

E-Waste Recycling & Resource Recovery Market Forecasts to 2032 - Global Analysis By Waste Type (Household Appliances, Consumer Electronics, Industrial Electronics and Other Waste Types), Material Type, Service Type, Technology, End User and By Geography

<https://marketpublishers.com/r/E5AB846C3749EN.html>

Date: January 2026

Pages: 200

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

ID: E5AB846C3749EN

Abstracts

According to Statistics MRC, the Global E-Waste Recycling & Resource Recovery Market is accounted for \$71.19 billion in 2025 and is expected to reach \$179.25 billion by 2032 growing at a CAGR of 14.1% during the forecast period. E-Waste Recycling & Resource Recovery refers to the systematic process of collecting, dismantling, and processing discarded electronic devices to extract valuable materials while minimizing environmental harm. This practice addresses the growing volume of obsolete electronics, including computers, smartphones, and household appliances, which contain hazardous substances such as lead, mercury, and cadmium. Recycling involves the separation of metals, plastics, and other components, enabling the recovery of precious metals like gold, silver, and copper for reuse in manufacturing. Beyond material reclamation, resource recovery reduces landfill waste, lowers carbon emissions, and promotes a circular economy, turning electronic waste into sustainable raw materials.

Market Dynamics:

Driver:

Increasing Consumer Awareness

Rising consumer awareness regarding the environmental and health hazards of electronic waste is driving the growth of the E-Waste Recycling & Resource Recovery market. As people recognize the importance of proper disposal and recycling of electronic devices, demand for sustainable and efficient recycling solutions increases. Educational campaigns, media coverage, and corporate social responsibility initiatives are encouraging households and businesses to participate in recycling programs, fostering responsible e-waste management and supporting a transition toward a circular economy, which ultimately fuels market expansion globally.

Restraint:

High Collection & Processing Costs

High collection and processing costs remain a key restraint for the market. The need for specialized equipment, advanced technologies, and skilled labor for dismantling and separating hazardous materials increases operational expenses. Additionally, logistics challenges in collecting e-waste from dispersed sources add to costs, limiting adoption in certain regions. These financial barriers can slow down investment in infrastructure and technology, making it challenging for small and medium enterprises to compete, thereby restraining market growth.

Opportunity:

Circular Economy & Sustainability Goals

The growing emphasis on circular economy principles and sustainability goals presents significant opportunities for the market. Companies and governments are increasingly adopting policies to minimize landfill waste and reduce carbon footprints. Recycling e-waste aligns with corporate ESG objectives and international sustainability targets, creating avenues for technological innovation and public-private partnerships. By integrating resource recovery into manufacturing cycles, stakeholders can achieve both environmental benefits and economic gains, positioning the market for long-term growth and global adoption.

Threat:

Regulatory Complexity & Compliance Issues

Regulatory complexity and compliance challenges pose notable threats to the market.

Variations in e-waste management policies across countries, stringent environmental norms, and frequent updates to legislation can make adherence difficult. Non-compliance risks legal penalties, operational disruptions, and reputational damage for companies. Moreover, differing standards for collection, transportation, and recycling processes across regions create uncertainty, requiring significant investment in monitoring and reporting systems, which can hinder market growth and limit expansion into new geographies.

Covid-19 Impact:

The Covid-19 pandemic temporarily disrupted the market, affecting collection, transportation, and processing activities due to lockdowns and workforce limitations. Supply chains for recycling equipment and materials were interrupted, delaying operations and investments. However, post-pandemic recovery has accelerated digital adoption, increased electronic consumption, leading to renewed market momentum. The crisis underscored the need for resilient recycling infrastructure and technology-driven solutions, ultimately strengthening the long-term growth prospects of the e-waste recycling and resource recovery sector.

