

ANMD-MRS35-348 · Waste-to-Energy Technologies

Mechanical Biological Treatment (MBT) 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

Mechanical biological treatment plants combine mechanical sorting with biological stabilisation to process mixed municipal waste, turning unsorted residual waste into recovered recyclables, RDF and stabilised, landfill-safe output. Purpose-built configurations — MBT with composting or anaerobic digestion, biodrying (MBS), RDF-producing MBT and stabilization plants — are engineered so that waste is diverted, recovered and stabilised ahead of disposal or energy use. The pay-off is measurable: landfill diversion, recyclable and RDF recovery, biogas from the biological stage and reduced landfill emissions. This report is a comprehensive, decision-grade study of that market across system type, process, component, application, end user 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 diversion, MBT delivers measurable landfill diversion, recyclable and RDF recovery, and reduced landfill emissions, while biological treatment strengthens the circular-economy story.

Mapped Sustainable Development Goals:

SDG 2 Zero Hunger	SDG 6 Clean Water	SDG 7 Affordable Energy	SDG 13 Climate Action	SDG 15 Life on Land
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Measurable sustainability outcomes assessed:

- Residual-waste diversion and recycle recovery
- Refuse-derived fuel and stabilised-output production
- Landfill-avoidance and resource-recovery rates
- Output-quality and odour / emissions control 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 mixed residuals to recovered value — where mechanical-biological treatment turns waste into recyclate and fuel.

MBT is moving from landfill pre-treatment to integrated recovery and RDF production. Demand is driven by the convergence of landfill-diversion targets, recycling mandates and RDF offtake, supported by maturing waste policy across Europe, Asia Pacific and the Middle East. The market is read three ways — value, plants and processing capacity (tpa) — 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.

- Europe leads early commercialisation, anchored by Germany, Italy and Spain, where landfill bans, recycling targets and large MBT fleets are most established.
- Asia Pacific is the scale engine, with China, India and Southeast Asia combining urban waste growth with landfill-diversion programmes.
- The Middle East is accelerating, supported by the UAE and Saudi Arabia, where new integrated waste-treatment infrastructure is being built.
- System type and process segment the value, across composting, anaerobic-digestion and biodrying configurations, and across stabilisation and RDF-producing routes, 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"> • Landfill-diversion & recycling mandates • RDF offtake & energy-recovery demand • Reduced landfill-emissions & leachate • Resource-recovery & circular-economy goals • Sorting, biodrying & digestion advances 	<ul style="list-style-type: none"> • Output-quality & RDF-offtake dependence • Capital & operating cost of complex plants • Odour, emissions & siting concerns • Recycling-quality vs source-separation debate • Policy-direction & feedstock variability

SEGMENTATION SNAPSHOT

By System Type	MBT with composting · MBT with anaerobic digestion · biodrying (MBS) · RDF-producing MBT · stabilization plants
By Component	Sorting systems · bioreactors · composting halls · screens · conveyors
By Application	Municipalities · waste operators · regional authorities · utilities
By End User	Municipalities · waste operators · regional authorities · utilities
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

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- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

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COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans MBT technology and sorting specialists, established plant builders, and integrated waste operators.

Representative players profiled in the full report:

Eggersmann GmbH · Komptech GmbH · Sutco RecyclingTechnik GmbH · STADLER Anlagenbau GmbH · CNIM Group 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 Mechanical Biological Treatment (MBT) Plants 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.