

Landfill Gas-to-Energy Market Forecasts to 2034 – Global Analysis By Feedstock Source (Municipal Solid Waste Landfills, Industrial Waste Landfills and Agricultural Waste Landfills), Technology, Application, End User and By Geography

<https://marketpublishers.com/r/LBA7B259FB1FEN.html>

Date: June 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: LBA7B259FB1FEN

Abstracts

According to Statistics MRC, the Global Landfill Gas-to-Energy Market is accounted for \$2.9 billion in 2026 and is expected to reach \$4.8 billion by 2034 growing at a CAGR of 6.8% during the forecast period. Landfill gas-to-energy systems harness biogas formed during the natural breakdown of municipal solid waste and transform it into useful power, including electricity, thermal energy, or pipeline-quality gas. Engineered wells and piping collect methane, limiting its release and mitigating climate change effects. The technology promotes resource recovery, improves landfill operations, and aligns with sustainability goals. In addition, projects generate revenue streams from power generation and environmental incentives, strengthening financial viability. Widely adopted across regions, LFGTE supports cleaner energy portfolios, reduces odors and safety risks, and delivers long-term environmental and economic advantages for communities and infrastructure operators while enhancing resilience and opportunities.

According to the U.S. Environmental Protection Agency (EPA): More than 500 operational landfill gas-to-energy projects exist in the United States, collectively reducing methane emissions equivalent to removing 4 million cars from the road annually.

Market Dynamics:

Driver:

Rising environmental regulations and emission reduction policies

Increasingly strict environmental laws and emission reduction mandates are significantly boosting the landfill gas-to-energy market. Authorities across regions are implementing tighter controls on methane release from landfills because of its harmful climate impact. These rules push operators to adopt gas recovery and energy conversion technologies. Financial incentives, along with penalties for non-compliance, encourage faster implementation. Carbon trading systems also play a role in supporting project viability. As countries strengthen their commitments to lowering emissions and achieving sustainability targets, regulatory frameworks continue to drive investment and innovation in LFGTE solutions, ensuring both ecological benefits and financial returns.

Restraint:

High initial capital investment and infrastructure costs

Significant capital expenditure and infrastructure demands present a major challenge for the landfill gas-to-energy market. Developing necessary systems for gas capture, treatment, and energy generation requires large financial commitments. Many local authorities, especially in emerging economies, face difficulties in allocating such funds or managing extended return periods. Additional expenses related to regulatory approvals and grid integration add to the burden. Financing constraints and concerns over profitability often deter stakeholders from investing. As a result, these high cost barriers restrict widespread implementation and slow the expansion of landfill gas energy projects across various regions worldwide.

Opportunity:

Expansion of renewable natural gas (RNG) production

Increasing production of renewable natural gas offers significant growth potential for the landfill gas-to-energy market. By refining landfill gas into high-quality RNG, it can replace traditional fossil-based natural gas across multiple sectors, including transport and industry. Rising interest in cleaner fuels and favorable regulatory frameworks are driving infrastructure development. This opens up additional income opportunities for stakeholders and boosts project viability. Furthermore, the ability to inject RNG into existing gas networks enhances system efficiency. With global focus on reducing carbon emissions, landfill-derived RNG is becoming an increasingly important component of the evolving energy landscape.

Threat:

Competition from alternative renewable energy sources

The growing dominance of other renewable energy technologies represents a key challenge for the landfill gas-to-energy market. Solutions like solar and wind power are expanding quickly due to technological improvements and favorable government policies. These energy sources are often more cost-effective and scalable, making them attractive to investors and policymakers. As a result, landfill gas projects may face reduced interest and funding. The continued decline in renewable energy costs further intensifies this competition, potentially hindering the adoption and expansion of landfill gas energy systems in global energy markets.

