Wood Pellet Fuel Market - Global Industry Size, Share, Trends, Opportunity and Forecast Segmented By Feedstock (Forest Wood & Waste, Agriculture Residue, and Others {Bark, Twigs, Gardening Waste, etc.}), By Heating Application (Free Standing Pellet Stove, Pellet Stove Inserts, and Pellet Boilers), By Application (CHP/District Heating, Power Plants, Residential Heating, and Commercial Heating) By Region & Competition, 2021-2031F

https://marketpublishers.com/r/W4AD19A72478EN.html
Date: January 2026
Pages: 181
Price: US$ 4,500.00 (Single User License)
ID: W4AD19A72478EN

Abstracts

The Global Wood Pellet Fuel Market is projected to expand from USD 14.18 Billion in 2025 to USD 22.51 Billion by 2031, reflecting a compound annual growth rate of 8.01%. Composed of compressed organic biomass residues such as sawdust, industrial wood waste, and forestry byproducts, wood pellet fuel offers a standardized, energy-dense renewable alternative to traditional energy sources. This market trajectory is primarily propelled by government-imposed decarbonization mandates that encourage the shift from fossil fuels to biomass within power generation and residential heating, alongside regulatory subsidies and tax incentives that reinforce demand and provide economic stability for industry stakeholders.

According to Bioenergy Europe, global wood pellet consumption surpassed 45 million tonnes for the first time in 2025. However, the market faces notable hurdles regarding raw material sustainability and certification compliance. Increasing environmental regulations related to forest management and carbon neutrality verification threaten to disrupt supply chains and elevate operational expenses, potentially hindering future growth as producers struggle to navigate complex regulatory environments to satisfy

stringent international standards.

Market Driver

The enforcement of favorable government policies and renewable energy subsidies acts as the primary accelerator for market growth, particularly in East Asia where nations are actively replacing coal with biomass. South Korea exemplifies this trend by employing Renewable Energy Certificates (RECs) to encourage power generators to co-fire wood pellets, establishing a steady import demand regardless of price volatility. According to Bioenergy Insight, South Korea imported roughly 312,000 tonnes of wood pellets in June 2025 alone, demonstrating how utilities are driving substantial trade volumes to comply with these renewable standards.

A second critical driver is the widespread expansion of coal-to-biomass conversion projects within the power generation sector, which directly dictates the scale of industrial pellet manufacturing. Utilities throughout Europe and Asia are modifying existing thermal plants to utilize standardized utility-grade pellets, creating a massive supply chain requirement distinct from residential needs. This transition has led North American producers to focus on large-scale contracts; Biomass Magazine reported in April 2025 that U.S. production of utility-grade pellets reached 9.16 million metric tons in 2024, contributing to a resilient global production total of 48.3 million tonnes according to the 'Pellets Statistical Report 2025' by Bioenergy Europe.

Market Challenge

Strict requirements regarding raw material sustainability and certification compliance constitute the primary barrier to the growth of the Global Wood Pellet Fuel Market. As regulators implement more rigorous standards for forest management and carbon neutrality verification, producers encounter rising operational costs and significant administrative challenges. These compliance mandates necessitate the adoption of exhaustive feedstock tracking systems, which often delay production processes and restrict the volume of legally sourcable raw materials, thereby disrupting supply chains and slowing the industry's ability to scale operations swiftly.

The tangible effect of these constraints is reflected in recent production data, which indicates a stagnation in growth despite increasing market demand. Bioenergy Europe reported that global pellet production remained largely stable at 48.3 million tonnes in 2024, underscoring how the challenges in obtaining certified, sustainable fiber hinder manufacturers from expanding capacity to meet the decarbonization goals of the heating and power sectors. As a result, market potential is effectively limited by the availability of compliant raw materials rather than a lack of consumer interest.

Market Trends

The integration of Bioenergy with Carbon Capture and Storage (BECCS) is fundamentally reshaping the market by transforming biomass from a carbon-neutral energy source into a carbon-negative climate solution. Major utilities are retrofitting existing biomass power stations with carbon capture technology to permanently sequester carbon dioxide, validating the long-term utility of wood pellets under strict net-zero regulations and allowing producers to generate revenue through carbon removal credits. Highlighted in a February 2025 article by The Guardian regarding Drax power plant, the UK government has agreed to a subsidy framework valued at approximately ?500 million annually to support the deployment of this essential infrastructure after 2027.

