

Global Biodiesel Market

https://marketpublishers.com/r/GDE1C8FBAD2EN.html Date: March 2010 Pages: 206 Price: US\$ 5,650.00 (Single User License) ID: GDE1C8FBAD2EN

Abstracts

The limited availability of petrol and its surging prices have brought about the development of alternative fuels such as biodiesel, bioethanol, and biogas. The major advantages of biodiesel are that it enhances engine life, and unlike petroleum, it does not pollute the environment.

The biodiesel market is slated for a huge growth in the next few years not only because of the growing environmental concerns, but also because of the surging prices for nonrenewable sources of energy, especially petroleum. Governments across the globe are encouraging the use of biodiesel; and many countries have initiated blending of conventional diesel with a percentage of biodiesel.

This report analyzes the markets for the major feedstock currently used for biodiesel production, such as vegetable oils, waste oils, and animal fats; as well as potential feedstock such as algae, jatropha, and sunflower oil. The report includes an in-depth analysis of transesterification, the technology to convert oils to biodiesel, and a comparative analysis between conventional petrol diesel and biodiesel on parameters such as pricing, feedstock availability, and the potential to reduce greenhouse gas emissions.

The report extensively analyzes the automotive, aerospace, railways, and heating applications of biodiesel. Each of the major and micro biodiesel markets include detailed analysis of the factors influencing the market, trends and forecasts, competitive landscape, and in-depth geographic analysis of the biodiesel markets in the Americas, Europe, Asia and Rest of the World.

The report identifies factors that drive or inhibit market growth in order to support the market trends and forecasts made herein for each sub-segment. More than 38 company profiles are provided for a deeper insight into the competitive landscape. The market



tables are categorized as per geographies and feedstocks.

The intended audience of this report includes:

- Biodiesel producers
- Feedstock suppliers
- Automotive manufacturers
- Aerospace companies and organizations
- Government authorities



Contents

EXECUTIVE SUMMARY MARKET OVERVIEW GLOBAL BIODIESEL MARKET OPPORTUNITIES FEEDSTOCK ANALYSIS BIODIESEL TECHNOLOGY GEOGRAPHIC ANALYSIS COMPETITIVE LANDSCAPE

1 INTRODUCTION

1.1 KEY TAKE AWAYS1.2 REPORT DESCRIPTION1.3 MARKETS COVERED1.4 RESEARCH METHODOLOGY1.5 STAKEHOLDERS

2 SUMMARY

3 MARKET OVERVIEW

- 3.1 EVOLUTION OF THE BIODIESEL MARKET
- 3.1.1 MARKET DEFINITION
- 3.2 MARKET FORCES ANALYSIS
- 3.2.1 INCENTIVES AND GOVERNMENT MANDATES
- 3.2.2 INCREASING R&D INVESTMENTS
- 3.2.3 FEEDSTOCK AVAILABILITY AND COMPETITION FROM ETHANOL FOR SUBSIDY
 - 3.2.4 SUSTAINABILITY
- 3.2.5 NOVEL BIODIESEL FEEDSTOCK
- 3.3 GLOBAL BIODIESEL MARKET
 - 3.3.1 DRIVERS
 - 3.3.1.1 Tax incentives support market development
 - 3.3.1.2 Biodiesel benefits
 - 3.3.1.3 Environmental security drives demand
 - 3.3.1.4 Government mandates stimulates production



- 3.3.1.5 Energy independence and economic security
- 3.3.1.6 Volatile petroleum prices provides growth prospects
- 3.3.2 RESTRAINTS & OPPORTUNITIES
 - 3.3.2.1 Insufficient feedstock restraints growth
 - 3.3.2.2 Food Vs Fuel debate
 - 3.3.2.3 Fluctuating raw material prices
- 3.3.2.4 Emergence of new feedstocks
- 3.4 BIODIESEL MARKET MOVING TOWARDS CONSOLIDATION
- 3.5 EUROPE DOMINATING PRODUCTION
- 3.6 MAJOR PLAYERS AND THEIR MARKET SHARE
- 3.7 BIODIESEL MARKET TRENDS, BY REGION
 - 3.7.1 AMERICAS: REVIVING WITH NEW BIODIESEL DESTINATIONS
- 3.7.2 EUROPE: INCREASING TAX, DECREASING PRODUCTION
- 3.7.3 ASIA: BIODIESEL MARKET OPPORTUNITY
- 3.8 PATENT ANALYSIS OF BIODIESEL MARKET

