

**India Combined Heat Power System Market By Prime Mover (Gas & Steam Turbine, Reciprocating Engine, Fuel Cell and Microturbine), By Capacity (30 kW to 1 MW, 1.1 MW to 5 MW, 5.1 MW to 10 MW and Above 10 MW), By End-User Industry (Industrial, Utilities, Commercial, Others), By Region, Competition, Forecast & Opportunities, 2029F**

Market Report (3 business days) | 2023-10-03 | 83 pages | TechSci Research

**AVAILABLE LICENSES:**

- Single User License \$3500.00
- Multi-User License \$4500.00
- Custom Research License \$7500.00

**Report description:**

The India Combined Heat Power System Market is expected to witness significant growth during the forecast period, 2025-2029. Combined Heat and Power (CHP), also known as cogeneration, is a technology that simultaneously produces electricity and heat on-site. A district energy system, which supplies heat and/or cooling to multiple buildings from a central source via a network of pipes, is a cost-effective solution. The demand for energy in India is high and the CHP system is an effective solution for meeting the increasing energy demands due to its high efficiency and cost-effectiveness. The market for CHP systems in India is driven by several factors, such as the increasing demand for electricity, rising fuel prices, and government initiatives aimed at promoting energy efficiency and clean energy. India's energy demand is expected to double by 2040, and CHP systems can assist in meeting this demand while reducing energy consumption and emissions. The market for combined heat and power systems in India is expected to be driven by growing government initiatives to promote cogeneration production through incentives and subsidies, technological advancements aimed at reducing the cost of CHP systems and increasing in-house energy demand from the industrial and commercial sectors. Moreover, the rising demand for energy-efficient CHP systems and strict government regulations aimed at reducing harmful emissions are expected to have a positive impact on the combined heat and power system market in India during the forecast period.

Increasing demand for electricity

To meet the increasing energy demand, it is crucial to find sustainable and efficient energy solutions that can generate electricity and useful thermal energy from a single fuel source. Combined Heat and Power (CHP) systems are a type of cogeneration system

that can generate electricity and thermal energy simultaneously, making them an attractive option for businesses and industries that require large amounts of energy. CHP systems are highly efficient and can provide significant cost savings compared to traditional energy systems. By utilizing waste heat from power generation, CHP systems can achieve overall efficiency levels of up to 80%, compared to the 35-40% efficiency levels of conventional power generation systems. Moreover, the fuel flexibility of CHP systems allows for the use of various fuel sources such as natural gas, biogas, or biomass, making them suitable for various industrial applications. Businesses and industries across India are increasingly turning to CHP systems as a way to meet their energy needs while reducing costs and improving their energy efficiency. The use of CHP systems in industries such as textile, food processing, and chemical manufacturing has been shown to provide significant cost savings and improve overall efficiency. In conclusion, the growing energy demand in India requires sustainable and efficient solutions to meet the needs of the population and industries. CHP systems are a viable solution that can generate electricity and useful thermal energy from a single fuel source, providing significant cost savings and improving energy efficiency. As a result, CHP systems are increasingly becoming an attractive option for businesses and industries that require large amounts of energy.

#### Rising fuel prices in the country

Fuel prices in India have indeed been volatile over the years, with crude oil prices often fluctuating due to global supply and demand factors. In recent years, the price of petrol and diesel in India has been on an upward trend, with the Indian government regularly adjusting fuel prices to reflect international crude oil prices. India's energy demand is projected to grow more than any other country in the world over the next two decades. This increased demand for energy, coupled with volatile fuel prices, has led to a greater interest in energy-efficient solutions such as Combined Heat and Power (CHP) systems.

CHP systems, also known as cogeneration systems, are capable of generating both electricity and thermal energy from a single fuel source, such as natural gas, biogas, or biomass. By utilizing waste heat from power generation, CHP systems can achieve overall efficiency levels of up to 80%, compared to the 35-40% efficiency levels of conventional power generation systems. Businesses and industries in India have been increasingly turning to CHP systems as a way to reduce their energy costs and improve their energy efficiency. Moreover, the Indian government has been promoting the use of CHP systems as part of its efforts to improve energy efficiency and reduce greenhouse gas emissions. In 2018, the Ministry of Power launched the "Perform, Achieve, and Trade" (PAT) scheme, which incentivizes industries to adopt energy-efficient technologies such as CHP systems. Under the scheme, industries are given energy efficiency targets and are eligible for tradable energy-saving certificates if they achieve or surpass these targets. In conclusion, the rising fuel prices in India, coupled with increasing energy demand, have made energy-efficient solutions such as CHP systems an attractive option for businesses and industries looking to reduce their energy costs and improve their sustainability.

