

## **Biorefinery Products: Global Markets**

Market Research Report | 2022-10-20 | 440 pages | BCC Research

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### **Report description:**

Description

Report Scope:

This research report quantifies the two categories of bioenergetic and non-bioenergetic bioproducts into seven major product segments: bio-derived chemicals, biofuels, pharmaceuticals (biodrugs and herbal/botanicals), biocomposite materials, biopolymers/bioplastics, biogas and biopower.

The report is divided into 16 chapters.

- Chapter Two analyzes demand by category, with a forecast to 2027.
- Chapter Three presents an overview that defines and quantifies biorefinery products and assesses market trends and categories/segments with a forecast to 2027.
- Chapter Four presents the history, opportunity and penetration of bio-products with a forecast to 2027.
- Chapter Five presents the impacts of COVID-19 and the Russia-Ukraine war on various end-use industries globally.
- Chapter Six presents the demand for bioenergetic bioproducts and analyzes the market for biofuels, biogas and wood pellets, with regional breakdowns and forecasts to 2027.
- Chapter Seven presents the demand for non-bioenergetic bioproducts and analyzes the market for chemicals, pharmaceuticals and biomaterials. These are quantified by type, with regional breakdowns and forecasts to 2027.
- Chapter Eight considers the applications of bioproducts and quantifies the demand in up to 11 key markets, offering forecasts to 2027.
- Chapter Nine considers the technology and quantifies demand by type of technology used for the conversion of biomass to bioproducts, offering estimates for 2027.
- Chapter Ten presents the region wise market for biorefinery products.
- Chapter Eleven discusses product development in the chemical, pharmaceutical, materials, power and fuel sectors, which will

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enable utilization of the biomass that Earth's biology produces every year.

- Chapter Twelve presents an analysis of the industry structure, showing how each market segment will interact over the next five years to 2027, including the macroeconomic factors that affect the global economy.
- Chapter Thirteen presents the international aspects, including market leadership. It also quantifies international trade in bioproducts with a forecast for 2027.
- Chapter Fourteen presents the market shares of the major companies involved in the manufacture of bio-based products and discusses these companies and products.
- Chapter Fifteen analyzes the regulatory environment of the biorefinery industry.
- Chapter Sixteen presents company product profiles and identifies the various companies involved in manufacturing these products.

A negative economic outlook has been assumed in all the segments for 2020 due to COVID-19. A negative impact due to the Russia-Ukraine war that started in February 2022 has also been considered in this report. The growing economies are assumed to attract key companies in the market and increase consumer spending.

#### Report Includes:

- 124 data tables and 109 additional tables
- A comprehensive overview and up-to-date analysis of the global markets for biorefinery products
- Analyses of the global market trends, with market revenue for 2021, estimates for 2022, and projections of compound annual growth rates (CAGRs) through 2027
- Estimation of the actual market size and market forecast for biorefinery products in value and volumetric terms, and their corresponding market share analysis based on product, technology, end-use application, and geographic region
- Highlights of the current and future market potential for two main types of biorefinery products (energetic/non-energetic), along with a detailed analysis of the competitive environment, industry outlook, and opportunities and penetration of bio-products
- Discussion of the value chain of basic products and the structure of the biorefinery industry and its interaction with the fossil-based industry
- A critical evaluation of the current status of commercial biorefinery markets and how recent environmental legislation and breakthroughs in technology will make the use of bio-based products competitive with established fossil-based platforms
- Holistic review of the effects of Covid-19 pandemic and the Russia-Ukraine war on the global biorefinery industry
- Updated information on the technology landscape of biorefinery products, conversion technologies, and number of registered patents for bioproducts (biochemicals, ethanol, biodiesel and biological materials)
- Insight into the end-users of biorefinery products, and assessment of the product technology development, and international trade and regulations within the biorefinery industry
- Descriptive company profiles of the market leading players, including Abengoa, ADM, Amyris, BASF, BP plc, Chevron Corp., Neste, and Petrobras

#### Executive Summary

##### Summary:

BCC Research estimates that the global demand for biorefinery products will increase at a CAGR of REDACTED% over the next five years from 2022 to reach \$REDACTED in 2027. There are two key distinct categories of biorefinery products: bioenergetic and non-bioenergetic biorefinery products.

Demand for bioenergetic biorefinery products will increase at a CAGR of REDACTED% to reach \$REDACTED in 2027, up from an estimated \$REDACTED in 2022. This growth will result in a market penetration rate of REDACTED% in 2027, up from an estimated

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penetration of REDACTED% in 2020. Many bioenergetic biorefinery products are now going commercial, with commercially available production technologies (e.g., direct combustion in stoker boilers, low-percentage co-firing, municipal solid waste incineration with combined heat and power, dry/wet milling, fermentation and esterification). Bioenergetic biorefinery products can therefore help countries meet their policy goals for secure, reliable and affordable clean energy to expand access and promote rural development.

Demand for non-bioenergetic biorefinery products, which include chemicals, pharmaceuticals, and materials, should reach \$REDACTED in 2027, from an estimated \$REDACTED in 2022, corresponding to a CAGR of REDACTED%. These products continue to penetrate the clothing, pharmaceuticals, plastic films, carpeting, containers, composite panels, sorbents, solvents, adhesives and insulation markets, which are at well-established stages of development. Pharmaceuticals, coatings, plastic films, containers, adhesives, insulation, wood waste products and composite panels are expected to represent a substantial share in the non-bioenergetic bio-based industry.

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