

Carbon-neutral Fuels Market Size, Share & Trends Analysis Report By Type (Biofuels, E-fuels, Green Hydrogen), By Application, By Region, And Segment Forecasts, 2025 - 2033

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Abstracts

The global carbon-neutral fuels market size was estimated at USD 98.67 billion in 2024 and is projected to reach USD 184.36 billion by 2033, growing at a CAGR of 7.2% from 2025 to 2033. The global transition toward low-carbon energy alternatives and stricter environmental regulations across developed economies continues to serve as a significant growth driver for the carbon-neutral fuels sector.

Over the past few years, the transportation, industrial, and power generation sectors have increasingly adopted carbon-neutral fuels to reduce greenhouse gas (GHG) emissions, driving steady market expansion. Biofuels, e-fuels, and green hydrogen have emerged as dominant contributors, reflecting the broader push toward sustainable energy sources and the decarbonization of traditional fuel systems.

In the United States, market growth is supported by federal and state-level incentives, including subsidies for sustainable aviation fuels (SAF) and biofuel blending mandates. The growing adoption of biofuels in transportation and industrial applications is further reinforced by abundant renewable feedstock, particularly biomass and waste-derived fuels. The country's energy transition is accelerating as natural gas and carbon-neutral alternatives increasingly replace conventional fossil fuels, while rising fuel prices and corporate sustainability targets create additional demand. These factors, combined with ongoing investment in R&D for e-fuels and green hydrogen, are expected to sustain strong market momentum throughout the forecast period.

Europe represents a key market for carbon-neutral fuels, with Germany at the forefront

due to its aggressive decarbonization policies and renewable energy infrastructure. Investments in sustainable aviation fuel production, advanced biofuels, and hydrogen technologies have been instrumental in accelerating market growth. As the country continues to reduce dependence on imported fossil fuels, it is expected to drive significant regional demand for carbon-neutral fuels. The broader adoption of e-fuels and green hydrogen across European transportation and industrial sectors will further reinforce the region's contribution to the global market.

Global Carbon-neutral Fuels Market Report Segmentation

This report forecasts revenue growth at global, regional, and country levels and provides an analysis of the latest industry trends in each of the sub-segments from 2021 to 2033. For this study, Grand View Research has segmented the global carbon-neutral fuels market report based on the type, application, and region:

Type Outlook (Revenue, USD Billion, 2021 - 2033)

Biofuels

E-fuels

Green Hydrogen

Other Alternative Fuels

Application Outlook (Revenue, USD Billion, 2021 - 2033)

Transportation

Power Generation

Industrial Use

Residential & Commercial

Regional Outlook (Revenue, USD Billion, 2021 - 2033)

North America

U.S.

Canada

Mexico

Europe

Germany

UK

France

Asia Pacific

China

India

Japan

South Korea

Latin America

Brazil

Middle East & Africa

Saudi Arabia

UAE

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