

# **Biomass Gasification Market Outlook 2025-2034: Market Share, and Growth Analysis By Gasifier Type (Moving or Fixed Bed, Fluidized Bed, Entrained And Other Gasifier Types), By Source (Solid Biomass, Biogas, Municipal Waste, Liquid Biomass), By Application**

<https://marketpublishers.com/r/B8BC7F7961DBEN.html>

Date: October 2025

Pages: 160

Price: US\$ 3,950.00 (Single User License)

ID: B8BC7F7961DBEN

## **Abstracts**

The Biomass Gasification Market is valued at USD 111.9 billion in 2025 and is projected to grow at a CAGR of 9% to reach USD 243 billion by 2034. The biomass gasification market involves the conversion of biomass into syngas, a versatile fuel that can be used for electricity generation, heat production, and chemical synthesis. This market offers a promising pathway for utilizing biomass resources efficiently and sustainably. The market is driven by the need for clean and renewable energy sources and the growing interest in bio-based chemicals and fuels.

Technological advancements in gasification processes, including fluidized bed and entrained flow gasification, are enhancing the market's efficiency and scalability. The market is witnessing a trend towards the integration of gasification with other technologies, such as carbon capture and utilization (CCU), to produce advanced biofuels and chemicals. The development of small-scale gasification systems for decentralized applications is also gaining traction.

The biomass gasification market is expected to expand significantly, driven by the increasing demand for renewable energy and bio-based products. However, challenges related to syngas cleaning, tar removal, and cost competitiveness need to be addressed. The market's future success depends on the development of robust and efficient gasification technologies and the establishment of sustainable biomass supply

chains.

## Key Insights Biomass Gasification Market

Development of advanced gasification technologies for improved efficiency.

Integration of gasification with carbon capture and utilization (CCU).

Growing focus on small-scale gasification systems for decentralized applications.

Production of bio-based chemicals and fuels from syngas.

Increased research and development for syngas cleaning and tar removal.

Increasing demand for renewable energy and bio-based products.

Government policies supporting biomass utilization and renewable energy.

Growing interest in carbon capture and utilization technologies.

Availability of diverse biomass feedstocks.

Potential for producing high-value chemicals and fuels.

High capital and operational costs.

Challenges related to syngas cleaning and tar removal.

Variability in biomass feedstock composition.

Competition from other renewable energy and bio-based technologies.

Scale-up and commercialization of advanced gasification processes.

## Biomass Gasification Market Segmentation

### By Gasifier Type

#### Moving or Fixed Bed

Fluidized Bed

Entrained And Other Gasifier Types

### By Source

Solid Biomass

Biogas

Municipal Waste

Liquid Biomass

### By Application

Chemicals

Liquid Fuels

Power

Gas Fuels

### Key Companies Analysed

Siemens Energy AG

Engie

Andritz

Air Products

Air Liquide

Mitsubishi Heavy Industries Ltd

Thyssenkrupp AG

Xcel Energy Inc

Lahti Energia

Babcock & Wilcox

Shangqiu Haiqi Machinery Equipment

Sedin Engineering Company Ltd

Chanderpur Group

Case Group

GGE Power

EnviTec Biogas AG

First Biogas International AG

Shenzhen Puxin Science & Technology Co. LTD

Mingshuo Environment Technology Group Co. Ltd

Clarke Energy

Seko Industries Srl

HC Energy

Agraferm Technologies AG

LMS Energy

Sunpower

Outotec Oyj

Valmet

Drax Power Limited

Centria Reti Gas

GASAG

Enag?s

Italgas

Eni Gas & Power

Cadent Gas Ltd

Orcan Energy

TomTom

TC Energy

Vital Energi

British Gas

EDF Energy

E. ON Next

Octopus Energy

OVO Energy

ScottishPower

Shell Energy

Wartsila Corporation

Acciona

Ramboll

EPH

Segezha Group

NaftoGaz Group

Hitachi Zosen Inova (HZI)

EcoTerra BioGas

CEZ Group

Romelectro

ZiO-Podolsk

Notus Energy

Polish Energy Group

Terrasigna

H3-CHP Clean Energy Systems

Emispec

PyroGenesis Canada Inc

Lambion Energy Solutions GmbH

Triple Green Energy

Klean Industries Inc

Wright Tech Systems Inc

V&F Analyse- und Messtechnik GmbH

3Degrees

A A Energy Ltd

A S NaturEnergie GmbH

Fluid Components International LLC. (FCI)

Western Research Institute (WRI)

CleanTech Biofuels Inc.

