

Circular Economy Plastics Recycling Market Forecasts to 2034 – Global Analysis By Plastic Type (PET (Polyethylene Terephthalate), HDPE (High- Density Polyethylene), LDPE (Low-Density Polyethylene), PP (Polypropylene), PVC (Polyvinyl Chloride) and Specialty Plastics), Recycling Technology, Circular Economy Model, End User and By Geography

<https://marketpublishers.com/r/CE5551DEA4E9EN.html>

Date: May 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: CE5551DEA4E9EN

Abstracts

According to Statistics MRC, the Global Circular Economy Plastics Recycling Market is accounted for \$86.2 billion in 2026 and is expected to reach \$182.1 billion by 2034 growing at a CAGR of 9.8% during the forecast period. Plastics recycling within a circular economy aims to retain value by extending the life of polymers through reuse, repair, and closed loop recovery. It prioritizes efficient collection, precise sorting, and techniques including mechanical reprocessing and chemical depolymerization to produce high grade recyclates. This approach cuts demand for virgin resources, reduces emissions, and limits pollution escaping into ecosystems. Progress depends on coordinated action by policymakers, businesses, and citizens to expand infrastructure, harmonize design standards, and promote mindful use. With supportive regulation, technology advances, and capital, systems can scale to convert discarded plastics into useful feedstocks, enabling resilient, low waste manufacturing cycles.

According to the Organisation for Economic Co-operation and Development, only about 9% of global plastic waste is recycled, while nearly 50% ends up in landfills and 19% is incinerated, highlighting the significant gap and need for circular economy solutions in plastics management.

Market Dynamics:

Driver:**Rising consumer awareness and sustainability demand**

Increasing public awareness and demand for sustainability strongly influence the growth of plastics recycling within a circular economy. People are becoming more conscious of environmental damage, waste accumulation, and global warming, prompting them to choose recyclable and environmentally friendly goods. This behavioral change pushes companies to use sustainable packaging and integrate recycled content into production. Businesses that meet these expectations benefit from improved reputation and customer trust. The rising need for transparency and ethical sourcing further supports circular adoption. As sustainability gains importance in buying decisions, demand for recycled plastics rises steadily across various sectors worldwide.

Restraint:**High costs of recycling infrastructure and operations**

The significant expense involved in building and operating recycling systems acts as a key limitation for the circular plastics recycling market. Developing efficient facilities for collection, sorting, and processing demands large upfront investments. Ongoing costs such as workforce, electricity, and equipment upkeep add to financial pressure. In several markets, recycled plastics remain costlier than newly produced materials, limiting their attractiveness. Insufficient subsidies and uneven regulatory backing further reduce investor interest. Smaller businesses face difficulties in adopting advanced recycling solutions. These financial barriers restrict infrastructure growth and delay broader implementation, especially in emerging economies with limited resources and technical expertise available.

Opportunity:**Expansion of chemical recycling technologies**

The growth of chemical recycling solutions offers significant potential for plastics recycling within a circular framework. Techniques like pyrolysis and depolymerization allow difficult and contaminated plastics to be transformed into valuable raw inputs. These approaches handle waste streams that traditional recycling cannot process, improving recovery levels. With increasing funding and innovation, these technologies are becoming more efficient and scalable. This development enables the extraction of value from materials once considered unusable. Producing outputs comparable to virgin plastics encourages wider industry acceptance. Overall, chemical recycling creates strong opportunities for advancing circular systems and expanding applications across global markets.

Threat:**Competition from low-cost virgin plastics**

The availability of inexpensive virgin plastics poses a significant risk to the circular plastics recycling market. Lower crude oil prices reduce the cost of producing new

plastics, making them more attractive than recycled options. This cost difference discourages industries from using recycled materials, particularly where margins are tight. As demand for recyclates fluctuates, recycling businesses face reduced profitability and limited investment opportunities. The dominance of cheaper virgin materials weakens circular economy efforts and delays broader adoption. Without regulatory support or pricing balance, recycled plastics remain less competitive, creating ongoing challenges for the growth of sustainable material systems worldwide.

