

Renewable Chemicals Market - Alcohols (Ethanol, Methanol), Biopolymers (Starch Blends, Regenerated Cellulose, PBS, Bio-PET, PLA, PHA, Bio-PE, and Others), Platform Chemicals & Others - Global Trends & Forecast to 2020

https://marketpublishers.com/r/REAC3F187D5EN.html

Date: October 2015

Pages: 170

Price: US\$ 5,650.00 (Single User License)

ID: REAC3F187D5EN

Abstracts

The renewable chemicals market includes all the chemicals obtained from renewable feedstock such as agricultural raw materials, agricultural waste products or biomass microorganisms, and so on. The benefits of the development of this market are that it would reduce the dependence on conventional fossil fuel sources, would also help to diversify the feedstock portfolio.

The renewable chemicals market is currently facing considerable competition from conventional chemicals derived from petrochemical feedstock; because the renewable chemicals market is susceptible to the volatility in crude oil prices, rising environmental concerns and governmental litigations. Market participants are witnessing the need to make a paradigm shift from petrochemical feedstock to renewable feedstock. This move would not only bring in economic benefits, it would also successfully address the rising concern over greenhouse gas emissions and their lasting impact on the environment.

The threat of substitutes for renewable chemicals market is high. Presently, renewable chemicals account for a small share of the overall chemicals market. These renewable chemicals have higher prices when compared to the conventional chemicals. This ensures large availability of alternative chemicals for buyers and increases the chances of substitution. There are issues regarding the performance of some renewable chemicals which restricts its penetration in application markets. The increase in capacity utilization rate and new products launch are estimated to make the renewable chemicals market more competitive.



For this report, various secondary sources, such as directories, technical handbooks, company annual reports, industry association publications, chemical magazine articles, trade websites, and databases have been referred to identify and collect information useful for this extensive commercial study of the renewable chemicals market. The primary sources that include experts from related industries and suppliers have been interviewed to obtain and verify critical information as well as to assess future prospects and market estimations.

This report includes the analysis of different marketing trends and various growth strategies adopted by the players in the market. It includes the identification of market dynamics such as drivers, restraints, opportunities, burning issues, and winning imperatives. Companies such as BioAmber (Canada), Myriant Corporation (U.S.), Metabolix Inc. (U.S.), BASF SE (Germany), Mitsubishi Chemical Corporation (Japan), Braskem (Brazil), Corbion N.V. (The Netherlands), NatureWorks LLC (U.S.), BioMCN (The Netherlands), have also been profiled in this report.



Contents

1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
- 1.3 SCOPE OF THE MARKET
 - 1.3.1 MARKETS COVERED
- 1.3.2 YEARS CONSIDERED IN THE REPORT
- 1.4 CURRENCY
- 1.5 PACKAGE SIZE
- 1.6 LIMITATION
- 1.7 STAKEHOLDERS

2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
 - 2.1.1 SECONDARY DATA
 - 2.1.1.1 Key data from secondary sources
 - 2.1.2 PRIMARY DATA
 - 2.1.2.1 Key data from primary sources
 - 2.1.2.2 Key Industry Insights
 - 2.1.2.3 Breakdown of primaries
- 2.2 MARKET SIZE ESTIMATION
 - 2.2.1 BOTTOM UP APPROACH
 - 2.2.2 TOP-DOWN APPROACH
- 2.3 MARKET BREAKDOWN & DATA TRIANGULATION
- 2.4 RESEARCH ASSUMPTIONS