CPFL Energias Renovaveis SA

Companhia Energetica de Minas Gerais SA

Centrais Eletricas Brasileiras S.A.

## Biomass Gasification Market Analytics

The report employs rigorous tools, including Porter's Five Forces, value chain mapping, and scenario-based modeling, to assess supply–demand dynamics. Cross-sector influences from parent, derived, and substitute markets are evaluated to identify risks and opportunities. Trade and pricing analytics provide an up-to-date view of international flows, including leading exporters, importers, and regional price trends.

Macroeconomic indicators, policy frameworks such as carbon pricing and energy security strategies, and evolving consumer behavior are considered in forecasting scenarios. Recent deal flows, partnerships, and technology innovations are incorporated to assess their impact on future market performance.

## Biomass Gasification Market Competitive Intelligence

The competitive landscape is mapped through OG Analysis' proprietary frameworks, profiling leading companies with details on business models, product portfolios, financial performance, and strategic initiatives. Key developments such as mergers & acquisitions, technology collaborations, investment inflows, and regional expansions are analyzed for their competitive impact. The report also identifies emerging players and innovative startups contributing to market disruption.

Regional insights highlight the most promising investment destinations, regulatory landscapes, and evolving partnerships across energy and industrial corridors.

### Countries Covered

North America — Biomass Gasification market data and outlook to 2034

United States

Canada

Mexico

Europe — Biomass Gasification market data and outlook to 2034

Germany

United Kingdom

France

Italy

Spain

BeNeLux

Russia

Sweden

Asia-Pacific — Biomass Gasification market data and outlook to 2034

China

Japan

India

South Korea

Australia

Indonesia

Malaysia

Vietnam

Middle East and Africa — Biomass Gasification market data and outlook to 2034

Saudi Arabia

South Africa

Iran

UAE

Egypt

South and Central America — Biomass Gasification market data and outlook to 2034

Brazil

Argentina

Chile

Peru

*\* We can include data and analysis of additional countries on demand.*

## Research Methodology

This study combines primary inputs from industry experts across the Biomass Gasification value chain with secondary data from associations, government publications, trade databases, and company disclosures. Proprietary modeling techniques, including data triangulation, statistical correlation, and scenario planning, are applied to deliver reliable market sizing and forecasting.

## Key Questions Addressed

What is the current and forecast market size of the Biomass Gasification industry at global, regional, and country levels?

Which types, applications, and technologies present the highest growth potential?

How are supply chains adapting to geopolitical and economic shocks?

What role do policy frameworks, trade flows, and sustainability targets play in shaping demand?

Who are the leading players, and how are their strategies evolving in the face of global uncertainty?

Which regional “hotspots” and customer segments will outpace the market, and what go-to-market and partnership models best support entry and expansion?

Where are the most investable opportunities—across technology roadmaps, sustainability-linked innovation, and M&A—and what is the best segment to invest over the next 3–5 years?

## Your Key Takeaways from the Biomass Gasification Market Report

Global Biomass Gasification market size and growth projections (CAGR), 2024-2034

Impact of Russia-Ukraine, Israel-Palestine, and Hamas conflicts on Biomass Gasification trade, costs, and supply chains

Biomass Gasification market size, share, and outlook across 5 regions and 27 countries, 2023-2034

Biomass Gasification market size, CAGR, and market share of key products, applications, and end-user verticals, 2023-2034

Short- and long-term Biomass Gasification market trends, drivers, restraints, and opportunities

Porter's Five Forces analysis, technological developments, and Biomass Gasification supply chain analysis

Biomass Gasification trade analysis, Biomass Gasification market price analysis, and Biomass Gasification supply/demand dynamics

Profiles of 5 leading companies—overview, key strategies, financials, and products

Latest Biomass Gasification market news and developments

## Additional Support

With the purchase of this report, you will receive

An updated PDF report and an MS Excel data workbook containing all market tables and figures for easy analysis.

7-day post-sale analyst support for clarifications and in-scope supplementary data, ensuring the deliverable aligns precisely with your requirements.

Complimentary report update to incorporate the latest available data and the impact of recent market developments.