Covid-19 Impact:

The pandemic created both challenges and opportunities for plastics recycling within a circular economy. Early impacts included supply chain interruptions, workforce limitations, and reduced waste collection efficiency, leading to a decline in recycling operations. The surge in disposable plastic usage, particularly in healthcare and packaging, added pressure to existing systems. Temporary closures of recycling plants further affected recovery rates. Despite these setbacks, awareness of sustainability and system resilience increased significantly. Governments and businesses started prioritizing improved waste management and circular approaches.

The PET (polyethylene terephthalate) segment is expected to be the largest during the forecast period

The PET (polyethylene terephthalate) segment is expected to account for the largest market share during the forecast period because of its ease of recycling, extensive use, and organized recovery systems. Widely utilized in packaging applications such as drink bottles, PET experiences strong demand for recycled material in various industries. Its capacity to undergo multiple recycling cycles with minimal degradation enhances its value in circular processes. Advanced sorting methods and established global infrastructure contribute to its leading position. Supportive regulations encouraging closed loop recycling also reinforce its dominance.

The healthcare & medical applications segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the healthcare & medical applications segment is predicted to witness the highest growth rate, driven by a stronger emphasis on sustainability. Increasing plastic consumption in medical supplies, packaging, and safety equipment has highlighted the need for better recycling systems. Environmental regulations and rising awareness are pushing healthcare organizations to shift toward recyclable and reusable materials. Innovations in recycling technologies are making it possible to safely process selected medical plastics. Furthermore, waste reduction initiatives across hospitals and research facilities are accelerating adoption.

Region with largest share:

During the forecast period, the Asia-Pacific region is expected to hold the largest market share, supported by significant plastic usage, industrial expansion, and improving waste

management systems. Governments in the region are actively promoting recycling through policies and infrastructure investments aimed at reducing plastic pollution. Growing urban populations and economic development increase plastic consumption, creating strong demand for recycling solutions. The region's robust manufacturing sector also drives the use of recycled materials in production. Rising environmental awareness, supportive regulations, and advancements in recycling technologies enhance its leadership position.

Region with highest CAGR:

Over the forecast period, the Europe region is anticipated to exhibit the highest CAGR, driven by robust environmental regulations and sustainability goals. The region enforces strict rules encouraging recycling, minimizing waste, and increasing the use of recycled materials in production. Programs like circular economy strategies and producer responsibility schemes stimulate industry development. Well established infrastructure and continuous technological advancements enhance recycling efficiency. Additionally, strong corporate sustainability commitments and high consumer awareness boost demand for recycled plastics.

Key players in the market

Some of the key players in Circular Economy Plastics Recycling Market include Veolia Environnement S.A., SUEZ Group, Indorama Ventures Public Company Limited, Borealis AG, Plastipak Holdings, Inc., Loop Industries, Inc., LyondellBasell Industries N.V., ALPLA Group, MBA Polymers, Inc., Trex Company, Inc., PreZero International GmbH, Avangard Innovative LP, REMONDIS SE & Co. KG, Waste Management, Inc. (WM), Republic Services, Inc., DS Smith Plc, PLASTIC ENERGY Limited and TerraCycle.

Key Developments:

In February 2026, Veolia has secured two 15-year operations and maintenance (O&M) contracts for Mumbai's upcoming Bhandup and Panjrapur Water Treatment Plants (WTPs), strengthening its presence in India's municipal water sector. The contracts mark the largest municipal water sector agreements signed by a French company in India. The combined treatment capacity of the two plants will be 2,910 million litres per day (MLD), equivalent to 2.91 million cubic metres per day.

In June 2025, LyondellBasell (LYB) has announced that it has entered into an agreement and exclusive negotiations with German industrial group AEQUITA for the potential sale of four of its European olefins and polyolefins assets. The agreement marks a pivotal move in LyondellBasell's previously disclosed strategic review of its European operations.

In April 2025, SUEZ and the CNRS have signed a five-year framework agreement to combine their R&D efforts and develop innovative solutions to promote sustainable resource management and new decarbonisation technologies. This framework

agreement aims to pool together SUEZ's innovation capabilities and the CNRS' scientific excellence.