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

- 4.1 HIGH GROWTH OPPORTUNITIES FOR BIOPOLYMERS MANUFACTURERS IN THE LONG-TERM
- 4.2 BIOPOLYMERS MARKET, BY TYPE

5 MARKET OVERVIEW



5.1 INTRODUCTION

5.2 MARKET SEGMENTATION

- 5.2.1 BY PRODUCT TYPE
- 5.2.2 BY APPLICATION
- 5.3 MARKET DYNAMICS
 - 5.3.1 DRIVERS
 - 5.3.1.1 Abundant and low-cost feedstock
 - 5.3.1.2 Technological innovations
 - 5.3.1.3 Consumer acceptance for eco-friendly products
 - 5.3.1.4 Government support for eco-friendly sources & processes
 - 5.3.1.5 Growing popularity of biopolymers & platform chemicals
 - 5.3.2 RESTRAINTS
 - 5.3.2.1 Production issues
 - 5.3.2.2 Cost issues
 - 5.3.2.3 Trade-off with vital resources
 - 5.3.3 OPPORTUNITIES
 - 5.3.3.1 Chemical conversion can improve yields
 - 5.3.3.2 Collaboration with universities
 - 5.3.3.3 New product development
 - 5.3.3.3.1 Lignin
 - 5.3.3.3.2 Isobutanol
- 5.4 BURNING ISSUE
- 5.4.1 FLUCTUATING CRUDE OIL PRICES TO IMPACT THE RENEWABLE CHEMICALS MARKET

6 INDUSTRY TRENDS

- 6.1 VALUE CHAIN ANALYSIS
- 6.2 RAW MATERIAL ANALYSIS
 - 6.2.1 CORN
 - 6.2.1.1 Production analysis
 - 6.2.1.2 Import/Export analysis
 - 6.2.2 SUGARCANE
 - 6.2.2.1 Production analysis
 - 6.2.3 SUGAR BEET
 - 6.2.3.1 Production analysis
 - 6.2.3.2 Import/Export analysis
 - **6.2.4 WHEAT**
 - 6.2.4.1 Production analysis



- 6.2.4.2 Import/Export analysis
- 6.2.5 CASSAVA
 - 6.2.5.1 Production analysis
 - 6.2.5.2 Import/Export analysis
- 6.2.6 VEGETable OILS
 - 6.2.6.1 Introduction
 - 6.2.6.2 Production analysis
 - 6.2.6.3 Applications
 - 6.2.6.3.1 Food
 - 6.2.6.3.2 Industrial
 - 6.2.6.3.3 Bio-diesel
- 6.2.7 COCONUT, PALM OIL, AND PALM KERNEL OIL
 - 6.2.7.1 Coconut
 - 6.2.7.2 Palm Oil
 - 6.2.7.3 Palm kernel oil
- 6.2.8 CASTOR OIL
- 6.3 PORTER'S FIVE FORCES ANALYSIS
 - 6.3.1 THREAT OF NEW ENTRANTS
 - 6.3.2 BARGAINING POWER OF SUPPLIERS
 - 6.3.3 THREAT OF SUBSTITUTES
 - 6.3.4 BARGAINING POWER OF BUYERS
 - 6.3.5 INTENSITY OF COMPETITIVE RIVALRY

7 RENEWABLE CHEMICALS MARKET, BY PRODUCT TYPE

- 7.1 INTRODUCTION
- 7.2 BIO-BASED CHEMICALS
 - 7.2.1 ALCOHOLS
 - 7.2.1.1 C1 AND C2
 - 7.2.1.1.1 Methanol
 - 7.2.1.1.2 Ethanol
 - 7.2.1.1.3 Ethanol blends
 - 7.2.1.1.4 Use of food crop as feedstock
 - 7.2.1.2 C3 (Propanol)
 - 7.2.1.3 C4
 - 7.2.1.3.1 N-butanol
 - 7.2.1.3.2 Bio-Based N-Butanol
 - 7.2.1.3.3 Isobutanol
 - 7.2.1.4 C5 & others



