

## **Waste to Energy Market By Technology (Thermal, Biochemical, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032**

Market Report | 2023-11-01 | 250 pages | Allied Market Research

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### **Report description:**

The global waste to energy market size was valued at \$35.6 billion in 2022, and is projected to reach \$56.0 billion by 2032, growing at a CAGR of 4.7% from 2023 to 2032.

Waste to energy (WtE) is the process of converting non-recyclable waste materials into usable forms of energy like electricity, heat, or biofuels. It involves techniques such as incineration, gasification, or pyrolysis to transform waste into energy sources. This approach addresses waste management challenges by reducing landfill reliance and contributes to renewable energy generation. WtE plays an important role in sustainable resource utilization, minimizing environmental impact while harnessing the energy potential of discarded materials.

Waste to energy processes such as incineration, gasification, and pyrolysis play an important role in waste diversion from landfills. By harnessing the energy potential of waste materials, these methods significantly reduce the volume of waste destined for traditional disposal sites. This diversion minimizes the environmental impact of landfills and mitigates methane emissions which is a potent greenhouse gas produced during waste decomposition.

The increase in demand for renewable energy needs to diversify energy sources and reduce reliance on finite fossil fuels. Waste to energy technologies offer a valuable solution by converting various waste materials into usable energy forms like electricity, heat, or biofuels. This conversion contributes to the renewable energy mix, providing an alternative and sustainable source of power. All these factors increase the demand for WtE solutions. However, the high cost of investment in waste to energy facilities remains a significant challenge in their widespread adoption and implementation.

The waste to energy market is segmented on the basis of technology and region. By technology, the market is divided into thermal, biochemical, and others. On the basis of region, the market is classified into North America, Europe, Asia-Pacific, and LAMEA.

Thermal technology accounted for more than four-fifths waste to energy market growth in 2022 and is expected to maintain its dominance during the forecast period. Thermal technology plays a critical role in converting solid waste into usable energy forms through high-temperature processes. These methods harness the energy content of waste materials, contributing significantly to waste management and renewable energy generation. It involves processes such as incineration, gasification, and pyrolysis.

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Incineration is a commonly used thermal method. It involves controlled combustion of waste at high temperatures that produces heat which is used to generate steam that powers turbines, producing electricity.

On the basis of region, Europe accounted for more than two-fifths waste to energy market share in 2022 and is expected to maintain its dominance during the forecast period. The European Union's stringent waste management policies and directives such as targets to reduce landfilling and promote recycling, have propelled the adoption of waste to energy technologies. These regulations encourage member states to invest in alternative waste treatment methods. As a result, Europe has seen a significant increase in waste to energy infrastructure and capacity.

Key players in the waste to energy market include Babcock & Wilcox Enterprises, Inc., China Everbright Environment Group Limited, Covanta Holding Corporation, Hitachi Zosen Inova AG, Keppel Infrastructure Group, MVV Energie AG, Suez, Veolia, Viridor Limited, and Wheelabrator Technologies Inc.

Apart from these major players, there are other key players in the waste to energy market. These include EEW Energy from Waste GmbH, Fortum Corporation, Waste Management, Inc., Ramboll Group, Acciona S.A., Advanced Plasma Power, BioHiTech Global, Inc., GFL Environmental Inc., Herz GmbH, KEPPEL SEGHERS, CNIM Group, and Plasco Energy Group Inc.

Key findings of the study

-On the basis of technology, the other segments including mechanical biological treatment (MBT), plasma gasification, and hydrothermal processing are expected to grow at a CAGR of 5.3%, in terms of revenue, during the forecast period.

-By region, Europe was the highest revenue contributor accounting for more than two-fifths waste to energy market share in 2022 representing the CAGR of 4.6% of CAGR.

-Asia-Pacific is the fastest growing region representing for 5.1% of CAGR to the market.

Key Benefits For Stakeholders

-This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the waste to energy market analysis from 2022 to 2032 to identify the prevailing waste to energy market opportunities.

-The market research is offered along with information related to key drivers, restraints, and opportunities.

-Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

-In-depth analysis of the waste to energy market forecast to determine the prevailing market opportunities.

-Major countries in each region are mapped according to their revenue contribution to the global market.

-Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

-The report includes the analysis of the regional as well as global waste to energy market trends, key players, market segments, application areas, and market growth strategies.

Additional benefits you will get with this purchase are:

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- Capital Investment breakdown
- Investment Opportunities
- Product Benchmarking / Product specification and applications
- Upcoming/New Entrant by Regions
- Technology Trend Analysis
- Market share analysis of players by products/segments
- New Product Development/ Product Matrix of Key Players
- Patient/epidemiology data at country, region, global level
- Regulatory Guidelines
- Additional company profiles with specific to client's interest
- Additional country or region analysis- market size and forecast
- Expanded list for Company Profiles
- Historic market data
- Key player details (including location, contact details, supplier/vendor network etc. in excel format)
- SWOT Analysis
- Volume Market Size and Forecast

#### Key Market Segments

##### By Technology

- Thermal
- Type
- Incineration
- Pyrolysis
- Gasification
- Biochemical
- Others

##### By Region

- North America
- U.S.
- Canada
- Mexico
- Europe
- Germany
- France
- UK
- Spain
- Italy
- Rest of Europe
- Asia-Pacific
- China
- India
- Japan
- South Korea
- Australia
- Rest of Asia-Pacific
- LAMEA
- Brazil
- South Africa

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- Saudi Arabia
- Rest of LAMEA
- Key Market Players
- Babcock & Wilcox Enterprises, Inc.
- Covanta Holding Corporation
- Hitachi Zosen Inova AG
- Veolia
- Suez
- Keppel Infrastructure Group
- China Everbright Environment Group Limited.
- Wheelabrator Technologies Inc.
- MVV Energie AG
- Viridor Limited

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