future, the combination of new energy generators and traditional generators will be more widely used to achieve complementary utilization of energy.

## Investment forecast for the generator industry

### Market size growth

It is expected that in the next few years, the market size of China's generator industry will continue to maintain a steady growth trend. On the one hand, the strong support of national policies for new energy power generation will further increase the market share of new energy power generation equipment; on the other hand, with the continuous expansion of domestic and foreign market demand, and the continuous emergence of new technologies and new products, China's generator industry will continue to maintain a good growth rate.

### Investment in technological innovation

Enterprises will increase their investment in technological innovation to improve the competitiveness of their products. In particular, technological research and development in the areas of intelligence, efficiency, and environmental protection will become the key areas of corporate investment.

### Investment in new energy fields

With the rapid development of the new energy market, investment in new energy power generation equipment will continue to increase. Investment in fields including wind power generation and solar power generation will promote the advancement of new energy generator technology and the expansion of the market.

In 2025, the global and Chinese generator markets showed a good development trend. With the growth of the economy, the advancement of technology and the development of new energy, the generator industry will face more opportunities and challenges. Enterprises need to keep up with market trends, strengthen technological innovation, and improve product quality and competitiveness to cope with market changes. At the same time, investors should also pay attention to the development prospects of the generator industry, seize investment opportunities, and achieve good returns on investment.