

India Power Generation Engines Market, By Fuel Type (Diesel, Petrol, Gas), By End Use (Industrial, Commercial, Residential), By Engine Power (5 – 75 HP, 76 – 350 HP, 351 – 750 HP, Above 751 HP) By Region, Competition, Forecast & Opportunities, 2021-2031F

<https://marketpublishers.com/r/I73D14501E96EN.html>

Date: June 2025

Pages: 82

Price: US\$ 3,500.00 (Single User License)

ID: I73D14501E96EN

Abstracts

Market Overview

India's Power Generation Engines Market was valued at USD 1.20 billion in 2025 and is projected to reach USD 1.70 billion by 2031, growing at a CAGR of 5.81% during the forecast period. This market is witnessing robust expansion driven by increasing energy demands arising from urbanization and industrialization. Power generation engines play a vital role in converting energy into electricity across residential, commercial, and industrial sectors. These engines, which operate on fuels such as diesel, natural gas, and petrol, are known for their efficiency and adaptability to various applications. Technological advancements have enhanced engine performance and environmental compliance, supporting the transition toward more sustainable energy solutions. India's escalating electricity needs, particularly in sectors like manufacturing and construction, coupled with infrastructure growth and government initiatives, are reinforcing the demand for reliable and scalable power generation systems. As energy consumption rises alongside economic growth, power generation engines remain integral to ensuring a continuous and flexible electricity supply nationwide.

Key Market Drivers

Increasing Energy Demand Due to Rapid Industrialization and Urbanization

India's accelerating industrial development and expanding urban population are major drivers of the power generation engines market. As cities grow and industries such as IT, construction, and manufacturing flourish, the demand for consistent and efficient electricity supply rises sharply. Urban homes are increasingly reliant on modern appliances, adding to the overall power load. Power generation engines, which can be deployed flexibly and scaled according to need, are essential in bridging gaps in grid reliability and providing backup power. This is particularly critical for new infrastructure and smart city developments. Government investments in industrial corridors and urban expansion further elevate electricity demand. India's position as the third-largest global energy consumer, combined with a projected doubling of energy demand by 2040, highlights the need for scalable generation technologies. The urban population, expected to surpass 600 million by 2030, and an 8% growth in energy use in 2024—fueled by industrial activity—underline the market's long-term growth potential.

Key Market Challenges

Environmental Concerns and Stringent Emission Regulations

A primary challenge for the India power generation engines market is managing the environmental impact of combustion-based engines. Traditional diesel and coal-fueled engines contribute significantly to air pollution, emitting NO_x, SO_x, PM, and CO₂, which have serious environmental and public health implications. To curb these emissions, the Indian government has implemented stricter regulations, such as the Bharat Stage VI (BS-VI) norms, mandating lower emissions from engines. These regulations necessitate significant investments in cleaner technologies and compliance mechanisms from manufacturers. While critical for sustainability, these requirements increase production costs and pose adoption barriers, particularly for smaller firms and budget-sensitive users. Balancing performance, affordability, and environmental compliance remains a key challenge for market stakeholders.

Key Market Trends

Rising Adoption of Natural Gas Engines for Cleaner Power Generation

A significant trend in the India power generation engines market is the growing shift toward natural gas-powered engines. With rising environmental awareness and tighter emission norms, industries are moving away from diesel and coal to cleaner fuel alternatives. Natural gas engines emit fewer pollutants, making them suitable for

meeting regulatory requirements while also reducing operational costs. Government support for city gas distribution and increased availability of LNG and CNG are further accelerating this transition. Natural gas engines also support combined heat and power (CHP) applications, enhancing energy efficiency. Industrial users in sectors like manufacturing and IT are adopting these systems to meet both performance and sustainability goals. The reliability, efficiency, and environmental advantages of natural gas engines are making them a preferred choice for next-generation power solutions across India.

Key Market Players

Cummins India Limited

Kirloskar Oil Engines Limited

Mahindra Powerol

Ashok Leyland Limited

Caterpillar India Pvt. Ltd.