Additionally, the commercialization of Torrefied Black Pellet Technology marks a significant product innovation aimed at resolving the logistical and storage challenges associated with traditional white pellets. By roasting biomass at high temperatures in low-oxygen environments, manufacturers produce hydrophobic "black pellets" with energy densities similar to coal, enabling outdoor storage without degradation and removing the need for costly silos at power plants. As reported by Biomass Magazine in February 2025, a newly commissioned facility in Thailand has successfully begun operations with an annual capacity of 75,000 metric tons, specifically engineered to replace fossil coal in heavy industrial applications.

Key Market Players

- Wood Pellet Energy UK LTD
- Drax Group Plc
- Enviva
- German Pellets GmbH
- Stora Enso Oyj
- Pacific BioEnergy

Wood & Sons

Land Energy Girvan Limited

AS Graanul Invest

Energex American Inc

An Viet Phat Group

Report Scope

In this report, the Global Wood Pellet Fuel Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

- Wood Pellet Fuel Market, By Feedstock
  - Forest Wood & Waste
  - Agriculture Residue
  - Others
- Wood Pellet Fuel Market, By Heating Application
  - Free Standing Pellet Stove
  - Pellet Stove Inserts
  - Pellet Boilers
- Wood Pellet Fuel Market, By Application
  - CHP/District Heating
  - Power Plants

Residential Heating

Commercial Heating

Wood Pellet Fuel Market, By Region

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

+357 96 030922
info@marketpublishers.com

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Wood Pellet Fuel Market.

Available Customizations:

Global Wood Pellet Fuel Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

1.1. Market Definition
1.2. Scope of the Market
  1.2.1. Markets Covered
  1.2.2. Years Considered for Study
  1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

2.1. Objective of the Study
2.2. Baseline Methodology
2.3. Key Industry Partners
2.4. Major Association and Secondary Sources
2.5. Forecasting Methodology
2.6. Data Triangulation & Validation
2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

3.1. Overview of the Market
3.2. Overview of Key Market Segmentations
3.3. Overview of Key Market Players
3.4. Overview of Key Regions/Countries
3.5. Overview of Market Drivers, Challenges, Trends

4. VOICE OF CUSTOMER

5. GLOBAL WOOD PELLET FUEL MARKET OUTLOOK

5.1. Market Size & Forecast
  5.1.1. By Value
5.2. Market Share & Forecast
  5.2.1. By Feedstock (Forest Wood & Waste, Agriculture Residue, Others {Bark, Twigs, Gardening Waste, etc.})
  5.2.2. By Heating Application (Free Standing Pellet Stove, Pellet Stove Inserts, Pellet Boilers)

5.2.3. By Application (CHP/District Heating, Power Plants, Residential Heating, Commercial Heating)
5.2.4. By Region
5.2.5. By Company (2025)
5.3. Market Map

6. NORTH AMERICA WOOD PELLET FUEL MARKET OUTLOOK

6.1. Market Size & Forecast
6.1.1. By Value
6.2. Market Share & Forecast
6.2.1. By Feedstock
6.2.2. By Heating Application
6.2.3. By Application
6.2.4. By Country
6.3. North America: Country Analysis
6.3.1. United States Wood Pellet Fuel Market Outlook
6.3.1.1. Market Size & Forecast
6.3.1.1.1. By Value
6.3.1.2. Market Share & Forecast
6.3.1.2.1. By Feedstock
6.3.1.2.2. By Heating Application
6.3.1.2.3. By Application
6.3.2. Canada Wood Pellet Fuel Market Outlook
6.3.2.1. Market Size & Forecast
6.3.2.1.1. By Value
6.3.2.2. Market Share & Forecast
6.3.2.2.1. By Feedstock
6.3.2.2.2. By Heating Application
6.3.2.2.3. By Application
6.3.3. Mexico Wood Pellet Fuel Market Outlook
6.3.3.1. Market Size & Forecast
6.3.3.1.1. By Value
6.3.3.2. Market Share & Forecast
6.3.3.2.1. By Feedstock
6.3.3.2.2. By Heating Application
6.3.3.2.3. By Application