- 7.2.1.4.1 Pentanol
- 7.2.1.4.2 2-ethyl-1-hexanol
- 7.2.1.4.3 1-nonanol
- 7.2.1.4.4 2-octanol
- 7.2.1.4.5 1-octanol
- 7.2.1.4.6 1-dodecanol
- 7.2.2 ORGANIC ACIDS
 - 7.2.2.1 Formic acid
 - 7.2.2.1.1 Acetic acid
 - 7.2.2.1.2 Glycolic acid
 - 7.2.2.1.3 Butyric acid
- 7.2.3 KETONES
 - 7.2.3.1 Acetone
- 7.2.3.2 Methyl ethyl ketone
- **7.2.4 OTHERS**
 - 7.2.4.1 Glycerol
 - 7.2.4.2 Epichlorohydrin
 - 7.2.4.3 1,3-propanediol (1,3-PDO)
 - 7.2.4.3.1 Applications
 - 7.2.4.4 1,4-Butanediol
 - 7.2.4.4.1 Bio-BDO
 - 7.2.4.5 Fatty Acid Methyl Esters
- 7.3 PLATFORM CHEMICALS
 - 7.3.1 1, 4-DIACIDS
 - 7.3.1.1 Fumaric acid
 - 7.3.1.2 Succinic acid
 - 7.3.1.2.1 1,4-Butanediol
 - 7.3.1.2.2 Polyurethane
 - 7.3.1.2.3 De-icing Compounds
 - 7.3.1.2.4 Coolants
 - 7.3.1.2.5 Bio Succinic Acid
 - 7.3.2 2, 5- FURAN DICARBOXYLIC ACID
 - 7.3.3 3-HYDROXYPROPIONIC ACID
 - 7.3.4 ASPARTIC ACID
 - 7.3.5 LEVULINIC ACID
 - 7.3.6 ITACONIC ACID
 - 7.3.7 GLUCARIC ACID
 - 7.3.8 GLUTAMIC ACID
- 7.4 BIOPOLYMERS



7.4.1 POLYLACTIC ACID (PLA)

7.4.1.1 Region

7.4.1.2 Application

7.4.2 STARCH BLENDS

7.4.2.1 Region

7.4.2.2 Application

7.4.3 REGENERATED CELLULOSE

7.4.3.1 Region

7.4.3.2 Application

7.4.4 PBS

7.4.4.1 Region

7.4.4.2 Application

7.4.5 POLYHYDROXYALKANOATES (PHA)

7.4.5.1 Region

7.4.5.2 Application

7.4.6 BIO-PET

7.4.6.1 Region

7.4.6.2 Application

7.4.7 BIO-PE

7.4.7.1 Region

7.4.7.2 Application

7.4.8 POLYVINYL ACETATE

7.4.9 POLYAMINO ACIDS

7.4.10 POLYGLYCOLIC ACID

7.4.11 POLYACRYLAMIDE

8 RENEWABLE CHEMICALS MARKET, BY APPLICATION

- 8.1 INTRODUCTION
- 8.2 INDUSTRIAL
- 8.3 TRANSPORTATION
- 8.4 FOOD PACKAGING & BEVERAGE BOTTLING
- 8.5 BIO-MEDICAL
- 8.6 FERTILIZERS
- 8.7 AGRICULTURE
- 8.8 TEXTILES
- **8.9 ENVIRONMENT**
- 8.10 HOUSING
- 8.11 RECREATION



8.12 HEALTH & HYGIENE

9 REGIONAL ANALYSIS

- 9.1 INTRODUCTION
- 9.2 NORTH AMERICA
 - 9.2.1 PLA
 - 9.2.2 STARCH BLENDS
 - 9.2.3 REGENERATED CELLULOSE
 - 9.2.4 PBS
 - 9.2.5 PHA
 - 9.2.6 BIO-PET
 - 9.2.7 BIO-PE
- 9.3 WESTERN EUROPE
 - 9.3.1 PLA
 - 9.3.2 STARCH BLENDS
 - 9.3.3 REGENERATED CELLULOSE
 - 9.3.4 PBS
 - 9.3.5 PHA
 - 9.3.6 BIO-PET
 - 9.3.7 BIO-PE
- 9.4 ASIA-PACIFIC
 - 9.4.1 PLA
 - 9.4.2 STARCH BLENDS
 - 9.4.3 REGENERATED CELLULOSE
 - 9.4.4 PBS
 - 9.4.5 PHA
 - 9.4.6 BIO-PET
 - 9.4.7 BIO-PE
- 9.5 ROW

