

# **Investigation Report on the Chinese Rare Earth Market** 2021-2025

https://marketpublishers.com/r/I077EEBE46BDEN.html

Date: May 2021

Pages: 70

Price: US\$ 2,800.00 (Single User License)

ID: I077EEBE46BDEN

# **Abstracts**

Rare earth elements and metals are widely used in the industry. Rare earths are used to improve the production efficiency of traditional industries such as petrochemicals, metallurgy, glass, ceramics, and textiles. At the same time, they are widely used in new energy, energy saving and environmental protection, smart phones, consumer electronics and other fields.

According to CRI's analysis, driven by low mining costs and low environmental protection costs, in the 1990s, Chinese enterprises started mining and exporting rare earth on a large scale. In the past decade, China's rare earth reserves fell sharply. Its proportion in the global rare earth reserves once exceeded 70% while at the end of 2020, the proportion was only 38%. From 1998 to 2015, the Chinese government introduced an export quota licensing system for rare earth. On Mar. 26, 2014, the WTO ruled that China's administrative measures for rare earth exports breached WTO rules. On May 1, 2015, the Chinese government canceled its tariffs on rare earth exports. On Jan. 1, 2016, it abolished the export quota licensing system. Before the export quota licensing system was abolished, many Chinese rare earth enterprises had difficulty obtaining export quotas, and smuggling became the main export method. Although the Chinese government rectified this phenomenon many times, it has not been able to completely eliminate this phenomenon.

In China, there is also a total control index system for rare earth ore (rare earth oxide REO) mining. The Rare Earth Mining Index is an enterprise mining index promulgated by the State Council of China, targeting strategic metal resources such as rare earth, tungsten, and molybdenum. In 2020, China's total control indicators for the mining, smelting and separation of rare earth ore (rare earth oxide REO) are 140,000 tons and 135,000 tons respectively. Compared with 2019, mineral products increased by 6.1%,



and smelting and separated products increased by 6.3% in 2020.

According to CRI's analysis, the mining and refining of rare earth in China is monopolized by six major state-owned enterprises (SOEs). Non-SOEs only have access to downstream industries such as the production and application of rare earth materials.

At present, the annual production capacity of rare earth separation enterprises in China is about 400,000 tons, and the global annual demand is about 200,000 tons. The international market demand is about 90,000-100,000 tons, and the domestic market demand is about 100,000 tons. China's rare earth dominance in the global market still exists, but its dominant advantage is gradually weakening. With the increase in local mining efforts in the United States, Japan, Australia and other countries, China's rare earth production has fallen from 81.4% in 2016 to 58.3% to 2020. In 2020, China's actual production of rare earths will exceed 150,000 tons, which is higher than the quota. The reason is that there are illegal mining and smuggling. There is no tax to engage in illegal mining and smuggling of rare earths, and the profit rate is very high, so it cannot be completely eliminated.

CRI shows that the prices of rare earth oxides and metals in China in 2020 are mostly higher than that in 2019. With the continuous escalation of the Chinese government's crackdown on the illegal mining of rare earths and the adoption of policies such as the national reserve of rare earths, it is expected that rare earth prices can increase in the next few years.

The downstream demand for rare earths is divided into five major sectors: permanent magnet materials, catalytic materials, luminescent materials, polishing materials, and hydrogen storage materials. With the rapid development of global high-tech industries, rare earths are being applied to more high-tech fields and the consumption of rare earth new materials is growing rapidly. The new energy vehicle industry, the wind power industry and other consumers of rare earth all have a promising future, which promotes the development of the rare earth industry. For example, in 2020, the global production of new energy vehicles reached 2.55 million, among which 1.366 million units were produced in China, up by about 10% YOY. Rare earth hydrogen storage alloys are mainly used in NiMH power batteries. 95% of the world's rare earth hydrogen storage alloys are supplied by China and Japan. The production of China's hydrogen storage alloys exceeds 70% of the world's total production. A hybrid electric vehicle needs about 10 kg of hydrogen storage alloy. In general, a hydrogen storage alloy contains 30% mischmetal, which means that a hybrid electric vehicle consumes about 3 kg of rare



earth. The drive motor of a hybrid electric vehicle consumes about 1 kg to 3 kg of neodymium-iron-boron magnetic materials; the drive motor of a battery electric vehicle consumes about 5 kg to 10 kg.

CRI analyzes that according to the plan of the Chinese government, the annual production of new energy vehicles in China will exceed 5 million units by 2025. If this goal can be achieved, new energy vehicles will consume 50,000 tons of rare earths in 2025 or more, which will boost the development of China's rare earth industry.