7. EUROPE WOOD PELLET FUEL MARKET OUTLOOK

7.1. Market Size & Forecast
7.1.1. By Value
7.2. Market Share & Forecast
7.2.1. By Feedstock
7.2.2. By Heating Application
7.2.3. By Application
7.2.4. By Country
7.3. Europe: Country Analysis
7.3.1. Germany Wood Pellet Fuel Market Outlook
7.3.1.1. Market Size & Forecast
7.3.1.1.1. By Value
7.3.1.2. Market Share & Forecast
7.3.1.2.1. By Feedstock
7.3.1.2.2. By Heating Application
7.3.1.2.3. By Application
7.3.2. France Wood Pellet Fuel Market Outlook
7.3.2.1. Market Size & Forecast
7.3.2.1.1. By Value
7.3.2.2. Market Share & Forecast
7.3.2.2.1. By Feedstock
7.3.2.2.2. By Heating Application
7.3.2.2.3. By Application
7.3.3. United Kingdom Wood Pellet Fuel Market Outlook
7.3.3.1. Market Size & Forecast
7.3.3.1.1. By Value
7.3.3.2. Market Share & Forecast
7.3.3.2.1. By Feedstock
7.3.3.2.2. By Heating Application
7.3.3.2.3. By Application
7.3.4. Italy Wood Pellet Fuel Market Outlook
7.3.4.1. Market Size & Forecast
7.3.4.1.1. By Value
7.3.4.2. Market Share & Forecast
7.3.4.2.1. By Feedstock
7.3.4.2.2. By Heating Application
7.3.4.2.3. By Application
7.3.5. Spain Wood Pellet Fuel Market Outlook
7.3.5.1. Market Size & Forecast

7.3.5.1.1. By Value
7.3.5.2. Market Share & Forecast
7.3.5.2.1. By Feedstock
7.3.5.2.2. By Heating Application
7.3.5.2.3. By Application

8. ASIA PACIFIC WOOD PELLET FUEL MARKET OUTLOOK

8.1. Market Size & Forecast
8.1.1. By Value
8.2. Market Share & Forecast
8.2.1. By Feedstock
8.2.2. By Heating Application
8.2.3. By Application
8.2.4. By Country
8.3. Asia Pacific: Country Analysis
8.3.1. China Wood Pellet Fuel Market Outlook
8.3.1.1. Market Size & Forecast
8.3.1.1.1. By Value
8.3.1.2. Market Share & Forecast
8.3.1.2.1. By Feedstock
8.3.1.2.2. By Heating Application
8.3.1.2.3. By Application
8.3.2. India Wood Pellet Fuel Market Outlook
8.3.2.1. Market Size & Forecast
8.3.2.1.1. By Value
8.3.2.2. Market Share & Forecast
8.3.2.2.1. By Feedstock
8.3.2.2.2. By Heating Application
8.3.2.2.3. By Application
8.3.3. Japan Wood Pellet Fuel Market Outlook
8.3.3.1. Market Size & Forecast
8.3.3.1.1. By Value
8.3.3.2. Market Share & Forecast
8.3.3.2.1. By Feedstock
8.3.3.2.2. By Heating Application
8.3.3.2.3. By Application
8.3.4. South Korea Wood Pellet Fuel Market Outlook
8.3.4.1. Market Size & Forecast

+357 96 030922
info@marketpublishers.com

8.3.4.1.1. By Value
8.3.4.2. Market Share & Forecast
8.3.4.2.1. By Feedstock
8.3.4.2.2. By Heating Application
8.3.4.2.3. By Application
8.3.5. Australia Wood Pellet Fuel Market Outlook
8.3.5.1. Market Size & Forecast
8.3.5.1.1. By Value
8.3.5.2. Market Share & Forecast
8.3.5.2.1. By Feedstock
8.3.5.2.2. By Heating Application
8.3.5.2.3. By Application