4 GLOBAL BIODIESEL MARKET

4.1 GLOBAL BIODIESEL MARKET DYNAMICS

4.1.1 GLOBAL BIODIESEL PRODUCTION OVERVIEW

- 4.2 KEY ISSUES AND THEIR MARKET IMPACT
- 4.2.1 FEEDSTOCK COST & AVAILABILITY
 - 4.2.1.1 Market Impact
- 4.2.1.2 Possible Solutions
- 4.2.2 GOVERNMENTAL SUPPORT
 - 4.2.2.1 Market Impact
 - 4.2.2.2 Possible Solutions
- 4.3 BIODIESEL: A GREEN FUEL
- 4.3.1 POTENTIAL TO REDUCE GHG EMISSIONS
- 4.4 BIODIESEL VS PETROLEUM DIESEL

4.4.1 PRICING

- 4.4.1.1 Global pricing trends in biodiesel
- 4.4.1.2 Retail cost component analysis
- 4.4.2 BIODIESEL VS PETROLEUM DIESEL: COMPARATIVE ANALYSIS
- 4.5 BIODIESEL MARKET: OPPORTUNITIES
- 4.5.1 SHORT-TERM GROWTH OPPORTUNITIES
- 4.5.2 MIDTERM GROWTH OPPORTUNITIES
- 4.5.2.1 Commercialization of biodiesel from algae
- 4.5.2.2 Export from developing nations



4.5.2.3 Community projects

4.5.3 LONG-TERM OPPORTUNITIES

- 4.6 BIODIESEL APPLICATIONS
 - 4.6.1 AUTOMOTIVE APPLICATION
 - 4.6.1.1 Drivers
 - 4.6.1.1.1 Improved vehicle performance
 - 4.6.1.1.2 Support from vehicle manufacturers
 - 4.6.1.1.3 Governmental initiatives
 - 4.6.1.2 Restraints
 - 4.6.1.2.1 Requires engine modifications
 - 4.6.1.2.2 Reduction in fuel economy
 - 4.6.1.2.3 Lower cloud-point
 - 4.6.2 MARINE APPLICATIONS
- 4.6.3 RAILWAY APPLICATIONS
- 4.6.4 HEATING OIL (BOILER FUEL) APPLICATION
- 4.6.5 OTHER APPLICATIONS
- 4.7 GLYCERIN AS A BIODIESEL BYPRODUCT

5 FEEDSTOCK ANALYSIS

- 5.1 FEEDSTOCK FFA CONTENT: PRICE PROCESSING COST CORRELATION
- 5.2 VEGETABLE OIL FEEDSTOCK
 - 5.2.1 METHYL ESTER CHARACTERISTICS OF VARIOUS VEGETABLE OILS
 - 5.2.2 EDIBLE OIL FEEDSTOCK
 - 5.2.2.1 Soy Oil Feedstock
 - 5.2.2.2 Rapeseed oil Feedstock
 - 5.2.2.3 Palm Oil Feedstock
- 5.2.3 INEDIBLE OIL FEEDSTOCK
 - 5.2.3.1 Jatropha oil
 - 5.2.3.2 Pongamia oil
- 5.2.4 WASTE VEGETABLE OIL
- 5.3 ANIMAL FAT
- 5.4 OTHER FEEDSTOCK
 - 5.4.1.1 Sunflower oil feedstock
 - 5.4.1.2 Algae
 - 5.4.1.3 Other feedstock sources

6 BIODIESEL PRODUCTION TECHNOLOGIES



6.1 TRANSESTERIFICATION ISSUES

- 6.1.1 FEEDSTOCK-RELATED ISSUE
- 6.1.2 PROCESS RELATED ISSUES
 - 6.1.2.1 Type of alcohol used
 - 6.1.2.2 Use of catalyst
 - 6.1.2.3 Reaction time, temperature, and agitation
- 6.2 TECHNOLOGICAL INNOVATIONS TO IMPROVE COST-EFFECTIVENESS

7 GEOGRAPHIC ANALYSIS

- 7.1 OVERVIEW
- 7.2 EUROPEAN BIODIESEL MARKET
- 7.2.1 PRODUCTION & CAPACITY ANALYSIS
- 7.2.2 EUROPEAN BIODIESEL MARKET: ISSUES & CHALLENGES
 - 7.2.2.1 Phasing out of incentives and tax exemption
 - 7.2.2.2 Lack of distribution channels
 - 7.2.2.3 Decrease in support for rapeseed oil
- 7.2.3 BIODIESEL POLICY IN EUROPE
- 7.2.3.1 EC biofuel directives
- 7.2.3.2 Biodiesel Targets
- 7.2.4 FUTURE IMPACT OF EUROPE ON GLOBAL BIODIESEL MARKET
- 7.3 AMERICAS BIODIESEL MARKET
- 7.3.1 U.S. BIODIESEL MARKET: OVERVIEW
- 7.3.2 PRODUCTION AND CAPACITY ANALYSIS
- 7.3.3 PRICE DIFFERENTIAL ANALYSIS: BIODIESEL VS. CONVENTIONAL DIESEL
- 7.3.4 BIODIESEL POLICY
- 7.3.4.1 Biodiesel targets of federal government
- 7.3.4.2 Biodiesel targets of U.S. state governments
- 7.3.4.3 Investment subsidies and tax credits
- 7.3.4.4 Other measures
- 7.3.5 U.S. BIODIESEL MARKET: ISSUES & CHALLENGES
- 7.3.6 FUTURE IMPACT OF U.S. ON GLOBAL BIODIESEL MARKET
- 7.4 ASIAN BIODIESEL MARKET
 - 7.4.1 BIODIESEL PRODUCTION ANALYSIS
 - 7.4.2 BIODIESEL POLICY
 - 7.4.2.1 China
 - 7.4.2.2 India
 - 7.4.2.3 Malaysia
 - 7.4.2.4 Future impact of Asia on global biodiesel market