10 CATALYSIS & TECHNOLOGIES

- 10.1 INTRODUCTION
- 10.2 BIOCATALYSIS
 - **10.2.1 DRIVERS**
 - 10.2.1.1 High specificity and multi-step reactions
 - 10.2.1.2 Improved enzymes enhance industrial processes
 - 10.2.2 RESTRAINTS & OPPORTUNITIES



- 10.2.2.1 Slower process increases production costs
- 10.2.2.2 Limited biocatalyst inventory
- 10.2.2.3 Lesser water and energy consumption
- 10.3 CHEMICAL CATALYSIS
- 10.3.1 DRIVERS & RESTRAINTS
 - 10.3.1.1 Faster and simpler processes
 - 10.3.1.2 High energy requirements
- 10.4 THERMO-CHEMICAL CONVERSION
 - 10.4.1 GASIFICATION
 - 10.4.2 PYROLYSIS
 - 10.4.3 HYDROTHERMAL UPGRADING
 - 10.4.4 FERMENTATION & BIOCONVERSION
 - 10.4.5 PRODUCT SEPARATION & UPGRADING
 - 10.4.6 ENZYMATIC HYDROLYSIS
 - 10.4.7 GASIFICATION-FERMENTATION
 - 10.4.8 ACID HYDROLYSIS
 - 10.4.9 BIOCHEMICAL-THERMOCHEMICAL
 - 10.4.10 BIOCHEM-ORGANISOLVE
 - 10.4.11 FISCHER TROPSCH DIESEL
 - 10.4.12 REDUCTIVE TRANSFORMATION
 - 10.4.13 DEHYDRATIVE TRANSFORMATION

11 COMPETITIVE LANDSCAPE

- 11.1 OVERVIEW
- 11.2 PARTNERSHIPS/COLLABORATIONS/SUPPLY CONTRACTS AND NEW

PRODUCT LAUNCH: THE MOST POPULAR GROWTH STRATEGIES

- 11.3 MAXIMUM DEVELOPMENTS IN 2012
- 11.4 COMPETITIVE SITUATION & TRENDS
 - 11.4.1 PARTNERSHIPS/AGREEMENTS/COLLABORATIONS/JOINT

VENTURES/SUPPLY CONTRACTS

- 11.4.2 NEW PRODUCT LAUNCH & DEVELOPMENT
- 11.4.3 EXPANSION

12 COMPANY PROFILES

(Overview, Financial*, Products & Services, Strategy, and Developments)

12.1 BIOAMBER INC.



- 12.2 GENOMATICA INC.
- 12.3 MYRIANT CORPORATION
- 12.4 DUPONT TATE & LYLE BIO PRODUCTS COMPANY, LLC
- 12.5 COBALT TECHNOLOGIES INC.
- 12.6 BIOMETHANOL CHEMIE NEDERLAND B.V.
- 12.7 METABOLIX INC.
- 12.8 CORBION NV (PURAC)
- 12.9 NATUREWORKS LLC
- 12.10 MITSUBISHI CHEMICAL CORP.
- 12.11 BIOME TECHNOLOGIES PLC
- 12.12 REVERDIA
- 12.13 BRASKEM
- 12.14 BASF SE

13 APPENDIX

- 13.1 DEVELOPMENTS
- 13.2 INSIGHTS OF INDUSTRY EXPERTS
- 13.3 DISCUSSION GUIDE
- 13.4 INTRODUCING RT: REAL TIME MARKET INTELLIGENCE
- 13.5 AVAILABLE CUSTOMIZATIONS
- 13.6 RELATED REPORTS

^{*}Details might not be captured in case of unlisted companies.