*\* The updated report will be delivered within 3 working days*

## Contents

### **1. TABLE OF CONTENTS**

- 1.1 List of Tables
- 1.2 List of Figures

### **2. GLOBAL BIOMASS GASIFICATION MARKET SUMMARY, 2025**

- 2.1 Biomass Gasification Industry Overview
  - 2.1.1 Global Biomass Gasification Market Revenues (In US\$ billion)
- 2.2 Biomass Gasification Market Scope
- 2.3 Research Methodology

### **3. BIOMASS GASIFICATION MARKET INSIGHTS, 2024-2034**

- 3.1 Biomass Gasification Market Drivers
- 3.2 Biomass Gasification Market Restraints
- 3.3 Biomass Gasification Market Opportunities
- 3.4 Biomass Gasification Market Challenges
- 3.5 Tariff Impact on Global Biomass Gasification Supply Chain Patterns

### **4. BIOMASS GASIFICATION MARKET ANALYTICS**

- 4.1 Biomass Gasification Market Size and Share, Key Products, 2025 Vs 2034
- 4.2 Biomass Gasification Market Size and Share, Dominant Applications, 2025 Vs 2034
- 4.3 Biomass Gasification Market Size and Share, Leading End Uses, 2025 Vs 2034
- 4.4 Biomass Gasification Market Size and Share, High Growth Countries, 2025 Vs 2034
- 4.5 Five Forces Analysis for Global Biomass Gasification Market
  - 4.5.1 Biomass Gasification Industry Attractiveness Index, 2025
  - 4.5.2 Biomass Gasification Supplier Intelligence
  - 4.5.3 Biomass Gasification Buyer Intelligence
  - 4.5.4 Biomass Gasification Competition Intelligence
  - 4.5.5 Biomass Gasification Product Alternatives and Substitutes Intelligence
  - 4.5.6 Biomass Gasification Market Entry Intelligence

### **5. GLOBAL BIOMASS GASIFICATION MARKET STATISTICS – INDUSTRY REVENUE, MARKET SHARE, GROWTH TRENDS AND FORECAST BY SEGMENTS, TO 2034**

