

## **Biorefinery Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034**

Market Report | 2025-01-06 | 110 pages | Global Market Insights

### **AVAILABLE LICENSES:**

- Single User \$4850.00
- Multi User \$6050.00
- Enterprise User \$8350.00

### **Report description:**

The Global Biorefinery Market was valued at USD 146.4 billion in 2024 and is projected to grow at a CAGR of 7.8% between 2025 and 2034, driven by increasing demand for sustainable energy solutions and enhanced resource efficiency. As climate change concerns escalate and fossil fuel reserves deplete, a significant transition to renewable energy sources is underway, with biorefineries playing a pivotal role in this transformation.

These facilities employ advanced biomass conversion processes to produce renewable fuels, power, and value-added chemicals from biological resources such as agricultural residues, forestry materials, and organic waste. Furthermore, growing consumer awareness of eco-friendly alternatives, along with strong governmental support through subsidies, tax incentives, and regulations aimed at curbing greenhouse gas emissions, is propelling market growth. The expanding scope of biorefineries in sectors like energy, chemicals, and materials is fostering innovation, encouraging investments, and contributing to a more sustainable future.

The first-generation biorefinery segment is anticipated to generate USD 158.8 billion by 2034, driven by its well-established infrastructure and affordability. This segment relies primarily on food-based feedstocks such as sugarcane, vegetable oils, and corn, which are plenty and widely available in many regions. These feedstocks are critical in producing biofuels like ethanol and biodiesel, which are increasingly utilized in the transportation and energy industries. Government mandates and blending requirements across various regions further bolster demand for these biofuels, ensuring steady growth. The affordability and accessibility of first-generation feedstocks make them a preferred choice for stakeholders, securing their dominant market position.

The industrial biotechnology segment is forecasted to grow at a CAGR of 7.4% through 2034, owing to its ability to efficiently transform biomass into high-value bio-based products using microbial and enzymatic processes. This technology enables the production of biofuels, bioplastics, and biochemicals with a reduced environmental footprint compared to conventional methods. Advances in synthetic biology and metabolic engineering are enhancing microbial strains' productivity, reducing production costs,

and diversifying bio-based product offerings. Industrial biotechnology has emerged as a cornerstone for creating innovative, sustainable solutions across industries, driving its adoption and fueling market growth.

The U.S. biorefinery market is projected to reach USD 88.4 billion by 2034, supported by robust policies, abundant feedstock availability, and continuous technological advancements. Initiatives such as the Renewable Fuel Standard (RFS) and tax incentives for bio-based products have significantly boosted investment in biorefinery infrastructure. The U.S. benefits from an extensive supply of feedstocks, including agricultural residues and forest materials, ensuring a steady input for first-generation and advanced biorefineries. This favorable environment, coupled with ongoing innovation, positions the U.S. as a global leader in the biorefinery market.

## **Table of Contents:**

Report Content

Chapter 1 Methodology & Scope

1.1 Market definitions

1.2 Base estimates & calculations

1.3 Forecast calculation

1.4 Data sources

1.4.1 Primary

1.4.2 Secondary

1.4.2.1 Paid

1.4.2.2 Public

Chapter 2 Executive Summary

2.1 Industry synopsis, 2021 - 2034

Chapter 3 Industry Insights

3.1 Industry ecosystem analysis

3.2 Regulatory landscape

3.3 Industry impact forces

3.3.1 Growth drivers

3.3.2 Industry pitfalls & challenges

3.4 Growth potential analysis

3.5 Porter's analysis

3.5.1 Bargaining power of suppliers

3.5.2 Bargaining power of buyers

3.5.3 Threat of new entrants

3.5.4 Threat of substitutes

3.6 PESTEL analysis

Chapter 4 Competitive landscape, 2024

4.1 Strategic dashboard

4.2 Innovation & sustainability landscape

Chapter 5 Market Size and Forecast, By Type, 2021 - 2034 (USD Million)

5.1 Key trends

5.2 First generation

5.3 Second generation

5.4 Third generation

Chapter 6 Market Size and Forecast, By Technology, 2021 - 2034 (USD Million)

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

[www.scotts-international.com](http://www.scotts-international.com)

6.1 Key trends  
6.2 Industrial biotechnology  
6.3 Physio chemical  
6.4 Thermochemical

Chapter 7 Market Size and Forecast, By Product, 2021 - 2034 (USD Million)

7.1 Key trends  
7.2 Energy driven  
7.3 Material driven

Chapter 8 Market Size and Forecast, By Region, 2021 - 2034 (USD Million)

8.1 Key trends  
8.2 North America

8.2.1 U.S.

8.2.2 Canada

8.2.3 Mexico

8.3 Europe

8.3.1 UK

8.3.2 France

8.3.3 Germany

8.3.4 Italy

8.3.5 Russia

8.3.6 Spain

8.4 Asia Pacific

8.4.1 China

8.4.2 Australia

8.4.3 India

8.4.4 Japan

8.4.5 South Korea

8.5 Middle East & Africa

8.5.1 Saudi Arabia

8.5.2 UAE

8.5.3 Turkey

8.5.4 South Africa

8.5.5 Egypt

8.6 Latin America

8.6.1 Brazil

8.6.2 Argentina

Chapter 9 Company Profiles

9.1 Borregaard

9.2 CARGILL

9.3 Clariant

9.4 Godavari Biorefineries

9.5 Green Plains

9.6 Neste Oyj

9.7 Renewable Energy Group

9.8 SEKAB

9.9 Total Energies

9.10 Valero

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

9.11 Versalis

9.12 Vivergo Fuels

9.13 Wilmar International Anixter

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

[www.scotts-international.com](http://www.scotts-international.com)

**Biorefinery Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 - 2034**

Market Report | 2025-01-06 | 110 pages | Global Market Insights

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Single User	\$4850.00
	Multi User	\$6050.00
	Enterprise User	\$8350.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-18"/>

Signature

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

[www.scotts-international.com](http://www.scotts-international.com)