Covid-19 Impact:

The COVID-19 outbreak produced both negative and positive effects on the landfill gas-to-energy market. In the early stages, restrictions such as lockdowns and workforce limitations disrupted project execution and supply chains, causing delays in operations. Maintenance and installation activities were slowed, impacting overall output. Meanwhile, higher household waste volumes during stay-at-home periods contributed to increased gas generation in certain areas. Economic instability and lower energy consumption from industries affected revenues. Nevertheless, recovery efforts focused on sustainable development encouraged investment in renewable energy, strengthening the market's long-term outlook and reinforcing the importance of landfill gas utilization worldwide.

The municipal solid waste landfills segment is expected to be the largest during the forecast period

The municipal solid waste landfills segment is expected to account for the largest market share during the forecast period because they receive substantial quantities of organic waste from residential and commercial sources. The decomposition of this material generates considerable methane, which can be efficiently captured and converted into energy. Well-developed infrastructure and favourable regulations make these sites ideal for project implementation. Continuous waste disposal ensures a reliable supply of landfill gas, supporting consistent energy production. With rising urban populations and increasing waste generation, this segment remains the most prominent contributor to landfill gas utilization and large-scale energy recovery initiatives

worldwide.

The municipal & community projects segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the municipal & community projects segment is predicted to witness the highest growth rate, driven by strong government support for sustainable waste solutions and localized power generation. Authorities are increasingly adopting landfill gas systems to manage waste efficiently while producing energy for local consumption. Rising environmental awareness and the push for energy independence are key contributing factors. Financial support through public funding and collaborative programs further encourages adoption. As urban areas continue to develop and sustainability becomes a priority, community-level landfill gas projects are experiencing significant expansion across global markets.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share owing to its advanced waste management systems and supportive environmental regulations promoting methane recovery and energy production. A large number of active projects, especially in the United States, contribute to this leadership. Government incentives, including renewable energy schemes and financial benefits, encourage ongoing development. Technological advancements and strong sustainability awareness also drive adoption. Reliable waste generation ensures a continuous supply of landfill gas for energy conversion. Furthermore, the involvement of major industry participants and steady investment in green energy initiatives strengthen the region's top position in the global market.

Region with highest CAGR:

Over the forecast period, the Asia-Pacific region is anticipated to exhibit the highest CAGR, driven by expanding urban populations and rising volumes of municipal waste. Nations like China and India are investing heavily in modern waste management systems and clean energy technologies. Favourable government initiatives, along with financial support from global organizations, are encouraging project expansion. Increasing focus on environmental protection and emission reduction further supports adoption. With continuous infrastructure development and growing awareness of sustainable practices, Asia-Pacific is emerging as a major center for rapid advancement in landfill gas-to-energy solutions.

Key players in the market

Some of the key players in Landfill Gas-to-Energy Market include Waste Management, Inc., Republic Services, Inc., Veolia Environnement S.A., SUEZ SA, Wheelabrator Technologies Inc., Covanta Holding Corporation, Ameresco, Inc., Montauk Renewables, Inc., Pennon Group Plc, Gasrec Ltd., GreenGas USA, LFG Specialties, LLC, Coronado Energy, Energy Developments Pty Ltd, Biffa Plc, Vespene Energy, Viridi Energy and Waga Energy.

Key Developments:

In March 2026, Ameresco, Inc announced a district-wide LED lighting upgrade project at Saginaw Public School District, advancing its commitment to reducing energy consumption and lowering operating costs across all facilities. The comprehensive initiative will modernize lighting systems throughout the district, improve overall building efficiency, and create brighter, more consistent learning and working environments for students and staff.

In February 2026, Veolia has secured two 15-year operations and maintenance (O&M) contracts for Mumbai's upcoming Bhandup and Panjrapur Water Treatment Plants (WTPs), strengthening its presence in India's municipal water sector. The contracts mark the largest municipal water sector agreements signed by a French company in India. The combined treatment capacity of the two plants will be 2,910 million litres per day (MLD), equivalent to 2.91 million cubic metres per day.