Plastic Types Covered:

PET (Polyethylene Terephthalate)

HDPE (High-Density Polyethylene)

LDPE (Low-Density Polyethylene)

PP (Polypropylene)

PVC (Polyvinyl Chloride)

Specialty Plastics

Recycling Technologies Covered:

Mechanical Recycling

Chemical Recycling

Advanced Sorting & AI-enabled Systems

Circular Economy Models Covered:

Closed-loop Recycling

Open-loop Recycling

Upcycling & Value-Added Reuse

End Users Covered:

Packaging

Automotive

Construction

Electronics & Electricals

Textiles & Apparel

Healthcare & Medical Applications

Agriculture

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030,

2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL CIRCULAR ECONOMY PLASTICS RECYCLING MARKET, BY PLASTIC TYPE

- 5.1 PET (Polyethylene Terephthalate)
- 5.2 HDPE (High-Density Polyethylene)
- 5.3 LDPE (Low-Density Polyethylene)
- 5.4 PP (Polypropylene)
- 5.5 PVC (Polyvinyl Chloride)
- 5.6 Specialty Plastics

6 GLOBAL CIRCULAR ECONOMY PLASTICS RECYCLING MARKET, BY RECYCLING TECHNOLOGY

- 6.1 Mechanical Recycling
- 6.2 Chemical Recycling
- 6.3 Advanced Sorting & AI-enabled Systems

7 GLOBAL CIRCULAR ECONOMY PLASTICS RECYCLING MARKET, BY CIRCULAR ECONOMY MODEL

- 7.1 Closed-loop Recycling
- 7.2 Open-loop Recycling
- 7.3 Upcycling & Value-Added Reuse

8 GLOBAL CIRCULAR ECONOMY PLASTICS RECYCLING MARKET, BY END USER

- 8.1 Packaging
- 8.2 Automotive
- 8.3 Construction
- 8.4 Electronics & Electricals
- 8.5 Textiles & Apparel
- 8.6 Healthcare & Medical Applications
- 8.7 Agriculture

9 GLOBAL CIRCULAR ECONOMY PLASTICS RECYCLING MARKET, BY GEOGRAPHY

9.1 North America

9.1.1 United States

9.1.2 Canada

9.1.3 Mexico

9.2 Europe

9.2.1 United Kingdom

9.2.2 Germany

9.2.3 France

9.2.4 Italy

9.2.5 Spain

9.2.6 Netherlands

9.2.7 Belgium

9.2.8 Sweden

9.2.9 Switzerland

9.2.10 Poland

9.2.11 Rest of Europe

9.3 Asia Pacific

9.3.1 China

9.3.2 Japan

9.3.3 India

9.3.4 South Korea

9.3.5 Australia

9.3.6 Indonesia

9.3.7 Thailand

9.3.8 Malaysia

9.3.9 Singapore

9.3.10 Vietnam

9.3.11 Rest of Asia Pacific

9.4 South America

9.4.1 Brazil

9.4.2 Argentina

9.4.3 Colombia

9.4.4 Chile

9.4.5 Peru

9.4.6 Rest of South America

9.5 Rest of the World (RoW)

- 9.5.1 Middle East
 - 9.5.1.1 Saudi Arabia
 - 9.5.1.2 United Arab Emirates
 - 9.5.1.3 Qatar
 - 9.5.1.4 Israel
 - 9.5.1.5 Rest of Middle East
- 9.5.2 Africa
 - 9.5.2.1 South Africa
 - 9.5.2.2 Egypt
 - 9.5.2.3 Morocco
 - 9.5.2.4 Rest of Africa

10 STRATEGIC MARKET INTELLIGENCE

- 10.1 Industry Value Network and Supply Chain Assessment
- 10.2 White-Space and Opportunity Mapping
- 10.3 Product Evolution and Market Life Cycle Analysis
- 10.4 Channel, Distributor, and Go-to-Market Assessment

11 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 11.1 Mergers and Acquisitions
- 11.2 Partnerships, Alliances, and Joint Ventures
- 11.3 New Product Launches and Certifications
- 11.4 Capacity Expansion and Investments
- 11.5 Other Strategic Initiatives

12 COMPANY PROFILES

- 12.1 Veolia Environnement S.A.
- 12.2 SUEZ Group
- 12.3 Indorama Ventures Public Company Limited
- 12.4 Borealis AG
- 12.5 Plastipak Holdings, Inc.
- 12.6 Loop Industries, Inc.
- 12.7 LyondellBasell Industries N.V.
- 12.8 ALPLA Group
- 12.9 MBA Polymers, Inc.
- 12.10 Trex Company, Inc.