7.5 ROW BIODIESEL MARKET7.5.1 AUSTRALIAN BIODIESEL MARKET7.5.2 AFRICAN BIODIESEL MARKET

8 COMPETITIVE LANDSCAPE

9 COMPANY PROFILES

9.1 ACCIONA ENERGIA, S.A 9.2 AE BIOFUELS, INC. 9.3 ARCHER DANIELS MIDLAND CO 9.4 AUSTRALIAN RENEWABLE FUELS LTD 9.5 BIODIESEL INTERNATIONAL AG 9.6 BIODIESEL INDUSTRIES, INC. 9.7 BIOPETROL INDUSTRIES AG 9.8 BRASIL ECODIESEL 9.9 CANADIAN BIOENERGY CORP. 9.10 CARGILL INC 9.11 CAROLINA BIODIESEL, LLC 9.12 CHINA BIODIESEL INTERNATIONAL HOLDING CO LTD 9.13 CHINA CLEAN ENERGY INC. 9.14 D1 OILS PLC 9.15 DELTA BIOFUELS, INC. 9.16 EVOLUTION FUELS, INC 9.17 EOP BIODIESEL AG 9.18 FOUR RIVERS BIOENERGY INC 9.19 GOMTI BIOTECH LTD 9.20 GREEN EARTH FUELS LLC 9.21 GREENHUNTER BIOFUELS, INC 9.22 GREEN STAR PRODUCTS, INC 9.23 GRIFFIN INDUSTRIES, INC. 9.24 GUSHAN ENVIRONMENTAL ENERGY 9.25 HERO BX 9.26 JATOIL LTD. 9.27 MISSION NEW ENERGY LTD 9.28 NESTE OIL OY 9.29 ORGANIC FUELS, INC 9.30 PETROBRAS BRAZIL INC 9.31 PETROTEC AG



9.32 PURE BIOFUELS CORP
9.33 RENEWABLE ENERGY GROUP, INC
9.34 SIRONA FUELS INC
9.35 STEPAN COMPANY
9.36 TELLURIAN BIODIESEL INC
9.37 VERBIO DIESEL BITTERFELD GMBH & CO. KG.
9.38 WORLD ENERGY ALTERNATIVES LLC

APPENDIX KYOTO PROTOCOL PROTOCOL PROVISIONS TAX INCENTIVES (U.S.) BIODIESEL GRANTS (U.S.) PRIMARY FEEDSTOCK USED IN DIFFERENT COUNTRIES U.S. PATENTS EUROPEAN PATENTS ASIA PATENTS



List Of Tables

LIST OF TABLES

TABLE 1 GLOBAL BIODIESEL MARKET, BY PRODUCTS 2007 – 2014 (\$MILLIONS) TABLE 2 TOP FIVE BIODIESEL PRODUCING COUNTRIES TABLE 3 EMISSION REDUCTION VALUES OF BIODIESEL **TABLE 4 BIODIESEL LIFECYCLE OPERATIONS** TABLE 5 PETROLEUM DIESEL LIFECYCLE OPERATIONS TABLE 6 COMPARISON OF FEEDSTOCK TYPES TABLE 7 BIODIESEL CHARACTERISTICS OF MAJOR EDIBLE VEGETABLE OILS TABLE 8 GLOBAL SOYBEAN OIL BIODIESEL MARKET, BY GEOGRAPHY 2007 -2014 (\$MILLIONS) TABLE 9 GLOBAL RAPESEED OIL BIODIESEL MARKET, BY GEOGRAPHY 2007 -2014 (\$MILLIONS) TABLE 10 GLOBAL PALM OIL BIODIESEL MARKET, BY GEOGRAPHY 2007 - 2014 (\$MILLIONS) TABLE 11 COMPARISON OF INEDIBLE OIL FEEDSTOCKS TABLE 12 GLOBAL ANIMAL FAT BIODIESEL MARKET, BY GEOGRAPHY 2007 -2014 (\$MILLIONS) TABLE 13 OTHER FEEDSTOCK BIODIESEL MARKET, BY GEOGRAPHY 2007 – 2014 (\$MILLIONS) TABLE 14 GLOBAL BIODIESEL MARKET, BY GEOGRAPHY 2007 – 2014 (\$MILLIONS) TABLE 15 EUROPEAN BIODIESEL MARKET, BY PRODUCTS 2007 - 2014 (\$MILLIONS) TABLE 16 AMERICAS BIODIESEL MARKET, BY PRODUCTS 2007 - 2014 (\$MILLIONS) TABLE 17 EISA FUEL PRODUCTION MANDATES (BILLION GALLONS PER YEAR) TABLE 18 BIODIESEL TAX CREDITS TABLE 19 ASIA BIODIESEL MARKET, BY PRODUCTS 2007 – 2014 (\$MILLIONS) TABLE 20 ROW BIODIESEL MARKET, BY PRODUCTS 2007 – 2014 (\$MILLIONS) TABLE 21 BIOFUEL EXCISE RATES FOR AUSTRALIA (U.S. CENTS PER GALLON*) TABLE 22 MERGERS AND ACQUISITIONS (2007 – 2009) TABLE 23 AGREEMENTS AND COLLABORATIONS (2007 - 2009) TABLE 24 RESEARCH & DEVELOPMENTS (2007 - 2009)