In April 2025, SUEZ and the CNRS have signed a five-year framework agreement to combine their R&D efforts and develop innovative solutions to promote sustainable resource management and new decarbonisation technologies. This framework agreement aims to pool together SUEZ's innovation capabilities and the CNRS' scientific excellence.

Feedstock Sources Covered:

Municipal Solid Waste Landfills

Industrial Waste Landfills

Agricultural Waste Landfills

Technologies Covered:

- Gas Collection Systems
- Gas Processing & Upgrading Systems
- Gas-to-Energy Conversion Systems

Applications Covered:

- Electricity Generation
- Direct Use
- Renewable Natural Gas (RNG) Production

End Users Covered:

- Utilities & Independent Power Producers (IPPs)
- Industrial Facilities
- Commercial Establishments
- Municipal & Community Projects

Regions Covered:

- North America
 - United States
 - Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL LANDFILL GAS-TO-ENERGY MARKET, BY FEEDSTOCK SOURCE

- 5.1 Municipal Solid Waste Landfills
- 5.2 Industrial Waste Landfills
- 5.3 Agricultural Waste Landfills

6 GLOBAL LANDFILL GAS-TO-ENERGY MARKET, BY TECHNOLOGY

- 6.1 Gas Collection Systems
- 6.2 Gas Processing & Upgrading Systems
- 6.3 Gas-to-Energy Conversion Systems

7 GLOBAL LANDFILL GAS-TO-ENERGY MARKET, BY APPLICATION

- 7.1 Electricity Generation
- 7.2 Direct Use
- 7.3 Renewable Natural Gas (RNG) Production

8 GLOBAL LANDFILL GAS-TO-ENERGY MARKET, BY END USER

- 8.1 Utilities & Independent Power Producers (IPPs)
- 8.2 Industrial Facilities
- 8.3 Commercial Establishments
- 8.4 Municipal & Community Projects

9 GLOBAL LANDFILL GAS-TO-ENERGY MARKET, BY GEOGRAPHY

- 9.1 North America
 - 9.1.1 United States
 - 9.1.2 Canada
 - 9.1.3 Mexico
- 9.2 Europe
 - 9.2.1 United Kingdom
 - 9.2.2 Germany
 - 9.2.3 France

- 9.2.4 Italy
- 9.2.5 Spain
- 9.2.6 Netherlands
- 9.2.7 Belgium
- 9.2.8 Sweden
- 9.2.9 Switzerland
- 9.2.10 Poland
- 9.2.11 Rest of Europe
- 9.3 Asia Pacific
 - 9.3.1 China
 - 9.3.2 Japan
 - 9.3.3 India
 - 9.3.4 South Korea
 - 9.3.5 Australia
 - 9.3.6 Indonesia
 - 9.3.7 Thailand
 - 9.3.8 Malaysia
 - 9.3.9 Singapore
 - 9.3.10 Vietnam
 - 9.3.11 Rest of Asia Pacific
- 9.4 South America
 - 9.4.1 Brazil
 - 9.4.2 Argentina
 - 9.4.3 Colombia
 - 9.4.4 Chile
 - 9.4.5 Peru
 - 9.4.6 Rest of South America
- 9.5 Rest of the World (RoW)
 - 9.5.1 Middle East
 - 9.5.1.1 Saudi Arabia
 - 9.5.1.2 United Arab Emirates
 - 9.5.1.3 Qatar
 - 9.5.1.4 Israel
 - 9.5.1.5 Rest of Middle East
 - 9.5.2 Africa
 - 9.5.2.1 South Africa
 - 9.5.2.2 Egypt
 - 9.5.2.3 Morocco
 - 9.5.2.4 Rest of Africa