List Of Tables

LIST OF TABLES

Table 1 DRIVING FACTORS FOR RENEWABLE CHEMICALS MARKET

Table 2 RESTRAINTS OBSERVED IN THE RENEWABLE CHEMICALS MARKET

Table 3 OPPORTUNITIES FOR RENEWABLE CHEMICALS MARKET PLAYERS

Table 4 TOP 10 CORN PRODUCING COUNTRIES, 2014 (THOUSAND METRIC TON)

Table 5 TOP 10 CORN IMPORTING COUNTRIES, 2014 (THOUSAND METRIC TON)

Table 6 TOP 10 CORN EXPORTING COUNTRIES, 2014 (THOUSAND METRIC TON)

Table 7 TOP 10 SUGARCANE PRODUCING COUNTRIES, 2013 (MILLION TON)

Table 8 TOP 10 SUGAR BEET PRODUCING COUNTRIES, 2013 (TON)

Table 9 TOP 10 SUGAR BEET IMPORTING COUNTRIES, 2012 (TON)

Table 10 TOP 10 SUGAR BEET EXPORTING COUNTRIES, 2012 (TON)

Table 11 TOP 10 WHEAT PRODUCING COUNTRIES, 2013 (TON)

Table 12 TOP 10 WHEAT IMPORTING COUNTRIES, 2012 (TON)

Table 13 TOP 10 WHEAT EXPORTING COUNTRIES, 2013 (TON)

Table 14 TOP 10 CASSAVA PRODUCING COUNTRIES, 2013 (TON)

Table 15 TOP 10 CASSAVA DRIED IMPORTING COUNTRIES, 2012 (TON)

Table 16 TOP 10 CASSAVA DRIED EXPORTING COUNTRIES, 2012 (TON)

Table 17 VEGETable OIL PRODUCTION, 2013 (TON)

Table 18 TOP 10 COCONUT PRODUCING COUNTRIES, 2013 (TON)

Table 19 TOP 5 PALM OIL PRODUCING COUNTRIES, 2014 (THOUSAND METRIC TON)

Table 20 TOP 10 PALM KERNEL OIL PRODUCING COUNTRIES, 2014 (THOUSAND METRIC TON)

Table 21 METHANOL MARKET SIZE, 2013-2020

Table 22 ENERGY OUTPUT RATIO OF MAJOR ETHANOL FEEDSTOCK

Table 23 GLOBAL ETHANOL PRODUCTION, 2013-2020, (MILLIONS OF GALLONS)

Table 24 GLOBAL ETHANOL PRODUCTION, 2013-2020 (USD MILLION)

Table 25 N-BUTANOL: PHYSICAL & CHEMICAL PROPERTIES

Table 26 GLOBAL BIO-BASED N-BUTANOL PRODUCTION CAPACITIES, 2015

Table 27 ECH: MARKET SIZE, BY REGION, 2013-2020 (KILOTON)

Table 28 ECH: MARKET SIZE, BY REGION, 2013-2020 (USD MILLION)

Table 29 GLOBAL 1,3-PDO PRODUCTION CAPACITY, BY COMPANY (TON)

Table 30 1,3-PDO PRODUCTION CAPACITY, BY REGION (TON)

Table 31 1,3 PDO: MARKET SIZE, BY REGION, 2013-2020 (TON)

Table 32 1,3 PDO: MARKET SIZE, BY REGION, 2013-2020 (USD MILLION)

Table 33 1,3 PDO: MARKET SIZE, BY APPLICATION, 2013-2020 (TON)



Table 34 1,3 PDO: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION) Table 35 SUCCINIC ACID: MARKET SIZE, BY PRODUCTION TYPE, 2013-2020 (TON)

Table 36 SUCCINIC ACID: MARKET SIZE, BY PRODUCTION TYPE, 2013-2020 (USD MILLION)

Table 37 BIO-SUCCINIC ACID: POTENTIAL MARKET

Table 38 COMPANIES PRODUCING BIO-SUCCINIC ACID & ITS CAPACITIES

Table 39 BIOPOLYMERS: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 40 BIOPOLYMERS: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 41 PLA: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 42 PLA: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 43 PLA: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 44 PLA: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 45 STARCH BLENDS: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 46 STARCH BLENDS: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 47 STARCH BLENDS: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 48 STARCH BLENDS: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 49 REGENERATED CELLULOSE: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 50 REGENERATED CELLULOSE: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 51 REGENERATED CELLULOSE: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 52 REGENERATED CELLULOSE: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 53 PBS: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 54 PBS: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 55 PBS: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 56 PBS: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 57 PHA: MARKET SIZE, BY TYPE, 2013-2020 (KILOTON)