5.1 World Biomass Gasification Market Size, Potential and Growth Outlook, 2024- 2034 (\$ billion)

5.1 Global Biomass Gasification Sales Outlook and CAGR Growth By Gasifier Type, 2024- 2034 (\$ billion)

5.2 Global Biomass Gasification Sales Outlook and CAGR Growth By Source, 2024- 2034 (\$ billion)

5.3 Global Biomass Gasification Sales Outlook and CAGR Growth By Application, 2024- 2034 (\$ billion)

5.4 Global Biomass Gasification Market Sales Outlook and Growth by Region, 2024- 2034 (\$ billion)

## **6. ASIA PACIFIC BIOMASS GASIFICATION INDUSTRY STATISTICS – MARKET SIZE, SHARE, COMPETITION AND OUTLOOK**

6.1 Asia Pacific Biomass Gasification Market Insights, 2025

6.2 Asia Pacific Biomass Gasification Market Revenue Forecast By Gasifier Type, 2024- 2034 (USD billion)

6.3 Asia Pacific Biomass Gasification Market Revenue Forecast By Source, 2024- 2034 (USD billion)

6.4 Asia Pacific Biomass Gasification Market Revenue Forecast By Application, 2024- 2034 (USD billion)

6.5 Asia Pacific Biomass Gasification Market Revenue Forecast by Country, 2024- 2034 (USD billion)

6.5.1 China Biomass Gasification Market Size, Opportunities, Growth 2024- 2034

6.5.2 India Biomass Gasification Market Size, Opportunities, Growth 2024- 2034

6.5.3 Japan Biomass Gasification Market Size, Opportunities, Growth 2024- 2034

6.5.4 Australia Biomass Gasification Market Size, Opportunities, Growth 2024- 2034

## **7. EUROPE BIOMASS GASIFICATION MARKET DATA, PENETRATION, AND BUSINESS PROSPECTS TO 2034**

7.1 Europe Biomass Gasification Market Key Findings, 2025

7.2 Europe Biomass Gasification Market Size and Percentage Breakdown By Gasifier Type, 2024- 2034 (USD billion)

7.3 Europe Biomass Gasification Market Size and Percentage Breakdown By Source, 2024- 2034 (USD billion)

7.4 Europe Biomass Gasification Market Size and Percentage Breakdown By Application, 2024- 2034 (USD billion)

## 7.5 Europe Biomass Gasification Market Size and Percentage Breakdown by Country, 2024- 2034 (USD billion)

7.5.1 Germany Biomass Gasification Market Size, Trends, Growth Outlook to 2034

7.5.2 United Kingdom Biomass Gasification Market Size, Trends, Growth Outlook to 2034

7.5.2 France Biomass Gasification Market Size, Trends, Growth Outlook to 2034

7.5.2 Italy Biomass Gasification Market Size, Trends, Growth Outlook to 2034

7.5.2 Spain Biomass Gasification Market Size, Trends, Growth Outlook to 2034

## **8. NORTH AMERICA BIOMASS GASIFICATION MARKET SIZE, GROWTH TRENDS, AND FUTURE PROSPECTS TO 2034**

8.1 North America Snapshot, 2025

8.2 North America Biomass Gasification Market Analysis and Outlook By Gasifier Type, 2024- 2034 (\$ billion)

8.3 North America Biomass Gasification Market Analysis and Outlook By Source, 2024- 2034 (\$ billion)

8.4 North America Biomass Gasification Market Analysis and Outlook By Application, 2024- 2034 (\$ billion)

8.5 North America Biomass Gasification Market Analysis and Outlook by Country, 2024- 2034 (\$ billion)

8.5.1 United States Biomass Gasification Market Size, Share, Growth Trends and Forecast, 2024- 2034

8.5.1 Canada Biomass Gasification Market Size, Share, Growth Trends and Forecast, 2024- 2034

8.5.1 Mexico Biomass Gasification Market Size, Share, Growth Trends and Forecast, 2024- 2034

## **9. SOUTH AND CENTRAL AMERICA BIOMASS GASIFICATION MARKET DRIVERS, CHALLENGES, AND FUTURE PROSPECTS**

9.1 Latin America Biomass Gasification Market Data, 2025

9.2 Latin America Biomass Gasification Market Future By Gasifier Type, 2024- 2034 (\$ billion)

9.3 Latin America Biomass Gasification Market Future By Source, 2024- 2034 (\$ billion)

9.4 Latin America Biomass Gasification Market Future By Application, 2024- 2034 (\$ billion)

9.5 Latin America Biomass Gasification Market Future by Country, 2024- 2034 (\$ billion)

9.5.1 Brazil Biomass Gasification Market Size, Share and Opportunities to 2034

9.5.2 Argentina Biomass Gasification Market Size, Share and Opportunities to 2034

## **10. MIDDLE EAST AFRICA BIOMASS GASIFICATION MARKET OUTLOOK AND GROWTH PROSPECTS**

10.1 Middle East Africa Overview, 2025

10.2 Middle East Africa Biomass Gasification Market Statistics By Gasifier Type, 2024-2034 (USD billion)

10.3 Middle East Africa Biomass Gasification Market Statistics By Source, 2024- 2034 (USD billion)

10.4 Middle East Africa Biomass Gasification Market Statistics By Application, 2024-2034 (USD billion)

10.5 Middle East Africa Biomass Gasification Market Statistics by Country, 2024- 2034 (USD billion)

10.5.1 Middle East Biomass Gasification Market Value, Trends, Growth Forecasts to 2034

10.5.2 Africa Biomass Gasification Market Value, Trends, Growth Forecasts to 2034

## **11. BIOMASS GASIFICATION MARKET STRUCTURE AND COMPETITIVE LANDSCAPE**

11.1 Key Companies in Biomass Gasification Industry

11.2 Biomass Gasification Business Overview

11.3 Biomass Gasification Product Portfolio Analysis

11.4 Financial Analysis

11.5 SWOT Analysis

## **12 APPENDIX**

12.1 Global Biomass Gasification Market Volume (Tons)

12.1 Global Biomass Gasification Trade and Price Analysis

12.2 Biomass Gasification Parent Market and Other Relevant Analysis

12.3 Publisher Expertise

12.2 Biomass Gasification Industry Report Sources and Methodology

## I would like to order

Product name: Biomass Gasification Market Outlook 2025-2034: Market Share, and Growth Analysis By Gasifier Type (Moving or Fixed Bed, Fluidized Bed, Entrained And Other Gasifier Types), By Source (Solid Biomass, Biogas, Municipal Waste, Liquid Biomass), By Application

Product link: <https://marketpublishers.com/r/B8BC7F7961DBEN.html>

Price: US\$ 3,950.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/B8BC7F7961DBEN.html>