

UK Combined Heat And Power (CHP) - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2020 - 2029

Market Report | 2024-02-17 | 150 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 UK Combined Heat And Power Market size is estimated at USD 74.08 million in 2024, and is expected to reach USD 99.74 million by 2029, growing at a CAGR of 6.13% during the forecast period (2024-2029).

The market was negatively impacted by COVID-19 in 2020. Presently the market has now reached pre-pandemic levels.

Key Highlights

- Over the medium term, growing emphasis on energy-efficient technology that generates electricity and increasing investments in CHP-based power projects are also expected to drive the growth of the market studied.
- On the other hand, geopolitical tensions and increasing natural gas prices are expected to impose challenges on the combined heat and power market in the United Kingdom and may negatively impact the market's growth and are one of the major restraints for the market.
- Nevertheless, increasing demand for distributed power generation and space heating coupled with technological advancements are expected to drive and create significant amount of opportunities for the market players.

UK Combined Heat and Power (CHP) Market Trends

Commercial and Transportation Segment is Expected to have as Significant Share in the Market

- In the commercial end-user segment, the Combined Heat, and Power (CHP) systems are typically installed at hotels,

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

supermarkets, office buildings, sports centers, hospitals, data centers, and shopping centers, providing energy independence and security. As these systems are relatively larger, and noise is a lesser concern, commercial systems are primarily internal combustion engine CHPs with higher electrical efficiency. However, with falling costs and the rising efficiency of fuel cell technology, fuel cell-based CHP systems are also becoming increasingly adopted by commercial end-users.

- The hydrogen-based fuel cell (CHP) technology is an area of the automotive industry that is becoming increasingly essential as manufacturers commit to developing this type of power train. Like electric cars, hydrogen-powered fuel cell electric vehicles (FCEVs) are classed as ultra-low emission vehicles (ULEVs) since water vapor is the only substance that comes from the exhaust.
- The commercial end-user segment in the United Kingdom is expected to witness a notable adoption of CHP systems due to the developments and the rising applications in commercial buildings, offices, hotels, hospitals, etc., during the forecast period.
- Supermarkets are one of the major end-users of commercial CHP systems, which most of the total energy consumption in supermarkets is from refrigeration, lighting, and HVAC systems, with refrigeration responsible for nearly 1/3rd of the total energy consumption. As the energy requirement in the retail sector is significantly lower during non-operational hours and subject to seasonal variations, commercial CHP systems need to be sized accordingly to match demand spikes. In supermarkets, CHP systems (usually based on ICEs) are installed directly in loco, which could cover both electricity and heat loads, or at least a part of them.
- The construction activity around the country has also been increasing in recent times. According to the Office of National Statistics, the total value of new orders for construction in the private commercial sector increased to about USD 17,960 million in 2022, an increase of around 35% compared to 2020. These are likely to surge the growth of CHP systems in the country during the forecast period.
- Therefore, owing to the above-mentioned points, commercial and transportation segment is expected to have a significant share in the United Kingdom's combined heat and power (CHP) market during the forecast period.

Increasing Natural Gas Price is Expected to Restrain the Market Demand

- Natural Gas is one of the essential sources of energy, and the utilization of natural gas in gas engines is characterized by the lowest carbon dioxide emissions levels of all fossil fuels, which is in line with the United Kingdom's goal to reduce greenhouse gas emissions. In addition, according to the United Kingdom's Department for Business, Energy, and Industrial Strategy, using natural gas as a fuel for Combined Heat and Power (CHP) units reduce nitrogen oxide emissions and virtually contains no sulfur or contaminants.
- Factors such as circumstances, such as soaring demand for natural gas in Asia and South America, diminished gas supply from Russia to the European markets due to the invasion of Russia on Ukraine, low gas stocks, and a series of breakdowns at various electrical facilities, consumers in the United Kingdom faced a significant increase in gas prices. Consumers, utility companies, and businesses using CHP units dependent on natural gas are impacted.
- The primary cause of the natural gas price rise has been a surge in the wholesale price of natural gas globally. Domestic supply covers approximately 40% of the United Kingdom's needs. At the same time, the rest is imported from neighboring countries, such as Norway and the Netherlands. Further, afield in Qatar and the United States, and Russia supplies around 5% of the United Kingdom market.
- According to Digest of UK Energy Statistics (DUKES), the United Kingdom had around 2,016 CHP sites in 2021, witnessing a decrease of 236 combined heat and power (CHP) areas compared to 2020.
- Moreover, In February 2022, Russia's invasion of Ukraine in a horrific escalation of a war that started in February 2022 further spiked the natural gas prices. In March 2022, the Natural Gas spot prices in the United Kingdom were 511 pence/therm witnessing an increase of 139% as compared to the previous year. Further, according to Office for National Statistics (UK), in 2022, the average consumer price index for gas in the United Kingdom stood at 164.7 index points.
- Thus, owing to the above points, increasing natural gas prices will likely hamper the combined heat and power (CHP) market in the United Kingdom during the forecast period.

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

UK Combined Heat and Power (CHP) Industry Overview

The UK combined heat and power (CHP) market is semi-consolidated. The key players in the market (in no particular order) include General Electric Company, Siemens Energy AG, Ramboll Group, Centrica PLC, and Caterpillar Inc., among others.

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, till 2028

4.3 Recent Trends and Developments

4.4 Government Policies and Regulations

4.5 Market Dynamics

4.5.1 Drivers

4.5.1.1 Increasing Investments in the CHP-Based Power Projects

4.5.1.2 Supportive Government Policies And Incentives To Develop And Operate CHP Plants

4.5.2 Restraints

4.5.2.1 Increasing Natural Gas Prices in the United Kingdom

4.6 Supply Chain Analysis

4.7 PESTLE Analysis

4.8 CHP Power Plant Statistics, 2014-2022 (by Number and Capacity)

4.9 CHP Power Plant Fuel Used Statistics (by Fuel Type and Sector)

5 MARKET SEGMENTATION

5.1 End User

5.1.1 Industrial Sector

5.1.2 Commercial and Transportation Sector

5.1.3 Other End Users (Agriculture, Community Heating, Leisure, etc.)

5.2 Type

5.2.1 Gas Turbine

5.2.2 Steam Turbine

5.2.3 Other Types (Reciprocating Engine and Organic Rankine Cycle CHP)

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com

6 COMPETITIVE LANDSCAPE

6.1 Mergers and Acquisitions, Joint Ventures, Collaborations, and Agreements

6.2 Strategies Adopted by Leading Players

6.3 Company Profiles

6.3.1 Caterpillar Inc.

6.3.2 Centrica PLC

6.3.3 General Electric Company

6.3.4 Mitsubishi Power Ltd

6.3.5 Siemens Energy AG

6.3.6 Ramboll Group

6.3.7 Helec Limited

6.3.8 Tedom AS

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

7.1 Technological Advancements in Combined Heat And Power (CHP) Systems

UK Combined Heat And Power (CHP) - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2020 - 2029

Market Report | 2024-02-17 | 150 pages | Mordor Intelligence

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	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		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"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-04"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

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

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

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