

Biofuels: Global Markets

https://marketpublishers.com/r/BCD67CDA2A3BEN.html

Date: October 2023

Pages: 106

Price: US\$ 5,500.00 (Single User License)

ID: BCD67CDA2A3BEN

Abstracts

Report Scope:

This BCC Research report presents an overview of biofuel types, manufacturing methods, feedstock options, typical plant costs, and operating margins, followed by an analysis of major geographical markets: North America, Europe, South America, Asia-Pacific, Africa, and the Middle East. Each regional evaluation includes market size estimates for ethanol, biodiesel, and other fuel types sales and a forecast for growth to 2028. The report also presents the technical and commercial developments in advanced biofuels and emerging technologies in the biofuel sector. The report concludes with a competitive landscape of the global biofuel market. The report will also discuss emerging technologies in the biofuel sector and conclude with company profiles of the various players in the area.

Report Includes:

18 data tables and 27 additional tables

An overview of the global markets for liquid biofuels

An estimate of market size and analyses of global market trends, with data from 2022, estimates for 2023, and projections of compound annual growth rates (CAGRs) through 2028

An evaluation of the market potential for biofuels based on biofuel type and region

Coverage of technical and commercial developments in advanced biofuels, and an assessment of manufacturing methods, feedstock options, typical plant costs,



operating margins, and the emerging technologies in the biofuel sector

A look at the regulatory framework regarding the use of biofuels, incentives for fuel production, and the number and capacity of manufacturing plants; and information on the Paris Climate Accords, investments in biofuel technologies, and collaborations between companies

Analysis of significant patent activity in biofuels

A market outlook for the major companies, including a market share analysis and assessment of the competitive landscape

Company profiles of major players within the industry, including ADM, Chevron Renewable Energy Group, Green Plains Inc., and HF Sinclair Corp.



Contents

CHAPTER 1 INTRODUCTION

Study Goals and Objectives
Reasons for Doing This Study
Scope of Report
What's New in this Update?
Methodology
Information Sources
Geographic Breakdown

CHAPTER 2 SUMMARY AND HIGHLIGHTS

Market Outlook Summary

CHAPTER 3 MARKET OVERVIEW

Introduction

Biofuel Evolution

First-Generation Biofuels

Second-Generation Biofuels

Third-Generation Biofuels

Fourth-Generation Biofuels

Yield

Net Energy Yield

Conversion Routes for Biofuels Production

Types of Biofuels

Ethanol

Corn Ethanol

Corn Ethanol Manufacturing

Cellulosic Ethanol

Ethanol Blending

Coproducts of Ethanol Production

Ethanol Plant Costs

Biodiesel

Biodiesel Manufacturing

Transesterification



Post-Reaction Processes

Biodiesel Blending

Coproducts of Biodiesel Manufacturing

Biodiesel Plant Costs

Renewable Diesel

Sustainable Aviation Fuel (SAF)

Other Biofuels

Straight Vegetable Oil/Pure Vegetable Oil

Wood Diesel

Biobutanol

Biobutanol Manufacturing

Hydrothermal Upgrading Diesel

Fischer-Tropsch Biofuels

Fischer-Tropsch Manufacturing

Algal Fuel (Oilgae)

Biomethanol

Dimethylfuran

Bio-DME

Green Gasoline

Designer Hydrocarbons

Share of Biofuels in World Energy Matrix

CHAPTER 4 MARKET DYNAMICS

Market Trends

Growing Demand for Low-Carbon Intensive Fuel

Stringent Policies

Food Crops to Remain as a Major Feedstock

Market Drivers

Environmental Policies and Incentives

Growing Demand for Sustainable Aviation Fuels (SAF)

