

Rare Earth Metals Recycling Market by Application (Permanent Magnets, Alloys, Polishing Materials, Glass, Catalyst, Phosphor, Ceramics, Hydrogen Storage Alloys), Technology (Hydrometallurgical, Pyrometallurgical) and Region - Global Forecasts to 2026

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Abstracts

The global rare earth metals recycling market is estimated to be USD 248 million in 2021 and is projected to reach USD 422 million by 2026, at a CAGR of 11.2% from 2021 to 2026. Rare earth metals are considered key elements in developing technologies in the communications, electronics, automotive, and military weapon sectors. The demand for these elements is expected to increase in the near future as these are key components in emerging applications, such as green technology and electric and hybrid vehicles.

“Glass segment among the other applications to dominate the rare earth metals recycling market during the forecast period”

Erbium, ytterbium, and neodymium are the most widely used rare earth metals in glass. Optical communication uses erbium-doped silica fiber, engineering materials processing uses ytterbium-doped silica fiber, and glass lasers used for inertial confinement fusion apply neodymium-doped. The ability to change the fluorescent properties of glass is one of the most important uses of rare earth metals in glass. Rare earth is used as clarifier, additive, decolorizer, colorant, and polishing powder in the glass industry and plays an irreplaceable role in other elements. By using the characteristics of high refraction and low dispersion of some rare earth elements, optical glass can be produced, which can be used to make good lenses of cameras, cameras, telescopes, and other good optical

instruments.

“Hydrometallurgical technology segment to witness higher cagr during the forecast period.”

Rare earth metals bearing deposits are limited and, hence, secondary sources of rare earth metals such as wastes are becoming the potential sources. Hydrometallurgical processing technology methodologies routed through leaching, solvent extraction, and precipitation is often preferred as a prominent technique for recovering rare earth metals from secondary wastes such as batteries, spent magnets, e-wastes, and others. The technology has a number of advantages over the pyro-metallurgical route. The favorable features of this technique are low production costs, small amount of waste generation, and low levels of noxious gases emission, which prevent environmental contamination and enable a clean separation of targeted rare earth metals.

“Fluorescent lamps to be the largest source of rare earth metals during the forecast period.”

The inner lining of fluorescent tubes is coated with phosphors, which absorb the ultraviolet light from electrically charged mercury vapor and re-emit visible light based on a mix of blue, green, and red emitters. While the adoption of LED lighting technology is growing rapidly, there are still about 2.3 billion fluorescent light sockets in the US, which will probably continue to be widely used in the foreseeable future. Europium (Eu) and yttrium (Y) are two rare earth metals that are commonly used in sustainable technology and high-tech applications. As these metals are difficult to mine, there is a great scope for recycling them. They can be recovered from red lamp phosphor, a powder that is used in fluorescent lamps such as neon tubes.

“APAC is the largest market for rare earth metals recycling”

Asia Pacific has witnessed tremendous growth in the past few years, driven by the growing population, favorable investment policies, growing economies, and government initiatives directed at promoting electronics and automobile industries in the region. The region is the largest consumer of rare earth materials due to rapidly increasing demand in China, which accounts for the maximum consumption of rare earth metals globally.

This study has been validated through primaries conducted with various industry experts worldwide. These primary sources have been divided into 3 categories, namely by company, by designation, and by region.

By Department- Sales/Export/Marketing – 50%, Production – 25%, R&D – 25%

By Designation- Managers – 55%, CXOs – 25%, Executives – 20%

By Region- North America- 40%, Europe- 30%, Asia Pacific- 20%, and Rest of World - 10%

The rare earth metals recycling market comprises major solution providers, Solvay SA (Belgium), Hitachi Metals, Ltd. (Japan), Umicore (Belgium), Osram Licht AG (Germany), Energy Fuels, Inc. (US), Global Tungsten & Powders Corp. (US), and REEcycle Inc.(US) among others. The study includes an in-depth competitive analysis of these key players in the rare earth metals recycling market, with their company profiles, and key market strategies.

Research Coverage:

The report covers the rare earth metals recycling market based on application, technology, source, and region. This study aims at estimating the size and future growth potential of the market across various segmentation types. It also includes an in-depth competitive analysis of the key market players, along with their profiles and key growth strategies.

Key Benefits of Buying the Report:

Comprehensive coverage and analysis of the rare earth metals recycling market in Asia Pacific, Europe, North America, and Rest of World

Competitive landscape of major players and their developments in rare earth metals recycling market

Identifying high-potential opportunities for rare earth metals recycling

Identifying and targeting high-growth end use segments

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*Details on Business Overview, Products and solutions, Recent Developments, Deals, MnM view, Key strengths/right to win, Strategic choices made, Weakness/competitive threats might not be captured in case of unlisted companies.

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