The plastics segment is expected to be the largest during the forecast period

The plastics segment is expected to account for the largest market share during the forecast period, due to widespread use of plastics in electronic devices, from casings to insulation materials, drives demand for their recovery and recycling. Efficient processing of e-waste plastics not only reduces environmental pollution but also allows manufacturers to reuse high-quality polymers in new electronic products. Growing regulatory pressure to curb plastic waste, combined with technological advancements, ensures this segment remains a dominant contributor to the market's overall expansion throughout the forecast period.

The biotechnological methods segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the biotechnological methods segment is predicted to witness the highest growth rate as these advanced methods, including microbial leaching and enzymatic recovery, provide eco-friendly alternatives. The growing demand for sustainable recycling technologies, coupled with regulatory support for green practices, drives adoption. Biotechnological approaches reduce hazardous emissions, and improve recovery efficiency, attracting investments in research and development. As

awareness of environmental impact grows, these innovative methods are poised to transform traditional e-waste recycling processes.

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market share, due to rapid industrialization, high electronic consumption, and increasing urbanization contribute to substantial e-waste generation. Countries like China and India are investing heavily in recycling infrastructure and awareness campaigns. Additionally, the presence of major electronics manufacturers and growing adoption of sustainable practices by businesses boost market penetration. Asia Pacific's strategic focus on environmental management positions it as the dominant regional player in e-waste recycling globally.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR, owing to technological advancements in recycling methods drive growth. The region's strong emphasis on circular economy practices and corporate sustainability initiatives encourages investment in state-of-the-art recycling infrastructure. Additionally, government incentives, efficient logistics networks, and high adoption of smart recycling solutions create a favorable environment. North America's proactive approach to resource recovery and eco-friendly practices positions it as a rapidly expanding market.

Key players in the market

Some of the key players in E-Waste Recycling & Resource Recovery Market include Enviro-Hub Holdings Ltd., Sims Limited, TES, Umicore, Aurubis AG, Eco Recycling Ltd., Stena Metall AB, Attero Recycling Pvt. Ltd., Veolia Environnement S.A., Recupyl S.A., Electronic Recyclers International (ERI), MBA Polymers Inc., Tetronics International, Boliden AB, and Global Electric Electronic Processing (GEEP).

Key Developments:

In November 2025, Veolia has partnership with Science City Guangzhou Investment Group to build a pioneering decarbonization project that captures industrial flue gas, turns waste heat into steam and electricity, and is expected to cut about 200,000 tons of CO₂ emissions annually.

In July 2025, Veolia and the French Development Agency (AFD) signed a three year strategic partnership to tackle environmental challenges in developing regions, combining expertise to improve water, waste and energy services while advancing sustainability, circular economy solutions and equitable access to resources.

Waste Types Covered:

Household Appliances

Consumer Electronics

Industrial Electronics

Other Waste Types

Material Types Covered:

Metals

Plastics

Glass

Circuit Boards

Batteries

Service Types Covered:

Precious Metal Extraction

Shredding & Separation

Refurbishment & Reuse

Landfilling & Incineration

Collection & Transportation

Dismantling & Component Recovery

Technologies Covered:

Hydrometallurgical Process

Biotechnological Methods

Pyrometallurgical Process

Mechanical Recycling

Electrostatic Separation

End Users Covered:

Residential

Commercial

Industrial

Government & Public Institutions

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & 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 2024, 2025, 2026, 2028, and 2032
- 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

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY WASTE TYPE

- 5.1 Introduction
- 5.2 Household Appliances
 - 5.2.1 Refrigerators
 - 5.2.2 Washing Machines
 - 5.2.3 Air Conditioners
- 5.3 Consumer Electronics
 - 5.3.1 Televisions
 - 5.3.2 Audio & Video Devices
 - 5.3.3 Gaming Consoles
- 5.4 Industrial Electronics
- 5.5 Other Waste Types

6 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY MATERIAL TYPE

- 6.1 Introduction
- 6.2 Metals
- 6.3 Plastics
- 6.4 Glass
- 6.5 Circuit Boards
- 6.6 Batteries