- 12.11 PreZero International GmbH
- 12.12 Avangard Innovative LP
- 12.13 REMONDIS SE & Co. KG
- 12.14 Waste Management, Inc. (WM)
- 12.15 Republic Services, Inc.
- 12.16 DS Smith Plc
- 12.17 PLASTIC ENERGY Limited
- 12.18 TerraCycle

List Of Tables

LIST OF TABLES

Table 1 Global Circular Economy Plastics Recycling Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Circular Economy Plastics Recycling Market Outlook, By Plastic Type (2023-2034) (\$MN)

Table 3 Global Circular Economy Plastics Recycling Market Outlook, By PET (Polyethylene Terephthalate) (2023-2034) (\$MN)

Table 4 Global Circular Economy Plastics Recycling Market Outlook, By HDPE (High-Density Polyethylene) (2023-2034) (\$MN)

Table 5 Global Circular Economy Plastics Recycling Market Outlook, By LDPE (Low-Density Polyethylene) (2023-2034) (\$MN)

Table 6 Global Circular Economy Plastics Recycling Market Outlook, By PP (Polypropylene) (2023-2034) (\$MN)

Table 7 Global Circular Economy Plastics Recycling Market Outlook, By PVC (Polyvinyl Chloride) (2023-2034) (\$MN)

Table 8 Global Circular Economy Plastics Recycling Market Outlook, By Specialty Plastics (2023-2034) (\$MN)

Table 9 Global Circular Economy Plastics Recycling Market Outlook, By Recycling Technology (2023-2034) (\$MN)

Table 10 Global Circular Economy Plastics Recycling Market Outlook, By Mechanical Recycling (2023-2034) (\$MN)

Table 11 Global Circular Economy Plastics Recycling Market Outlook, By Chemical Recycling (2023-2034) (\$MN)

Table 12 Global Circular Economy Plastics Recycling Market Outlook, By Advanced Sorting & AI-enabled Systems (2023-2034) (\$MN)

Table 13 Global Circular Economy Plastics Recycling Market Outlook, By Circular Economy Model (2023-2034) (\$MN)

Table 14 Global Circular Economy Plastics Recycling Market Outlook, By Closed-loop Recycling (2023-2034) (\$MN)

Table 15 Global Circular Economy Plastics Recycling Market Outlook, By Open-loop Recycling (2023-2034) (\$MN)

Table 16 Global Circular Economy Plastics Recycling Market Outlook, By Upcycling & Value-Added Reuse (2023-2034) (\$MN)

Table 17 Global Circular Economy Plastics Recycling Market Outlook, By End User (2023-2034) (\$MN)

Table 18 Global Circular Economy Plastics Recycling Market Outlook, By Packaging

(2023-2034) (\$MN)

Table 19 Global Circular Economy Plastics Recycling Market Outlook, By Automotive (2023-2034) (\$MN)

Table 20 Global Circular Economy Plastics Recycling Market Outlook, By Construction (2023-2034) (\$MN)

Table 21 Global Circular Economy Plastics Recycling Market Outlook, By Electronics & Electricals (2023-2034) (\$MN)

Table 22 Global Circular Economy Plastics Recycling Market Outlook, By Textiles & Apparel (2023-2034) (\$MN)

Table 23 Global Circular Economy Plastics Recycling Market Outlook, By Healthcare & Medical Applications (2023-2034) (\$MN)

Table 24 Global Circular Economy Plastics Recycling Market Outlook, By Agriculture (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) Regions are also represented in the same manner as above.

I would like to order

Product name: Circular Economy Plastics Recycling Market Forecasts to 2034 – Global Analysis By Plastic Type (PET (Polyethylene Terephthalate), HDPE (High-Density Polyethylene), LDPE (Low-Density Polyethylene), PP (Polypropylene), PVC (Polyvinyl Chloride) and Specialty Plastics), Recycling Technology, Circular Economy Model, End User and By Geography

Product link: <https://marketpublishers.com/r/CE5551DEA4E9EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/CE5551DEA4E9EN.html>