

Global Market for Fuel Cells for Residential, Commercial and Military Power

Market Research Report | 2026-01-13 | 125 pages | BCC Research

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Report description:

Description

Report Scope

The scope of this report encompasses the segmental analysis by fuel cell type, application and end use. The report also discusses innovations in fuel cells for residential, commercial and military power technology, regulatory analysis, competitive aspects, energy transition and economic trends that influence the market. The analyst has included patent analysis for the global market for fuel cells in residential, commercial and military power, depicting a strong investment prospect for technology investors. The study comprises Porter's analysis, an ESG development chapter, macroeconomic factors and a competitive landscape, enabling the reader to understand the competitive environment in the global market more precisely. The report concludes by providing detailed profiles of the major companies that offer fuel cells for residential, commercial and military power.

The report also includes a regional analysis of fuel cells for residential, commercial and military power that covers North America, Europe, Asia-Pacific and the Rest of the World (South America and the Middle East and Africa). The country analysis, which includes the U.S., the U.K., South Korea, Japan and China, further examines current and future factors influencing the demand. The year 2024 is considered the base year, and 2025 is an estimated year. Market values are forecast for five years through 2030. All market values are in millions of U.S. dollars (\$).

Report Includes

- 41 data tables and 49 additional tables
- In-depth analysis of the global market for fuel cells for residential, commercial and military power
- Analyses of the global market trends, with revenue data for 2024, estimates for 2025, forecasts for 2028 and 2029, as well as projected CAGRs through 2030
- Estimates of the market size and revenue growth prospects, accompanied by a market share analysis by fuel cell type, application, end user and region
- Facts and figures pertaining to market dynamics, technological advances, regulations, prospects and the impact of macroeconomic variables

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- Insights derived from Porter's Five Forces model, as well as global supply chain analyses
- Upcoming trends and technologies, and potential applications for fuel cells in residential, commercial and military power
- Patent review, featuring key granted and published patents
- Analysis of the industry structure, including companies' market shares and rankings, product mappings, strategic initiatives, M&A activity and a venture funding outlook
- Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, as well as the ESG risk ratings and practices of leading companies
- Profiles of the leading companies, including Bloom Energy, Mitsubishi Heavy Industries Ltd., Doosan Fuel Cell Co. Ltd., FuelCell Energy Inc., and Kyocera Corp.

Executive Summary

Summary:

The global market for fuel cells for residential, commercial and military power is estimated to grow from \$4.6 billion in 2025 to reach \$10.7 billion by 2030, at a compound annual growth rate (CAGR) of 18.4% from 2025 to 2030.

Hydrogen fuel cells represent a clean and efficient alternative to traditional power generation. The growing use of fuel cells in stationary applications, such as electricity generation for residential use and microgrids, is driving market growth. Government regulations and incentives encourage widespread deployment of fuel cells to achieve net-zero emissions. The expansion of fuel cell infrastructure, ongoing investments in hydrogen infrastructures and advances in fuel cell technology are driving demand for fuel cells for residential, commercial and military power. Many companies are focused on R&D and innovations in fuel cell technology. For example, in November 2024, Nimbus Power Systems and Toshiba Energy Systems & Solutions Corp. jointly developed a next-generation pure hydrogen fuel cell stack for portable applications and stationary uses, resulting in the growth of the market for fuel cells for residential, commercial and military power.

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BLOOM ENERGY
CONVION LTD.

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NEDSTACK FUEL CELL TECHNOLOGY
PLUG POWER INC.
POWERCELL SWEDEN AB
TOSHIBA ENERGY SYSTEMS & SOLUTIONS CORP.
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