List Of Figures

LIST OF FIGURES

FIGURE 1 PARENTAL STRUCTURE OF THE BIODIESEL MARKET FIGURE 2 EVOLUTION OF BIODIESEL FIGURE 3 MARKET FORCES ANALYSIS FOR BIODIESEL FIGURE 4 TOP COMPANIES AND THEIR STRATEGIES FIGURE 5 GLOBAL BIODIESEL PRODUCERS, BY GEOGRAPHY FIGURE 6 BIODIESEL PRODUCTION CAPACITY, BY COMPANY IN 2009 (MILLION GALLONS) FIGURE 7 COMPARATIVE ANALYSIS OF GEOGRAPHIC TRENDS IN GLOBAL **BIODIESEL MARKET** FIGURE 8 NUMBER OF BIODIESEL PATENTS INCREASING OVER THE YEARS FIGURE 9 EUROPE FILES LARGEST NUMBER OF BIODIESEL PATENTS, 2005-2009 FIGURE 10 YEAR WISE COMPARISION OF BIODIESEL PATENTS FIGURE 11 VEGETABLE OIL IS DOMINANT FEEDSTOCK FIGURE 12 BIODIESEL MARKET ISSUE IMPACT ANALYSIS FIGURE 13 BIODIESEL LIFECYCLE CO2 EMISSION FIGURE 14 EFFECT OF BIODIESEL BLEND LEVEL ON CO2 EMISSION FIGURE 15 RETAIL COST COMPONENTS OF PETROLEUM DIESEL AND BIODIESEL FIGURE 16 GLYCERIN DEMAND IN DIFFERENT APPLICATIONS SHORT AND MEDIUM TERM FIGURE 17 GLYCERIN DEMAND IN DIFFERENT APPLICATIONS LONG TERM FIGURE 18 FEEDSTOCK FFA CONTENT: PRICE – PROCESSING COST CORRELATION FIGURE 19 PRIMARY EDIBLE OIL FEEDSTOCK PRICE COMPARISON FIGURE 20 BIODIESEL PRODUCTION: STANDARD RECIPE FIGURE 21 TRANSESTERIFICATION PROCESS SWOT ANALYSIS FIGURE 22 EUROPEAN BIODIESEL PRODUCTION AND CAPACITY FIGURE 23 EUROPEAN BIODIESEL PRODUCTION AND CAPACITY BY COUNTRY FIGURE 24 U.S. BIODIESEL MARKET (2001 – 2009) FIGURE 25 U.S. BIODIESEL CAPACITY AND PRODUCTION: TRENDS AND FORECASTS FIGURE 26 PRICE DIFFERENTIAL ANALYSIS: BIODIESEL VS PETROLEUM DIESEL IN U.S.

FIGURE 27 ASIA BIODIESEL PRODUCTION ANALYSIS



FIGURE 28 ROW BIODIESEL PRODUCTION ANALYSIS FIGURE 29 INDUSTRY GROWTH STRATEGY (2009) FIGURE 30 YEAR WISE BIODIESEL MARKET COMPETITIVE SCENARIO



I would like to order

Product name: Global Biodiesel Market

Product link: https://marketpublishers.com/r/GDE1C8FBAD2EN.html

Price: US\$ 5,650.00 (Single User License / Electronic Delivery) If you want to order Corporate License or Hard Copy, please, contact our Customer Service: <u>info@marketpublishers.com</u>

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <u>https://marketpublishers.com/r/GDE1C8FBAD2EN.html</u>