ANMD-MRS35-345 · Waste-to-Energy Technologies

Landfill Gas Recovery Systems

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US$

WHY THIS REPORT

Landfill gas recovery systems capture methane-rich gas from decomposing waste, turning a potent fugitive greenhouse gas into electricity, heat or pipeline-grade renewable natural gas. Purpose-built systems — gas-collection wells and piping, flaring, LFG-to-energy, LFG upgrading to RNG and monitoring & control — are engineered so that landfill methane is collected, destroyed or monetised. The pay-off is measurable: methane-emissions abatement, renewable generation, RNG revenue and regulatory compliance. This report is a comprehensive, decision-grade study of that market across system type, component, application, end user, deployment and business model, spanning history 2020–2024, a 2025 base year, a 2025–2032 forecast and long-term outlooks to 2035, 2040 and 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

The sustainability case is the report's backbone. Beyond energy, LFG recovery delivers measurable methane-emissions abatement, renewable generation, and fossil-gas displacement, while monitoring strengthens the climate-integrity story.

Mapped Sustainable Development Goals:

SDG 2	SDG 6	SDG 7	SDG 13	SDG 15
Zero Hunger	Clean Water	Affordable Energy	Climate Action	Life on Land

Measurable sustainability outcomes assessed:

- Methane capture and avoided fugitive landfill emissions
- Renewable energy and RNG output from captured gas
- Avoided-emissions credits and disposal-site stewardship
- Collection efficiency and leakage integrity as material risks

Framework alignment: Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

WHAT'S INSIDE AT A GLANCE

53 Chapters	**9** Report Parts	**7** Regions Covered	**40+** Country Markets
2025–32 Forecast Horizon	**4** Forward Scenarios	**25+** Companies Profiled	**5** SDGs Mapped

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. Across the seven reporting regions, the report separates early commercialisation leaders from high-growth and emerging markets, profiling named country sub-markets, policy regimes and project pipelines in each. Europe and Asia Pacific anchor near-term volume; North America scales on RNG and diversion incentives; while Latin America, Africa and the Middle East are assessed on their own merits — for waste infrastructure, energy access and emissions mitigation — rather than aggregated away.

MARKET OVERVIEW

From fugitive methane to managed energy — where gas recovery turns landfill emissions into renewable output.

Landfill gas recovery is moving from flaring-for-compliance to RNG-driven value capture. Demand is driven by the convergence of methane regulation, RNG incentives and landfill-emissions targets, supported by maturing policy across North America, Europe and Asia Pacific. The market is read three ways — value, systems and installed MW — and forecast under conservative, base, accelerated and disruption scenarios, with every projection resolved to the 2025 base year and each region reported separately rather than folded into Rest of World.

- North America leads early commercialisation, anchored by the United States and Canada, where large landfill bases, RNG credits and methane rules drive the most activity.
- Europe is scaling on regulation, with Germany, the United Kingdom and France combining methane-control rules with established LFG-to-power assets.
- Asia Pacific is accelerating, supported by China, India and Southeast Asia, where large landfills and methane-mitigation programmes are strongest.
- System type and application segment the value, across collection, flaring and LFG-to-energy systems, and across power, RNG and compliance use cases, each with distinct economics.

REGIONAL OUTLOOK

Across seven reporting regions, the report separates early commercialisation leaders from high-growth and emerging markets — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
Europe	Commercial leader	Germany, France, Netherlands, Nordics — landfill bans, circular-economy targets, district heating
Asia Pacific	Scale engine	China, Japan, India, South Korea — urban waste growth, new-build programmes, industrial demand
North America	Accelerating	United States, Canada — RNG incentives, landfill diversion, plant modernisation
Latin America	Emerging	Brazil, Mexico — waste-management investment, methane-mitigation projects
Africa	Frontier	South Africa, Morocco, Egypt — waste infrastructure build-out, blended finance
Middle East	Frontier	Saudi Arabia, UAE, Israel — waste-management investment, circular-economy strategies

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
• Methane-emissions regulation & rules • RNG incentives & transport credits • Landfill-emissions & climate targets • Renewable power & heat revenue • Collection, upgrading & monitoring advances	• Declining gas yield over landfill life • Collection-efficiency & fugitive-loss limits • Upgrading capital cost for RNG • Credit-scheme & policy dependence • Gas-quality & contaminant variability

SEGMENTATION SNAPSHOT

By System Type	Gas-collection · flaring · LFG-to-energy · LFG upgrading to RNG · monitoring & control
By Component	Wells · piping · blowers · flares · engines · monitoring systems
By Application	Landfill operators · utilities · municipalities · gas distributors
By End User	Landfill operators · utilities · municipalities · gas distributors
By Business Model	Equipment sale · EPC / turnkey · BOT / concession · O&M; contract
By Scale	Small · mid · large

TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

Part V — Company, Competition, Patent and Project Intelligence

Part VI — Sustainability, ESG, SDG, Climate and Natural-Capital Intelligence

Part VII — Supply Chain, Policy, Legal, Economics and Finance

Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

Part IX — Annexes, Directories and Reference Material

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans waste-operator developers, RNG specialists, and gas-equipment manufacturers.

Representative players profiled in the full report:

Waste Management, Inc. · Republic Services, Inc. · Archaea Energy LLC / BP p.l.c. · Montauk Renewables, Inc. · Veolia Environnement SA · and further profiled players across the value chain.

Investment intelligence: venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a structured investment recommendation.

KEY QUESTIONS THIS REPORT ANSWERS

? How large is the global Landfill Gas Recovery Systems market, and how fast will it grow to 2032?
? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
? How do the category economics change returns versus incumbent approaches?
? Who leads, and where is the competitive and patent white space?
? Is the investment case bankable — and under what conditions?
? How does the technology align with the SDGs and emerging disclosure regulation?

WHY ANMD — THE DIFFERENCE

Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.

- **Triangulated sizing** — every market read multiple ways so value, volume and physical-unit views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, structured investment recommendation.

WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, EPC contractors, technology licensors, waste and utility operators, municipalities, policymakers, lenders, and corporate strategy and ESG teams.

Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.
Purchase at **www.anewmarketdynamics.com** · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at **www.anewmarketdynamics.com**. The full detailed table of contents will be sent directly to your registered company email address.