#### Government Initiatives

The Indian government has launched several initiatives to promote energy efficiency and clean energy, such as the National Solar Mission and the National Energy Efficiency Mission. These initiatives are aimed at promoting the adoption of renewable energy and energy-efficient technologies such as CHP systems. The government also offers incentives and subsidies to businesses and industries that adopt CHP systems, which is driving the adoption of CHP systems in India.

#### Technological Advancements

The technological advancements in CHP systems are driving their adoption in India. Newer and more efficient CHP systems are being developed that can generate electricity and thermal energy from a wider range of fuel sources, making them more versatile and attractive to businesses and industries. The advancements in digital technologies are also making it easier to monitor and optimize CHP systems, further driving their adoption in India.

In conclusion, the India CHP market is driven by several factors, including increasing demand for electricity, rising fuel prices, government initiatives, environmental concerns, and technological advancements. These drivers are promoting the adoption of CHP systems in India, making them an attractive option for businesses and industries that are looking to reduce their energy costs, increase their energy efficiency, and reduce their environmental impact.

The India CHP system market is expected to grow at a steady rate owing to increasing energy demand, rising fuel prices, and government initiatives to promote clean energy and energy efficiency. The market is highly competitive and key players are focusing on product innovation and partnerships to strengthen their market position. However, the market is also restrained by several factors such as high initial costs, lack of awareness and technical expertise, and limited infrastructure. To fully realize the

potential of CHP systems in India, there is a need for increased awareness, technical expertise, and supportive infrastructure.

#### Market Segments

The India Combined Heat Power System market is segmented on the basis of prime mover, capacity, end user industry and region. Based on prime mover, the market is further segmented into gas & steam turbine, reciprocating engine, fuel cell and microturbine. Based on capacity, the market is further divided into 30 kW to 1 MW, 1.1 MW to 5 MW and 5.1 MW to 10 MW and above 10 MW. Based on end-user industry, the market is further split into industrial, utilities, commercial and others. On the basis of region, the market is divided into East India, West India, North India, and South India.

#### Market Players

Major market players in India Combined Heat Power System Market are Bharat Heavy Electricals Limited, Thermax India Limited, MTS Systems Corporation, GE Power India Limited, Cummins India Limited, Enercon India Limited, Triveni Turbine, ABB Power Products and Systems India Ltd., Tinius Olsen India Pvt. Ltd, and Shimadzu Corporation. To achieve good market growth, businesses that are active in the market employ organic tactics such as product launches, mergers, and partnerships.

#### Report Scope:

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

##### □ India Combined Heat Power System Market, By Prime Mover

- o □ Gas & Steam Turbine
- o □ Reciprocating Engine
- o □ Fuel Cell
- o □ Microturbine

##### □ India Combined Heat Power System Market, By Capacity

- o □ 30 kW to 1 MW
- o □ 1.1 MW to 5 MW
- o □ 5.1 MW to 10 MW

##### □ India Combined Heat Power System Market, By End User Industry

- o □ Industrial
- o □ Utilities
- o □ Commercial
- o □ Others

##### □ India Combined Heat Power System Market, By Region:

- o □ East India
- o □ West India
- o □ North India
- o □ South India

#### Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in India Combined Heat Power System Market

#### Available Customizations:

With the given market data, Tech Sci 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).

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

##### 1.□ Product Overview

###### 1.1.□ Market Definition

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

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

[www.scotts-international.com](http://www.scotts-international.com)

- 1.2. Scope of the Market
- 1.3. Markets Covered
- 1.4. Years Considered for Study
- 1.5. Key Market Segmentations
- 2. Research Methodology
  - 2.1. Objective of the Study
  - 2.2. Baseline Methodology
  - 2.3. Key Industry Partners
  - 2.4. Major Association and Secondary Sources
  - 2.5. Forecasting Methodology
  - 2.6. Data Triangulation & Validation
  - 2.7. Assumptions and Limitations
- 3. Executive Summary
- 4. Voice of Customer
- 5. India Combined Heat Power System Market Outlook
  - 5.1. Market Size & Forecast
    - 5.1.1. By Value
    - 5.2. Market Share & Forecast
      - 5.2.1. By Prime Mover (Gas & Steam Turbine, Reciprocating Engine, Fuel Cell and Microturbine)
      - 5.2.2. By Capacity (30 kW to 1 MW, 1.1 MW to 5 MW, 5.1 MW to 10 MW)
      - 5.2.3. By End User Industry (Industrial, Utilities, Commercial, Others)
      - 5.2.4. By Region (South, North, West, East)
      - 5.2.5. By Company (2023)
    - 5.3. Market Map
  - 6. South India Combined Heat Power System Market Outlook
    - 6.1. Market Size & Forecast
      - 6.1.1. By Value
      - 6.2. Market Share & Forecast
        - 6.2.1. By Prime Mover
        - 6.2.2. By Capacity
        - 6.2.3. By End User Industry
  - 7. North India Combined Heat Power System Market Outlook
    - 7.1. Market Size & Forecast
      - 7.1.1. By Value
      - 7.2. Market Share & Forecast
        - 7.2.1. By Prime Mover
        - 7.2.2. By Capacity
        - 7.2.3. By End User Industry
  - 8. West India Combined Heat Power System Market Outlook
    - 8.1. Market Size & Forecast
      - 8.1.1. By Value
      - 8.2. Market Share & Forecast
        - 8.2.1. By Prime Mover
        - 8.2.2. By Capacity
        - 8.2.3. By End User Industry
  - 9. East India Combined Heat Power System Market Outlook
    - 9.1. Market Size & Forecast

