

Biofuel Market by Fuel Type (Ethanol, Biodiesel, Renewable Diesel, and Biojets), Generation (First Generation, Second Generation, Third Generation), End-use, Application (Transportation, Aviation) and Region - Global Forecast to 2028

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Report description:

The global biofuel market is estimated to grow from USD 167.4 Billion in 2023 to USD 225.9 Billion by 2028; it is expected to record a CAGR of 6.2% during the forecast period. The growth is attributed to the rising demand for cleaner fuels worldwide. This demand is expected to continue to grow in the coming years as the world seeks to transition to a cleaner and more sustainable energy future. In addition, supportive government policies such as tax credits and bending mandates are another key reason driving the growth of the biofuel market.

"Biodiesel: The second-largest segment of the biofuel market, by fuel type. "

Based on fuel type, the biofuel market has been split into four types: ethanol, biodiesel, renewable diesel, and biojets. The biodiesel segment is expected to hold the second largest market share during the forecast period. Biodiesel is generally produced from feedstocks, such as vegetable oils and animal fats. The utilization of renewable feedstocks decreases reliance on finite fossil fuel resources while also enhancing energy security. The growing initiatives to reduce carbon emissions from the transport sector is one of the important factor driving the growth of the biodiesel segment in the biofuel market.

"First Generation segment is expected to be the largest segment during the forecast period based on generation."

By generation, the biofuel market has been segmented into the first-generation, second generation and third generation. The first generation segment is expected to hold the largest market share during the forecast period. First generation biofuels are produced from food crops, such as corn, sugarcane, and soybeans. These crops are high in starch, sugar, or oil, which can be converted into biofuels through fermentation or other chemical processes. Easily accessible raw materials and the extensive use of biofuel in many countries will boost the biofuel market in the first generation segment.

"By end use, the transportation segment is expected to be the largest segment during the forecast period."

Based on the end use, the biofuel market is segmented into transportation, aviation, and others. The transportation segment is

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expected to be the largest segment of the biofuel market during the forecast period. Biofuels can be used in transportation applications in a variety of ways. For example, biodiesel can be used in pure form or blended with diesel fuel. Ethanol can be used in pure form or blended with gasoline. Biofuels can also be used to produce other types of transportation fuels, such as renewable diesel. The mitigation of carbon emissions from the transport sector globally is one of the key factors accelerating the usage of biofuels in the transport sector.

"North America is expected to be the largest region in the biofuel market."

North America is expected to be the largest region in the biofuel market during the forecast period. Growth is attributed to the rising investments in deploying biorefineries and a highly optimistic outlook for the renewable energy industry in the region. Further, according to the BP Statistical Review of World Energy 2022, 38.5% of the total renewable biofuel produced in North America is consumed in the region. The majority of biofuel usage is in the form of a blend with refined petroleum products including gasoline, diesel fuel, heating oil and jet fuel. This shift from predominantly conventional fuels to biofuels is expected to drive the biofuel market in the region. Moreover, the favorable government policies and programs intended to promote the usage of biofuels are also expected to drive the biofuel market in North America.

Breakdown of Primaries:

In-depth interviews have been conducted with various key industry participants, subject-matter experts, C-level executives of key market players, and industry consultants, among other experts, to obtain and verify critical qualitative and quantitative information and assess future market prospects. The distribution of primary interviews is as follows:

By Company Type: Tier 1- 65%, Tier 2- 24%, and Tier 3- 11%

By Designation: C-Level- 30%, Director Level- 25%, and Others- 45%

By Region: North America- 40%, Europe- 25%, Asia Pacific-25%, Rest of the World - 10%,

Note: Others include sales managers, engineers, and regional managers.

Note: The tiers of the companies are defined on the basis of their total revenues as of 2022. Tier 1: > USD 1 billion, Tier 2: From USD 500 million to USD 1 billion, and Tier 3: < USD 500 million

The biofuel market is dominated by a few major players that have a wide regional presence. The leading players in the biofuel market are ADM (US), Chevron (US), Valero (US), Neste (Finland), and Cargill, Incorporated (US). The major strategy adopted by the players includes new product launches, contracts & agreements, partnerships, collaborations, joint ventures, mergers and acquisitions, and investments & expansions.

Research Coverage:

The report defines, describes, and forecasts the global biofuel market by fuel type, generation, end use, and region. It also offers a detailed qualitative and quantitative analysis of the market. The report comprehensively reviews the major market drivers, restraints, opportunities, and challenges. It also covers various important aspects of the market. These include an analysis of the competitive landscape, market dynamics, market estimates in terms of value, and future trends in the biofuel market.

Key Benefits of Buying the Report

-□A transition toward the adoption of renewable energy sources and rising demand for cleaner fuels are a few of the key factors driving the biofuel market. Factors such as a high initial investment for setting up the biorefineries restrain the growth of the market. High rate depletion of fossil fuels and supportive government policies and programs to promote biofuels are expected to present lucrative opportunities for the players operating in the biofuel market. The variability and high cost of feedstocks pose a major challenge for the players, especially for emerging players operating in the biofuel market.

-□Product Development/ Innovation: The biofuel market is witnessing significant product development and innovation, driven by the growing demand for biofuels in the transportation and aviation sectors. Companies are investing in developing advanced biofuel types using second-generation feedstocks such as used cooking oil, animal fats, and other agricultural residues.

-□Market Development: Neste acquired Crimson Renewable Energy Holdings, LLC's used cooking oil (UCO) collecting and aggregation business and related assets. This acquisition strengthens Neste's global raw materials sourcing platform.

-□Market Diversification: Chevron Renewable Energy Group launched its line of branded fuel solutions, EnDura Fuels, a line which produces many types of renewable fuel including InfinD, PuriD which is next-generation biodiesel, UltraClean, VelociD, and BeyondD. These products help aviation, marine, trucking, rail, and other industries reach sustainability targets by using

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cleaner-burning and lower-emission fuels.

-Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players, like include ADM (US), Chevron (US), Valero (US), Neste (Finland), and Cargill, Incorporated (US), among others in the biofuel market.

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**Biofuel Market by Fuel Type (Ethanol, Biodiesel, Renewable Diesel, and Biojets),
Generation (First Generation, Second Generation, Third Generation), End-use,
Application (Transportation, Aviation) and Region - Global Forecast to 2028**

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