9. MIDDLE EAST & AFRICA WOOD PELLET FUEL MARKET OUTLOOK

9.1. Market Size & Forecast
9.1.1. By Value
9.2. Market Share & Forecast
9.2.1. By Feedstock
9.2.2. By Heating Application
9.2.3. By Application
9.2.4. By Country
9.3. Middle East & Africa: Country Analysis
9.3.1. Saudi Arabia Wood Pellet Fuel Market Outlook
9.3.1.1. Market Size & Forecast
9.3.1.1.1. By Value
9.3.1.2. Market Share & Forecast
9.3.1.2.1. By Feedstock
9.3.1.2.2. By Heating Application
9.3.1.2.3. By Application
9.3.2. UAE Wood Pellet Fuel Market Outlook
9.3.2.1. Market Size & Forecast
9.3.2.1.1. By Value
9.3.2.2. Market Share & Forecast
9.3.2.2.1. By Feedstock
9.3.2.2.2. By Heating Application
9.3.2.2.3. By Application
9.3.3. South Africa Wood Pellet Fuel Market Outlook
9.3.3.1. Market Size & Forecast

9.3.3.1.1. By Value
9.3.3.2. Market Share & Forecast
9.3.3.2.1. By Feedstock
9.3.3.2.2. By Heating Application
9.3.3.2.3. By Application

10. SOUTH AMERICA WOOD PELLET FUEL MARKET OUTLOOK

10.1. Market Size & Forecast
10.1.1. By Value
10.2. Market Share & Forecast
10.2.1. By Feedstock
10.2.2. By Heating Application
10.2.3. By Application
10.2.4. By Country
10.3. South America: Country Analysis
10.3.1. Brazil Wood Pellet Fuel Market Outlook
10.3.1.1. Market Size & Forecast
10.3.1.1.1. By Value
10.3.1.2. Market Share & Forecast
10.3.1.2.1. By Feedstock
10.3.1.2.2. By Heating Application
10.3.1.2.3. By Application
10.3.2. Colombia Wood Pellet Fuel Market Outlook
10.3.2.1. Market Size & Forecast
10.3.2.1.1. By Value
10.3.2.2. Market Share & Forecast
10.3.2.2.1. By Feedstock
10.3.2.2.2. By Heating Application
10.3.2.2.3. By Application
10.3.3. Argentina Wood Pellet Fuel Market Outlook
10.3.3.1. Market Size & Forecast
10.3.3.1.1. By Value
10.3.3.2. Market Share & Forecast
10.3.3.2.1. By Feedstock
10.3.3.2.2. By Heating Application
10.3.3.2.3. By Application

11. MARKET DYNAMICS

+357 96 030922
info@marketpublishers.com

11.1. Drivers
11.2. Challenges

12. MARKET TRENDS & DEVELOPMENTS

12.1. Merger & Acquisition (If Any)
12.2. Product Launches (If Any)
12.3. Recent Developments

13. GLOBAL WOOD PELLET FUEL MARKET: SWOT ANALYSIS

14. PORTER'S FIVE FORCES ANALYSIS

14.1. Competition in the Industry
14.2. Potential of New Entrants
14.3. Power of Suppliers
14.4. Power of Customers
14.5. Threat of Substitute Products

15. COMPETITIVE LANDSCAPE

15.1. Wood Pellet Energy UK LTD
  15.1.1. Business Overview
  15.1.2. Products & Services
  15.1.3. Recent Developments
  15.1.4. Key Personnel
  15.1.5. SWOT Analysis
15.2. Drax Group Plc
15.3. Enviva
15.4. German Pellets GmbH
15.5. Stora Enso Oyj
15.6. Pacific BioEnergy
15.7. Wood & Sons
15.8. Land Energy Girvan Limited
15.9. AS Graanul Invest
15.10. Energex American Inc
15.11. An Viet Phat Group

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Wood Pellet Fuel Market - Global Industry Size, Share, Trends, Opportunity and Forecast Segmented By Feedstock (Forest Wood & Waste, Agriculture Residue, and Others {Bark, Twigs, Gardening Waste, etc.}), By Heating Application (Free Standing Pellet Stove, Pellet Stove Inserts, and Pellet Boilers), By Application (CHP/District Heating, Power Plants, Residential Heating, and Commercial Heating) By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/W4AD19A72478EN.html

Price: US$ 4,500.00 (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/W4AD19A72478EN.html