Energy Security

Market Challenges

Feedstock Availability

CHAPTER 5 BIOFUEL MARKET BY FUEL TYPE

Introduction

Global Biofuel Market by Fuel Type



Global Market by Region

North America

Europe

South America

Asia-Pacific

Middle East and Africa

CHAPTER 6 BIOFUELS MARKET BY REGION

Global Market for Biofuels by Region

Global Market by Region

North America

Europe

South America

Asia-Pacific

Middle East and Africa

CHAPTER 7 SUSTAINABILITY IN BIOFUELS INDUSTRY: AN ESG PERSPECTIVE

Introduction

ESG Issues

Environmental Issues

Social Issues

Biofuel Industry ESG Performance Analysis

Consumer Attitudes Towards ESG

ESG Practices by Companies

ESG Risk and Opportunities

Opportunities in Implementing ESG in Biofuel Companies

Risks in Implementing ESG in Biofuel Companies

Case Study

ESG Performance of Neste: Driving Sustainable Innovation in the Biofuel Industry

Concluding Remarks from BCC

CHAPTER 8 EMERGING TECHNOLOGIES AND DEVELOPMENTS

Introduction

Emerging Technology

Technology Innovation

Innovative Technology in Feedstock



Los Alamos National Laboratory (LANL) Innovative Technology in Process

CHAPTER 9 COMPETITIVE INTELLIGENCE AND M&A

Market Share

Strategies

Feedstock Diversification

New Technologies

Partnership and Capacity Expansion

Product Diversification

Vertical Integration

Mergers & Acquisitions

Investments in Biofuels

CHAPTER 10 COMPANY PROFILES

Introduction

Company Profiles

ADM

CARGILL

CHEVRON RENEWABLE ENERGY GROUP

GREEN PLAINS INC.

HF SINCLAIR CORP.

