

Bioplastic Feedstocks

ANMD-MRS21-205 · Industrial & Environmental Biotechnology

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

Bioplastic feedstocks are the renewable carbon sources and monomers — from sugar, starch, lignocellulosic and waste streams — that supply PLA, PHA/PHB and bio-PE/bio-PET production, displacing fossil feedstocks at the base of the plastics value chain. Feedstock choice determines cost, carbon footprint and end-of-life behaviour, making it the decisive lever for bioplastics' competitiveness. This decision-grade study sizes the global market in value and volume (with bio-content as a sustainability lens), across feedstock type, generation, application and end-user, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone. Beyond fossil substitution, bioplastic feedstocks deliver measurable renewable-carbon content, life-cycle-emission reduction and waste-stream valorisation, strengthening the circular-plastics story.

Mapped Sustainable Development Goals:

SDG 12 Responsible Consumption	SDG 13 Climate Action	SDG 14 Life Below Water
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Measurable sustainability outcomes assessed:

- Renewable-carbon content displacing fossil feedstock
- Life-cycle-emission reduction and waste-stream valorisation
- Compostable and marine-degradable polymer routes
- Land-use and food-competition, end-of-life claims and bio-content substantiation 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. Europe leads on regulation (Italy, Germany, Netherlands) on single-use-plastics rules and packaging directives; Asia Pacific is the production engine (China, Thailand, Japan); North America accelerates on brand commitments; other regions assessed on their own merits.

MARKET OVERVIEW

From first-generation crops toward waste-derived and lignocellulosic carbon.

Bioplastic feedstocks are moving from first-generation crops toward waste-derived and lignocellulosic carbon. Demand is driven by plastics-regulation, brand decarbonisation pledges and packaging circular-economy mandates, against feedstock-versus-fossil cost, food-versus-feedstock tension and end-of-life infrastructure gaps. The market is read in value and volume — with bio-content as a sustainability lens — and forecast under four scenarios, each region reported separately.

- **Europe leads on regulation** — single-use-plastics rules, packaging directives and bio-based-content targets
- **Asia Pacific is the production engine** — China, Thailand and Japan supplying PLA and PHA capacity and feedstock
- **North America is accelerating** — brand commitments, compostable-packaging demand and feedstock availability
- **Feedstock-driven footprint is the differentiator** — waste and second-generation carbon cut both cost exposure and life-cycle emissions versus food-crop routes

REGIONAL OUTLOOK

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

Region	Stage	Lead Country Markets & Drivers
Europe	Regulation leader	Italy, Germany, Netherlands — SUP rules, packaging directives, bio-content targets
Asia Pacific	Production engine	China, Thailand, Japan — PLA / PHA capacity, feedstock supply
North America	Accelerating	United States — brand pledges, compostable demand, feedstock base
Latin America	Emerging	Brazil — sugarcane bio-PE, feedstock advantage
Africa	Frontier	South Africa — agricultural-residue feedstock potential
Middle East	Frontier	UAE, Saudi Arabia — diversification, bio-based investment

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
• Single-use-plastics & packaging regulation • Brand decarbonisation & bio-content pledges • Circular-economy & compostability mandates • Fossil-feedstock price & carbon exposure • Second-generation & waste-feedstock advances	• Feedstock cost vs fossil parity • Food-versus-feedstock land-use tension • Lignocellulosic conversion cost & maturity • End-of-life infrastructure & compost access • Bio-content verification & certification

SEGMENTATION SNAPSHOT

By Feedstock Type	Sugar / starch · lignocellulosic · waste / sidestream · oil-based
By Generation	First-generation · second-generation · advanced / waste
By Application	PLA · PHA / PHB · bio-PE / bio-PET · other biopolymers
By End User	Polymer producers · packaging · converters · brands
By Business Model	Feedstock sale · offtake / supply · managed-service · licensing
By Deployment Scale	Pilot · demonstration · commercial

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 2. Industry Discovery Summary — Bioplastic Feedstocks
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

Part II — Market Intelligence, Sizing, Forecasting and Segmentation

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- › Chapter 7. Global Market Size and Forecast, 2020–2032
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- › Chapter 10. Pricing, Cost and Commercial Model Intelligence

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- › Chapter 12. North America Market Intelligence
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- › Chapter 53. Reference Annexes

COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans dedicated biotech specialists, established industrial-biotech majors and integrated producers. Deal activity — M&A, technology acquisition and platform expansion — signals a market consolidating around scalable, bankable, deployment-ready solutions.

Representative players profiled in the full report:

Total Corbion PLA (TotalEnergies Corbion) · Novamont S.p.A. · Braskem S.A. · BASF SE · Kaneka Corporation · and further profiled feedstock and polymer players incl. Carbios SA, Avantium N.V. and Roquette Frères S.A.

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

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global bioplastic-feedstocks market, and how fast will it grow to 2032?
- ? Which regions, feedstock types and generations offer the strongest risk-adjusted opportunity?
- ? How do lignocellulosic and waste-stream routes change cost and life-cycle carbon?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the category align with the SDGs, land-use and bio-content substantiation?

WHY ANMD — THE DIFFERENCE

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

- **Triangulated sizing** — every market read three ways (value (US\$) and volume (tonnes), with bio-content (%) as a sustainability lens) so value, capacity and volume 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, conditions-based investment verdict.

WHO SHOULD BUY THIS REPORT

Investors and infrastructure / PE funds, feedstock and polymer producers, packaging converters and brands, conversion-technology developers, recyclers, policymakers, lenders and ESG teams, plus 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.