Table 58 PHA: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 59 PHA: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 60 PHA: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 61 BIO-PET: MARKET SIZE, BY REGION, 2013-2020 (KILOTON)

Table 62 BIO-PET: MARKET SIZE, BY REGION, 2013-2020 (USD MILLION)

Table 63 BIO-PET: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 64 BIO-PET: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)



Table 65 BIO-PE: MARKET SIZE, BY REGION, 2013-2020 (KILOTON)

Table 66 BIO-PE: MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 67 BIO-PE: MARKET SIZE, BY APPLICATION, 2013-2020 (KILOTON)

Table 68 BIO-PE: MARKET SIZE, BY APPLICATION, 2013-2020 (USD MILLION)

Table 69 RENEWABLE CHEMICALS: INDUSTRIAL APPLICATIONS

Table 70 RENEWABLE CHEMICALS: TRANSPORTATION APPLICATIONS

Table 71 NORTH AMERICA: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 72 NORTH AMERICA: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 73 NORTH AMERICA: STARCH BLENDS MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 74 NORTH AMERICA: STARCH BLENDS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 75 NORTH AMERICA: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 76 NORTH AMERICA: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 77 NORTH AMERICA: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 78 NORTH AMERICA: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 79 NORTH AMERICA: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 80 NORTH AMERICA: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 81 NORTH AMERICA: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 82 NORTH AMERICA: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 83 NORTH AMERICA: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 84 NORTH AMERICA: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 85 WESTERN EUROPE: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 86 WESTERN EUROPE: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 87 WESTERN EUROPE: STARCH BLENDS MARKET SIZE, BY COUNTRY,



2013-2020 (KILOTON)

Table 88 WESTERN EUROPE: STARCH BLENDS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 89 WESTERN EUROPE: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 90 WESTERN EUROPE: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 91 WESTERN EUROPE: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 92 WESTERN EUROPE: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 93 WESTERN EUROPE: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 94 WESTERN EUROPE: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 95 WESTERN EUROPE: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 96 WESTERN EUROPE: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 97 WESTERN EUROPE: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 98 WESTERN EUROPE: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 99 ASIA-PACIFIC: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON) Table 100 ASIA-PACIFIC: PLA MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 101 ASIA-PACIFIC: STARCH BLENDS MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 102 ASIA-PACIFIC: STARCH BLENDS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 103 ASIA-PACIFIC: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 104 ASIA-PACIFIC: REGENERATED CELLULOSE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 105 ASIA-PACIFIC: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON) Table 106 ASIA-PACIFIC: PBS MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 107 ASIA-PACIFIC: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)
Table 108 ASIA-PACIFIC: PHA MARKET SIZE, BY COUNTRY, 2013-2020 (USD



MILLION)

Table 109 ASIA-PACIFIC: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 110 ASIA-PACIFIC: BIO-PET MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 111 ASIA-PACIFIC: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (KILOTON)

Table 112 ASIA-PACIFIC: BIO-PE MARKET SIZE, BY COUNTRY, 2013-2020 (USD MILLION)

Table 113 ROW: BIOPOLYMERS MARKET SIZE, BY TYPE, 2013-2020 (KILOTON) Table 114 ROW: BIOPOLYMERS MARKET SIZE, BY TYPE, 2013-2020 (USD MILLION)