7 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY SERVICE TYPE

- 7.1 Introduction
- 7.2 Precious Metal Extraction
- 7.3 Shredding & Separation
- 7.4 Refurbishment & Reuse
- 7.5 Landfilling & Incineration
- 7.6 Collection & Transportation
- 7.7 Dismantling & Component Recovery

8 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 Hydrometallurgical Process
- 8.3 Biotechnological Methods
- 8.4 Pyrometallurgical Process
- 8.5 Mechanical Recycling
- 8.6 Electrostatic Separation

9 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY END USER

- 9.1 Introduction
- 9.2 Residential
- 9.3 Commercial
- 9.4 Industrial
- 9.5 Government & Public Institutions

10 GLOBAL E-WASTE RECYCLING & RESOURCE RECOVERY MARKET, BY GEOGRAPHY

- 10.1 Introduction
- 10.2 North America
 - 10.2.1 US
 - 10.2.2 Canada
 - 10.2.3 Mexico
- 10.3 Europe
 - 10.3.1 Germany
 - 10.3.2 UK
 - 10.3.3 Italy
 - 10.3.4 France
 - 10.3.5 Spain
 - 10.3.6 Rest of Europe
- 10.4 Asia Pacific
 - 10.4.1 Japan
 - 10.4.2 China
 - 10.4.3 India
 - 10.4.4 Australia
 - 10.4.5 New Zealand
 - 10.4.6 South Korea
 - 10.4.7 Rest of Asia Pacific

10.5 South America

10.5.1 Argentina

10.5.2 Brazil

10.5.3 Chile

10.5.4 Rest of South America

10.6 Middle East & Africa

10.6.1 Saudi Arabia

10.6.2 UAE

10.6.3 Qatar

10.6.4 South Africa

10.6.5 Rest of Middle East & Africa

11 KEY DEVELOPMENTS

11.1 Agreements, Partnerships, Collaborations and Joint Ventures

11.2 Acquisitions & Mergers

11.3 New Product Launch

11.4 Expansions

11.5 Other Key Strategies

12 COMPANY PROFILING

12.1 Enviro-Hub Holdings Ltd.

12.2 Sims Limited

12.3 TES

12.4 Umicore

12.5 Aurubis AG

12.6 Eco Recycling Ltd.

12.7 Stena Metall AB

12.8 Attero Recycling Pvt. Ltd.

12.9 Veolia Environnement S.A.

12.10 Recupyl S.A.

12.11 Electronic Recyclers International (ERI)

12.12 MBA Polymers Inc.

12.13 Tetronics International

12.14 Boliden AB

12.15 Global Electric Electronic Processing (GEEP)

List Of Tables

LIST OF TABLES

Table 1 Global E-Waste Recycling & Resource Recovery Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global E-Waste Recycling & Resource Recovery Market Outlook, By Waste Type (2024-2032) (\$MN)

Table 3 Global E-Waste Recycling & Resource Recovery Market Outlook, By Household Appliances (2024-2032) (\$MN)

Table 4 Global E-Waste Recycling & Resource Recovery Market Outlook, By Refrigerators (2024-2032) (\$MN)

Table 5 Global E-Waste Recycling & Resource Recovery Market Outlook, By Washing Machines (2024-2032) (\$MN)

Table 6 Global E-Waste Recycling & Resource Recovery Market Outlook, By Air Conditioners (2024-2032) (\$MN)

Table 7 Global E-Waste Recycling & Resource Recovery Market Outlook, By Consumer Electronics (2024-2032) (\$MN)

Table 8 Global E-Waste Recycling & Resource Recovery Market Outlook, By Televisions (2024-2032) (\$MN)

Table 9 Global E-Waste Recycling & Resource Recovery Market Outlook, By Audio & Video Devices (2024-2032) (\$MN)

