

## 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:

<b>SDG 2</b> Zero Hunger	<b>SDG 6</b> Clean Water	<b>SDG 7</b> Affordable Energy	<b>SDG 13</b> Climate Action	<b>SDG 15</b> Life on Land
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### 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

<b>53</b> Chapters	<b>9</b> Report Parts	<b>7</b> Regions Covered	<b>40+</b> Country Markets
<b>2025–32</b> Forecast Horizon	<b>4</b> Forward Scenarios	<b>25+</b> Companies Profiled	<b>5</b> 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
<ul style="list-style-type: none"> <li>• Methane-emissions regulation &amp; rules</li> <li>• RNG incentives &amp; transport credits</li> <li>• Landfill-emissions &amp; climate targets</li> <li>• Renewable power &amp; heat revenue</li> <li>• Collection, upgrading &amp; monitoring advances</li> </ul>	<ul style="list-style-type: none"> <li>• Declining gas yield over landfill life</li> <li>• Collection-efficiency &amp; fugitive-loss limits</li> <li>• Upgrading capital cost for RNG</li> <li>• Credit-scheme &amp; policy dependence</li> <li>• Gas-quality &amp; contaminant variability</li> </ul>

## SEGMENTATION SNAPSHOT

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

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- › Chapter 53. Reference Annexes

## 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](http://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](http://www.anewmarketdynamics.com). The full detailed table of contents will be sent directly to your registered company email address.