Table 115 PARTNERSHIPS/AGREEMENTS/COLLABORATIONS/JOINT VENTURES/SUPPLY CONTRACTS, 2015

Table 116 NEW PRODUCT LAUNCHES & DEVELOPMENTS, 2015

Table 117 EXPANSIONS, 2013–2015

Table 118 BIOAMBER: PRODUCTS & ITS TRADE NAMES

Table 119 BASF SE: PRODUCTS OFFERED



List Of Figures

LIST OF FIGURES

Figure 1 RENEWABLE CHEMICALS MARKET: RESEARCH DESIGN

Figure 2 MARKET SIZE ESTIMATION: BOTTOM-UP APPROACH

Figure 3 MARKET SIZE ESTIMATION: TOP-DOWN APPROACH

Figure 4 MARKET BREAKDOWN & DATA TRIANGULATION

Figure 5 RENEWABLE CHEMICALS MARKET SEGMENTATION, BY PRODUCT TYPE

Figure 6 BIOPOLYMERS REGION-WISE BREAK-UP, BY TYPE

Figure 7 BIOPOLYMERS, BY TYPE, 2014 (USD MILLION)

Figure 8 ATTRACTIVE GROWTH OPPORTUNITIES IN THE BIOPOLYMERS MARKET

Figure 9 BIO-PET IS EXPECTED TO GROW AT THE HIGHEST RATE (2015-2020)

Figure 10 RENEWABLE CHEMICALS MARKET SEGMENTATION, BY PRODUCT TYPES

Figure 11 RENEWABLE CHEMICALS MARKET SEGMENTATION, BY APPLICATION

Figure 12 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES FOR THE RENEWABLE CHEMICALS MARKET

Figure 13 VALUE CHAIN FOR RENEWABLE CHEMICALS MARKET

Figure 14 VEGETable OIL PRODUCTION SHARE, BY TYPE, 2013

Figure 15 VEGETable OIL: MARKET SHARE, BY APPLICATION, 2013 (METRIC TON)

Figure 16 TRANSFORMATION IN VEGETable OILS' MARKET

Figure 17 PORTER'S FIVE FORCES ANALYSIS

Figure 18 FEEDSTOCK FOR RENEWABLE ETHANOL

Figure 19 BIO SUCCINIC ACID: POTENTIAL APPLICATIONS

Figure 20 CHINA TO WITNESS THE FASTEST GROWTH IN THE GLOBAL

BIOPOLYMERS MARKET

Figure 21 COMPANIES ADOPTED

PARTNERSHIPS/AGREEMENTS/COLLABORATIONS/JOINT VENTURES/SUPPLY

CONTRACTS AS KEY GROWTH STRATEGIES BETWEEN 2012 AND 2015

Figure 22 MAJOR GROWTH STRATEGIES IN THE RENEWABLE CHEMICALS MARKET, 2012–2015

Figure 23 DEVELOPMENTS IN GLOBAL RENEWABLE CHEMICALS MARKET, 2012–2015

Figure 24 DUPONT TATE & LYLE BIO PRODUCTS COMPANY, LLC: SWOT ANALYSIS

Figure 25 METABOLIX INC.: COMPANY SNAPSHOT



Figure 26 METABOLIX INC.: SWOT ANALYSIS

Figure 27 CORBION N.V.: COMPANY SNAPSHOT

Figure 28 CORBION NV: SWOT ANALYSIS

Figure 29 NATUREWORKS LLC: SWOT ANALYSIS

Figure 30 MITSUBISHI CHEMICAL CORP.: COMPANY SNAPSHOT

Figure 31 BIOME TECHNOLOGIES PLC: COMPANY SNAPSHOT

Figure 32 BIOME TECHNOLOGY PLC: SWOT ANALYSIS

Figure 33 BASF SE: COMPANY SNAPSHOT

Figure 34 BASF SE: SWOT ANALYSIS



I would like to order

Product name: Renewable Chemicals Market - Alcohols (Ethanol, Methanol), Biopolymers (Starch

Blends, Regenerated Cellulose, PBS, Bio-PET, PLA, PHA, Bio-PE, and Others), Platform

Chemicals & Others - Global Trends & Forecast to 2020

Product link: https://marketpublishers.com/r/REAC3F187D5EN.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:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/REAC3F187D5EN.html