Siemens India Limited

Greaves Cotton Limited

Tata Motors Limited

Report Scope:

In this report, the India Power Generation Engines Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

India Power Generation Engines Market, By Fuel Type:

Diesel

Petrol

Gas

India Power Generation Engines Market, By End Use:

Industrial

Commercial

Residential

India Power Generation Engines Market, By Engine Power:

5 – 75 HP

76 – 350 HP

351 – 750 HP

Above 751 HP

India Power Generation Engines Market, By Region:

South India

North India

West India

East India

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the India Power Generation Engines Market.

Available Customizations:

India Power Generation Engines Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
- 1.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Formulation of the Scope
- 2.4. Assumptions and Limitations
- 2.5. Sources of Research
 - 2.5.1. Secondary Research
 - 2.5.2. Primary Research
- 2.6. Approach for the Market Study
 - 2.6.1. The Bottom-Up Approach
 - 2.6.2. The Top-Down Approach
- 2.7. Methodology Followed for Calculation of Market Size & Market Shares
- 2.8. Forecasting Methodology
 - 2.8.1. Data Triangulation & Validation

3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, and Trends

4. VOICE OF CUSTOMER

5. INDIA POWER GENERATION ENGINES MARKET OUTLOOK

- 5.1. Market Size & Forecast

5.1.1. By Value

5.2. Market Share & Forecast

5.2.1. By Fuel Type (Diesel, Petrol, Gas)

5.2.2. By End Use (Industrial, Commercial, Residential)

5.2.3. By Engine Power (5 – 75 HP, 76 – 350 HP, 351 – 750 HP, Above 751 HP)

5.2.4. By Region (South India, North India, West India, East India)

5.2.5. By Company (2025)

5.3. Market Map

6. SOUTH INDIA POWER GENERATION ENGINES MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Fuel Type

6.2.2. By End Use

6.2.3. By Engine Power

7. NORTH INDIA POWER GENERATION ENGINES MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Fuel Type

7.2.2. By End Use

7.2.3. By Engine Power

8. WEST INDIA POWER GENERATION ENGINES MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Fuel Type

8.2.2. By End Use

8.2.3. By Engine Power

9. EAST INDIA POWER GENERATION ENGINES MARKET OUTLOOK

9.1. Market Size & Forecast

- 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Fuel Type
 - 9.2.2. By End Use
 - 9.2.3. By Engine Power

10. MARKET DYNAMICS

- 10.1. Drivers
- 10.2. Challenges

11. MARKET TRENDS & DEVELOPMENTS

- 11.1. Merger & Acquisition (If Any)
- 11.2. Product Launches (If Any)
- 11.3. Recent Developments

12. POLICY AND REGULATORY LANDSCAPE

13. INDIA ECONOMIC PROFILE

14. COMPANY PROFILES

- 14.1. Cummins India Limited
- 14.2. Kirloskar Oil Engines Limited
- 14.3. Mahindra Powerol
- 14.4. Ashok Leyland Limited
- 14.5. Caterpillar India Pvt. Ltd.
- 14.6. Siemens India Limited
- 14.7. Greaves Cotton Limited
- 14.8. Tata Motors Limited
 - 14.8.1. Business Overview
 - 14.8.2. Key Revenue and Financials
 - 14.8.3. Recent Developments
 - 14.8.4. Key Personnel/Key Contact Person
 - 14.8.5. Key Product/Services Offered

15. STRATEGIC RECOMMENDATIONS

16. ABOUT US & DISCLAIMER

I would like to order

Product name: India Power Generation Engines Market, By Fuel Type (Diesel, Petrol, Gas), By End Use (Industrial, Commercial, Residential), By Engine Power (5 – 75 HP, 76 – 350 HP, 351 – 750 HP, Above 751 HP) By Region, Competition, Forecast & Opportunities, 2021-2031F

Product link: <https://marketpublishers.com/r/I73D14501E96EN.html>

Price: US\$ 3,500.00 (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/I73D14501E96EN.html>