MARQUIS

POET LLC



List Of Tables

LIST OF TABLES

Summary Table: Global Market for Biofuels, by Fuel Type, Through 2028

Table 1 : Energy Content of Commercial Fuels

Table 2: Relative Yield of Current and Proposed Biofuel Feedstocks

Table 3: Relative Yield of Current and Proposed Cellulosic Ethanol Feedstocks

Table 4: Net Energy Yield of Current and Proposed Biofuel Feedstock

Table 5: Feedstocks for Ethanol Production

Table 6: Corn Ethanol Feedstock Requirements, by Plant Size

Table 7: Estimated Capital and Operating Costs, by Ethanol Plant Size

Table 8: Feedstocks for Biodiesel Production

Table 9: Biodiesel Production Costs

Table 10 : Certified SAF Conversion Pathways

Table 11: Promising Algae for Biodiesel Manufacture

Table 12: Global Market for Biofuels, by Fuel Type, Through 2028

Table 13: North American Market for Biofuels, by Fuel Type, Through 2028

Table 14: European Market for Biofuels, by Fuel Type, Through 2028

Table 15: South American Market for Biofuels, by Fuel Type, Through 2028

Table 16: Asia-Pacific Market for Biofuels, by Fuel Type, Through 2028

Table 17: MEA Market for Biofuels, by Fuel Type, Through 2028

Table 18: Global Market for Biofuels, by Region, Through 2028

Table 19: North American Market for Biofuels, by Country, Through 2028

Table 20: European Market for Biofuels, by Country, Through 2028

Table 21: South American Market for Biofuels, by Country, Through 2028

Table 22: Asia-Pacific Market for Biofuels, by Country, Through 2028

Table 23: MEA Market for Biofuels, by Country, Through 2028

Table 24: Environment Performance of Biofuel Companies

Table 25: Social Performance of Biofuel Companies

Table 26 : Governance Performance of Biofuel Companies

Table 27: ESG Related Investments, by Neste

Table 28: Biofuel Production Share & Ranking, by Country/Region

Table 29: Largest Biodiesel Producers in the U.S., January 2023

Table 30: Largest Ethanol Producers in the U.S., January 2023

Table 31: Largest HDRD Producers in the EU

Table 32: M&A Activities in Biofuel Industry, 2022

Table 33: ADM: Annual Revenue, 2022

Table 34 : ADM: News, 2021-2023



Table 35 : Cargill: News, 2021-2023

Table 36: Chevron Renewable Energy Group: Annual Revenue, 2021

Table 37: Chevron Renewable Energy Group: News, 2022

Table 38 : Chevron Renewable Energy Group: Biofuel Product Portfolio

Table 39: Green Plains Inc.: Annual Revenue, 2022

Table 40: Green Plains Inc.: News, 2023

Table 41: HF Sinclair Corp.: Annual Revenue, 2022

Table 42: HF Sinclair Corp.: News, 2023

Table 43 : Marquis: News, 2023 Table 44 : POET LLC: News, 2023



List Of Figures

LIST OF FIGURES

Summary Figure: Global Market for Biofuels, by Fuel Type, 2022-2028

Figure 1: Relative Yield of Current and Proposed Biofuel Feedstocks

Figure 2: Relative Yield of Current and Proposed Cellulosic Ethanol Feedstocks

Figure 3: Thermal, Biological, and Chemicals Routes to Biofuels

Figure 4: Ethanol Production Facility

Figure 5 : Cellulosic Ethanol Manufacturing Process

Figure 6 : Shares of Biodiesel Production Costs, by Segment

Figure 7: Renewable Diesel Manufacturing Process Via Hydrotreating

Figure 8: Net Energy Yield of Current and Proposed Biofuel Feedstocks

Figure 9: Global Energy Matrix Shares, by Fuel Type/Energy Source, 2020

Figure 10: Global Market for Biofuels, by Fuel Type, 2022-2028

Figure 11: North American Market for Biofuels, by Fuel Type, 2022-2028

Figure 12: European Market for Biofuels, by Fuel Type, 2022-2028

Figure 13: South American Market for Biofuels, by Fuel Type, 2022-2028

Figure 14: Asia-Pacific Market for Biofuels, by Fuel Type, 2022-2028

Figure 15: MEA Market for Biofuels, by Fuel Type, 2022-2028

Figure 16: Global Market for Biofuels, by Region, 2022-2028

Figure 17: North American Market for Biofuels, by Country, 2022-2028

Figure 18: European Market for Biofuels, by Country, 2022-2028

Figure 19: South American Market for Biofuels, by Country, 2022-2028

Figure 20: Asia-Pacific Market for Biofuels, by Country, 2022-2028

Figure 21: MEA Market for Biofuels, by Country, 2022-2028

Figure 22: ESG Issues in Biofuels Industry

Figure 23: Percentage of Food Crops Used as Ethanol, 2022

Figure 24: Opportunities and Risks in Implementing ESG

Figure 25: Announced Projects for Pre-commercial Advanced Liquid Biofuel

Production, by Feedstock and Technology, 2022-2030

Figure 26: Average Annual Global Biodiesel Investments

Figure 27: Cumulative Investment, by Region, 2010-2022

Figure 28: ADM: Annual Revenue, 2021 and 2022

Figure 29: ADM: Revenue Shares, by Business Unit, 2022

Figure 30 : ADM: Revenue Shares, by Country/Region, 2022

Figure 31: Chevron Renewable Energy Group: Annual Revenue, 2020 and 2021

Figure 32: Chevron Renewable Energy Group: Revenue Shares, by Business Unit,

2021



Figure 33 : Chevron Renewable Energy Group: Revenue Shares, by Country/Region, 2021

Figure 34: Green Plains Inc.: Annual Revenue, 2021 and 2022

Figure 35 : Green Plains Inc.: Revenue Shares, by Business Unit, 2022

Figure 36 : Green Plains Inc.: Revenue Shares, by Country/Region, 2022

Figure 37: HF Sinclair Corp.: Annual Revenue, 2021 and 2022

Figure 38 : HF Synclair Corp.: Revenue Shares, by Business Unit, 2022

Figure 39 : HF Synclair Corp.: Revenue Shares, by Country/Region, 2022



I would like to order

Product name: Biofuels: Global Markets

Product link: https://marketpublishers.com/r/BCD67CDA2A3BEN.html
Price: US\$ 5,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/BCD67CDA2A3BEN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:	First name:	
Company: Address: City: Zip code: Country: Tel: Fax:	Last name:	
Address: City: Zip code: Country: Tel: Fax:	Email:	
City: Zip code: Country: Tel: Fax:	Company:	
Zip code: Country: Tel: Fax:	Address:	
Country: Tel: Fax:	City:	
Tel: Fax:	Zip code:	
Fax:	Country:	
	Tel:	
Your message:	Fax:	
	Your message:	
**All fields are required		**All fields are required
Custumer signature		Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970