- 9.1.1.□By Value
- 9.2.□Market Share & Forecast
- 9.2.1.□By Prime Mover
- 9.2.2.□By Capacity
- 9.2.3.□By End User Industry
- 10.□Market Dynamics
- 10.1.□Drivers
- 10.2.□Challenges
- 11.□Market Trends & Developments
- 12.□Policy & Regulatory Landscape
- 13.□India Economic Profile
- 14.□Company Profiles
- 14.1.□Bharat Heavy Electricals Limited
  - 14.1.1.□Business Overview
  - 14.1.2.□Key Revenue (If Available)
  - 14.1.3.□Recent Developments
  - 14.1.4.□Key Personnel
  - 14.1.5.□Key Product/Service Offered
- 14.2.□Thermax India Limited
  - 14.2.1.□Business Overview
  - 14.2.2.□Key Revenue (If Available)
  - 14.2.3.□Recent Developments
  - 14.2.4.□Key Personnel
  - 14.2.5.□Key Product/Service Offered
- 14.3.□ABB POWER PRODUCTS AND SYSTEMS INDIA LTD.
  - 14.3.1.□Business Overview
  - 14.3.2.□Key Revenue (If Available)
  - 14.3.3.□Recent Developments
  - 14.3.4.□Key Personnel
  - 14.3.5.□Key Product/Service Offered
- 14.4.□Enercon India Limited
  - 14.4.1.□Business Overview
  - 14.4.2.□Key Revenue (If Available)
  - 14.4.3.□Recent Developments
  - 14.4.4.□Key Personnel
  - 14.4.5.□Key Product/Service Offered
- 14.5.□Triveni Turbine
  - 14.5.1.□Business Overview
  - 14.5.2.□Key Revenue (If Available)
  - 14.5.3.□Recent Developments
  - 14.5.4.□Key Personnel
  - 14.5.5.□Key Product/Service Offered
- 14.6.□Siemens Limited
  - 14.6.1.□Business Overview
  - 14.6.2.□Key Revenue (If Available)
  - 14.6.3.□Recent Developments
  - 14.6.4.□Key Personnel

14.6.5.□Key Product/Service Offered

14.7.□GE Power India Limited

14.7.1.□Business Overview

14.7.2.□Key Revenue (If Available)

14.7.3.□Recent Developments

14.7.4.□Key Personnel

14.7.5.□Key Product/Service Offered

14.8.□Tinius Olsen India Pvt. Ltd

14.8.1.□Business Overview

14.8.2.□Key Revenue (If Available)

14.8.3.□Recent Developments

14.8.4.□Key Personnel

14.8.5.□Key Product/Service Offered

14.9.□ Cummins India Limited

14.9.1.□Business Overview

14.9.2.□Key Revenue (If Available)

14.9.3.□Recent Developments

14.9.4.□Key Personnel

14.9.5.□Key Product/Service Offered

14.10.□Shimadzu Corporation

14.10.1.□Business Overview

14.10.2.□Key Revenue (If Available)

14.10.3.□Recent Developments

14.10.4.□Key Personnel

14.10.5.□Key Product/Service Offered

15.□Strategic Recommendations

16.□About Us & Disclaimer

(Note: The companies list can be customized based on the client requirements.)

**India Combined Heat Power System Market By Prime Mover (Gas & Steam Turbine, Reciprocating Engine, Fuel Cell and Microturbine), By Capacity (30 kW to 1 MW, 1.1 MW to 5 MW, 5.1 MW to 10 MW and Above 10 MW), By End-User Industry (Industrial, Utilities, Commercial, Others), By Region, Competition, Forecast & Opportunities, 2029F**

Market Report (3 business days) | 2023-10-03 | 83 pages | TechSci Research

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User License	\$3500.00
	Multi-User License	\$4500.00
	Custom Research License	\$7500.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>

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

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

[www.scotts-international.com](http://www.scotts-international.com)

Address\*

Zip Code\*

City\*

Country\*

Date

Signature

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

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

[www.scotts-international.com](http://www.scotts-international.com)