

ANMD-MRS35-341 · Waste-to-Energy Technologies

Municipal Waste-to-Energy Plants

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

Municipal waste-to-energy plants convert residual municipal solid waste into electricity, heat and steam — turning landfill diversion and energy security into a single dispatchable-power and waste-management asset under strict emissions limits. This decision-grade study sizes the global market three ways — value, plants and installed MW — across system type, component and application, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone, not an afterthought. Beyond energy, municipal WtE delivers measurable landfill diversion, methane avoidance and recovered heat and power, while metals recovery and residue valorisation strengthen the circular-economy story.

Mapped Sustainable Development Goals:

SDG 7 Affordable Clean Energy	SDG 13 Climate Action	SDG 11 Sustainable Cities	SDG 12 Responsible Consumption	SDG 15 Life on Land
---	---------------------------------	-------------------------------------	--	-------------------------------

Measurable sustainability outcomes assessed:

- Landfill diversion and methane-avoidance benefits
- Baseload heat and power plus district-heat supply
- Metals recovery and bottom-ash valorisation
- Fossil-CO2 in waste, air-emissions and recycling-displacement 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

MARKET OVERVIEW

From mature European incineration to global landfill-diversion build-out — where one plant diverts waste and recovers baseload energy.

The municipal waste-to-energy plants market is moving from mature European incineration to global landfill-diversion build-out. Demand is driven by the convergence of landfill bans, circular-economy targets and energy-security needs, supported by maturing emissions standards across Europe, Asia Pacific and North America. The market is read three ways — value, plants and installed MW — and forecast under four scenarios, each region reported separately.

- Europe leads on landfill diversion — Germany, France, the Netherlands and the Nordics, on landfill bans and district heating
- Asia Pacific is the scale engine, with China, Japan, South Korea and India on rapid urbanisation and new-build programmes
- System type and scale segment the value — across moving-grate, fluidized-bed and CHP configurations
- Diversion plus energy is the differentiator — landfill avoidance plus baseload heat and power underpins returns landfilling cannot match

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"> • Landfill bans & diversion targets • Circular-economy & EU Waste Framework drivers • Energy-security & district-heat demand • Methane-avoidance & climate benefits • Grate, boiler & flue-gas-control advances 	<ul style="list-style-type: none"> • High CAPEX & long permitting timelines • Emissions, dioxin & public-opposition concerns • Recycling-competition & feedstock variability • Incineration-tax & policy-direction risk • Carbon-pricing & residue-disposal cost

SEGMENTATION SNAPSHOT

By System Type	Moving-grate · fluidized-bed · energy-from-waste CHP · flue-gas / APC · integrated WtE plants
By Component	Grates · boilers · turbines · APC systems · stacks · controls
By Application	Power · CHP · district heating · emissions control
By End User	Municipalities · utilities · waste operators · district-heating networks
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 I — Report Foundation, Discovery and Strategic Intelligence

- › Chapter 1. Scope, Methodology and Report Architecture
- › Chapter 2. Industry Discovery Summary — Municipal Waste-to-Energy Plants
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- › Chapter 5. Industry Overview and Market Evolution
- › Chapter 6. Market Dynamics
- › Chapter 7. Global Market Size and Forecast, 2020–2032
- › Chapter 8. Market Segmentation Analysis
- › Chapter 9. End-User and Demand-Side Intelligence
- › Chapter 10. Pricing, Cost and Commercial Model Intelligence

Part III — Regional and Country Intelligence

- › Chapter 11. Global Regional Intelligence Framework
- › Chapter 12. North America Market Intelligence
- › Chapter 13. Europe Market Intelligence
- › Chapter 14. Asia Pacific Market Intelligence
- › Chapter 15. Latin America Market Intelligence
- › Chapter 16. Africa Market Intelligence
- › Chapter 17. Middle East Market Intelligence
- › Chapter 18. Rest of World Market Intelligence

Part IV — Technology, Innovation and Category-Specific Intelligence

- › Chapter 19. Technology Landscape and Architecture
- › Chapter 20. Emerging and Next-Generation Technology Intelligence
- › Chapter 21. Category-Specific Intelligence Module
- › Chapter 22. Research, Innovation and Funding Landscape

Part V — Company, Competition, Patent and Project Intelligence

- › Chapter 23. Competitive Landscape
- › Chapter 24. Company Profiles
- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
- › Chapter 26. Patent Landscape and Intellectual Property Intelligence
- › Chapter 27. Project, Deployment and Case-Study Intelligence

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

- › Chapter 28. Sustainability Intelligence Suite
- › Chapter 29. ESG Intelligence and Double Materiality
- › Chapter 30. ESG and Sustainability Framework Alignment
- › Chapter 31. SDG Intelligence
- › Chapter 32. Carbon, Net-Zero and Climate-Mitigation Intelligence
- › Chapter 33. Water, Biodiversity and Natural-Capital Intelligence
- › Chapter 34. Circular Economy and Resource-Security Intelligence
- › Chapter 35. Social Impact, Human Capital and Community Intelligence
- › Chapter 36. Climate Risk, Adaptation and Resilience Intelligence

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

- › Chapter 37. Value Chain, Supply Chain and Geopolitical Intelligence
- › Chapter 38. Policy, Regulation and Incentive Intelligence
- › Chapter 39. Legal, Contracting and Risk-Allocation Intelligence
- › Chapter 40. Unit Economics, CAPEX, OPEX and Return Analysis
- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

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

- › Chapter 42. Scenario Analysis and Future Intelligence
- › Chapter 43. Sustainability Due Diligence Framework and Data-Room Index
- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
- › Chapter 46. Implementation Roadmap and Stakeholder Playbooks

Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
- › Chapter 48. Corporate Directory and Company Intelligence Annex
- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans WtE technology licensors, established EPC and equipment manufacturers, and integrated waste operators. Deal activity — EPC awards, BOT concessions and operator consolidation — signals a market organising around bankable, emissions-compliant plants.

Representative players profiled in the full report:

Reworld Waste, LLC · Hitachi Zosen Inova AG · Keppel Seghers Belgium NV · Martin GmbH für Umwelt- und Energietechnik · Veolia Environnement SA · and 20+ 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 decision-ready investment verdict.

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global municipal waste-to-energy plants market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How do the economics of municipal waste-to-energy plants 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 across three ways — value, plants and installed MW so the 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, decision-ready investment verdict.

WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, EPCs and technology licensors, waste and utility operators, municipalities, district-heating networks, research institutions, policymakers and lenders, and corporate strategy and ESG teams. This report supports investors, operators, developers, manufacturers, lenders and policymakers — alongside strategic corporate planners and decision-makers.

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.