10 STRATEGIC MARKET INTELLIGENCE

- 10.1 Industry Value Network and Supply Chain Assessment
- 10.2 White-Space and Opportunity Mapping
- 10.3 Product Evolution and Market Life Cycle Analysis
- 10.4 Channel, Distributor, and Go-to-Market Assessment

11 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 11.1 Mergers and Acquisitions
- 11.2 Partnerships, Alliances, and Joint Ventures
- 11.3 New Product Launches and Certifications
- 11.4 Capacity Expansion and Investments
- 11.5 Other Strategic Initiatives

12 COMPANY PROFILES

- 12.1 Waste Management, Inc.
- 12.2 Republic Services, Inc.
- 12.3 Veolia Environnement S.A.
- 12.4 SUEZ SA
- 12.5 Wheelabrator Technologies Inc.
- 12.6 Covanta Holding Corporation
- 12.7 Ameresco, Inc.
- 12.8 Montauk Renewables, Inc.
- 12.9 Pennon Group Plc
- 12.10 Gasrec Ltd.
- 12.11 GreenGas USA
- 12.12 LFG Specialties, LLC
- 12.13 Coronado Energy
- 12.14 Energy Developments Pty Ltd
- 12.15 Biffa Plc
- 12.16 Vespene Energy
- 12.17 Viridi Energy
- 12.18 Waga Energy

List Of Tables

LIST OF TABLES

Table 1 Global Landfill Gas-to-Energy Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Landfill Gas-to-Energy Market Outlook, By Feedstock Source (2023-2034) (\$MN)

Table 3 Global Landfill Gas-to-Energy Market Outlook, By Municipal Solid Waste Landfills (2023-2034) (\$MN)

Table 4 Global Landfill Gas-to-Energy Market Outlook, By Industrial Waste Landfills (2023-2034) (\$MN)

Table 5 Global Landfill Gas-to-Energy Market Outlook, By Agricultural Waste Landfills (2023-2034) (\$MN)

Table 6 Global Landfill Gas-to-Energy Market Outlook, By Technology (2023-2034) (\$MN)

Table 7 Global Landfill Gas-to-Energy Market Outlook, By Gas Collection Systems (2023-2034) (\$MN)

Table 8 Global Landfill Gas-to-Energy Market Outlook, By Gas Processing & Upgrading Systems (2023-2034) (\$MN)

Table 9 Global Landfill Gas-to-Energy Market Outlook, By Gas-to-Energy Conversion Systems (2023-2034) (\$MN)

Table 10 Global Landfill Gas-to-Energy Market Outlook, By Application (2023-2034) (\$MN)

Table 11 Global Landfill Gas-to-Energy Market Outlook, By Electricity Generation (2023-2034) (\$MN)

Table 12 Global Landfill Gas-to-Energy Market Outlook, By Direct Use (2023-2034) (\$MN)

Table 13 Global Landfill Gas-to-Energy Market Outlook, By Renewable Natural Gas (RNG) Production (2023-2034) (\$MN)

Table 14 Global Landfill Gas-to-Energy Market Outlook, By End User (2023-2034) (\$MN)

Table 15 Global Landfill Gas-to-Energy Market Outlook, By Utilities & Independent Power Producers (IPPs) (2023-2034) (\$MN)

Table 16 Global Landfill Gas-to-Energy Market Outlook, By Industrial Facilities (2023-2034) (\$MN)

Table 17 Global Landfill Gas-to-Energy Market Outlook, By Commercial Establishments (2023-2034) (\$MN)

Table 18 Global Landfill Gas-to-Energy Market Outlook, By Municipal & Community Projects (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) Regions are also represented in the same manner as above.

I would like to order

Product name: Landfill Gas-to-Energy Market Forecasts to 2034 – Global Analysis By Feedstock Source (Municipal Solid Waste Landfills, Industrial Waste Landfills and Agricultural Waste Landfills), Technology, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/LBA7B259FB1FEN.html>

Price: US\$ 4,150.00 (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/LBA7B259FB1FEN.html>