Table 10 Global E-Waste Recycling & Resource Recovery Market Outlook, By Gaming Consoles (2024-2032) (\$MN)

Table 11 Global E-Waste Recycling & Resource Recovery Market Outlook, By Industrial Electronics (2024-2032) (\$MN)

Table 12 Global E-Waste Recycling & Resource Recovery Market Outlook, By Other Waste Types (2024-2032) (\$MN)

Table 13 Global E-Waste Recycling & Resource Recovery Market Outlook, By Material Type (2024-2032) (\$MN)

Table 14 Global E-Waste Recycling & Resource Recovery Market Outlook, By Metals (2024-2032) (\$MN)

Table 15 Global E-Waste Recycling & Resource Recovery Market Outlook, By Plastics (2024-2032) (\$MN)

Table 16 Global E-Waste Recycling & Resource Recovery Market Outlook, By Glass (2024-2032) (\$MN)

Table 17 Global E-Waste Recycling & Resource Recovery Market Outlook, By Circuit Boards (2024-2032) (\$MN)

Table 18 Global E-Waste Recycling & Resource Recovery Market Outlook, By Batteries

(2024-2032) (\$MN)

Table 19 Global E-Waste Recycling & Resource Recovery Market Outlook, By Service Type (2024-2032) (\$MN)

Table 20 Global E-Waste Recycling & Resource Recovery Market Outlook, By Precious Metal Extraction (2024-2032) (\$MN)

Table 21 Global E-Waste Recycling & Resource Recovery Market Outlook, By Shredding & Separation (2024-2032) (\$MN)

Table 22 Global E-Waste Recycling & Resource Recovery Market Outlook, By Refurbishment & Reuse (2024-2032) (\$MN)

Table 23 Global E-Waste Recycling & Resource Recovery Market Outlook, By Landfilling & Incineration (2024-2032) (\$MN)

Table 24 Global E-Waste Recycling & Resource Recovery Market Outlook, By Collection & Transportation (2024-2032) (\$MN)

Table 25 Global E-Waste Recycling & Resource Recovery Market Outlook, By Dismantling & Component Recovery (2024-2032) (\$MN)

Table 26 Global E-Waste Recycling & Resource Recovery Market Outlook, By Technology (2024-2032) (\$MN)

Table 27 Global E-Waste Recycling & Resource Recovery Market Outlook, By Hydrometallurgical Process (2024-2032) (\$MN)

Table 28 Global E-Waste Recycling & Resource Recovery Market Outlook, By Biotechnological Methods (2024-2032) (\$MN)

Table 29 Global E-Waste Recycling & Resource Recovery Market Outlook, By Pyrometallurgical Process (2024-2032) (\$MN)

Table 30 Global E-Waste Recycling & Resource Recovery Market Outlook, By Mechanical Recycling (2024-2032) (\$MN)

Table 31 Global E-Waste Recycling & Resource Recovery Market Outlook, By Electrostatic Separation (2024-2032) (\$MN)

Table 32 Global E-Waste Recycling & Resource Recovery Market Outlook, By End User (2024-2032) (\$MN)

Table 33 Global E-Waste Recycling & Resource Recovery Market Outlook, By Residential (2024-2032) (\$MN)

Table 34 Global E-Waste Recycling & Resource Recovery Market Outlook, By Commercial (2024-2032) (\$MN)

Table 35 Global E-Waste Recycling & Resource Recovery Market Outlook, By Industrial (2024-2032) (\$MN)

Table 36 Global E-Waste Recycling & Resource Recovery Market Outlook, By Government & Public Institutions (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

I would like to order

Product name: E-Waste Recycling & Resource Recovery Market Forecasts to 2032 - Global Analysis By Waste Type (Household Appliances, Consumer Electronics, Industrial Electronics and Other Waste Types), Material Type, Service Type, Technology, End User and By Geography

Product link: <https://marketpublishers.com/r/E5AB846C3749EN.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/E5AB846C3749EN.html>