### Topics Covered:

Global supply of and demand for rare earth

Global trade of rare earth

Chinese government's policies on rare earth

Rare earth production in China

Demand for rare earth in China

China's rare earth imports and exports

Price trends of rare earth and rare earth materials in China

Major rare earth mining and refining enterprises in China

Major producers of rare earth materials in China

Driving forces and market opportunities for China's rare earth industry from 2021 to 2025

Forecast on the supply of and demand for rare earth in China from 2021 to 2025



# **Contents**

#### 1 CONCEPTS OF THE RARE EARTH INDUSTRY

- 1.1 Definition and Classification of Rare Earths
  - 1.1.1 Definition of Rare Earths
  - 1.1.2 Classification of Rare Earths
  - 1.1.3 Applications of Rare Earths
- 1.2 Global Distribution of Rare Earth Ores and Production Volume of Rare Earths
  - 1.2.1 Global Distribution of Rare Earth Ores
  - 1.2.2 Global Production Capacity of Rare Earths per Year
  - 1.2.3 Global Production Volume of Rare Earths
- 1.3 Methodology
  - 1.3.1 Data Sources
  - 1.3.2 Parameters and Assumptions
  - 1.3.3 About CRI

# 2 SUPPLY OF AND DEMAND FOR RARE EARTHS IN CHINA, 2016-2020

- 2.1 Development of China's Rare Earth Industry
  - 2.1.1 History of Rare Earth Production in China
  - 2.1.2 Distribution of Rare Earth Ores in China
  - 2.1.3 Production Volume of Legal Rare Earths in China, 2016-2020
  - 2.1.4 Actual Production Volume of Rare Earths in China
  - 2.1.5 Consumption of Rare Earths in China
  - 2.1.6 Price Trend of Rare Earths in China
- 2.2 Development Environment for China's Rare Earth Industry
  - 2.2.1 Chinese Government's Policies on the Rare Earth Industry
  - 2.2.2 Economic Environment for China's Rare Earth Industry
- 2.3 Global Consumption of Rare Earths, 2016-2020
  - 2.3.1 Overview of Global Consumption
  - 2.3.2 Consumption of Rare Earths in China
  - 2.3.3 Consumption of Rare Earths in the U.S.
  - 2.3.4 Consumption of Rare Earths in Japan
- 2.4 China's Rare Earth Exports
  - 2.4.1 Legal Exports
  - 2.4.2 Illegal Mining and Smuggling

# 3 ANALYSIS ON DOWNSTREAM APPLICATIONS OF RARE EARTHS IN CHINA,



#### 2016-2020

- 3.1 Rare-earth Magnets
  - 3.1.1 Production
  - 3.1.2 Application
- 3.2 Rare Earth Luminescent Materials
  - 3.2.1 Production
  - 3.2.2 Application
- 3.3 Rare Earth Hydrogen Storage Materials
- 3.4 Rare Earth Polishing Materials
- 3.5 Rare Earth Catalytic Materials

# 4 ANALYSIS OF MAJOR RARE EARTH MINING AND REFINING ENTERPRISES IN CHINA, 2016-2020

- 4.1 China Minmetals Corporation
  - 4.1.1 Profile of China Minmetals Corporation
  - 4.1.2 Operation Performance of China Minmetals Corporation
  - 4.1.3 Development Strategies of China Minmetals Corporation
- 4.2 Aluminum Corporation of China Limited (CHALCO)
- 4.3 Baotou Steel (Group) Co., Ltd.
- 4.4 Xiamen Tungsten Industry Co., Ltd.
- 4.5 Ganzhou Rare Earth Group Co., Ltd.
- 4.6 Guangdong Rare Earths Industry Group Co., Ltd.

# 5 MAJOR PRODUCERS OF RARE EARTH MATERIALS IN CHINA, 2016-2020

- 5.1 Lingyi Itech (Guangdong) Company
  - 5.1.1 Overview of Lingyi Itech (Guangdong) Company
- 5.1.2 Operation Status of Lingyi Itech (Guangdong) Company
- 5.2 Beijing Zhongke Sanhuan High-tech Co., Ltd.
  - 5.2.1 Overview of Beijing Zhongke Sanhuan High-tech Co., Ltd.
  - 5.2.2 Operation Status of Beijing Zhongke Sanhuan High-tech Co., Ltd.
- 5.3 Guangdong Weihua Corporation
  - 5.3.1 Overview of Guangdong Weihua Corporation
  - 5.3.2 Operation Status of Guangdong Weihua Corporation
- 5.4 Guangdong Fenghua Advanced Technology Holding Co., Ltd.
  - 5.4.1 Overview of Guangdong Fenghua Advanced Technology Holding Co., Ltd.
  - 5.4.2 Operation Status of Guangdong Fenghua Advanced Technology Holding Co.,



#### Ltd.

- 5.5 Yantai Zhenghai Magnetic Material Co., Ltd.
  - 5.5.1 Overview of Yantai Zhenghai Magnetic Materials Co., Ltd.
- 5.5.2 Operation Status of Yantai Zhenghai Magnetic Materials Co., Ltd.
- 5.6 Innuovo Technology Co., Ltd.
- 5.7 China Minmetals Rare Earth Co., Ltd.
- 5.8 Guangsheng Nonferrous Metals Co., Ltd.
- 5.9 Fujian Mindong Electric Power Co., Ltd.
- 5.10 Tiantong Holdings Co., Ltd.
- 5.11 Antai Technology Co., Ltd.
- 5.12 Hunan Corun New Energy Co., Ltd.
- 5.13 Ningbo Yunsheng Co., Ltd.
- 5.14 Nordisk Investment Co., Ltd.
- 5.15 China Nortnern Rare Earth (Group) High-Tech Co., Ltd.
- 5.16 Jiangxi Copper Industry Co., Ltd.
- 5.17 Aluminum Corporation of China Limited
- 5.18 China Nonferrous Metals Industry's Foreign Engineering and Construction Co., Ltd.
- 5.19 Grinm Advanced Materials Co.,Ltd.
- 5.20 Tibet Mining Development Co., Ltd.
- 5.21 Pengqi Technology Development Co., Ltd.
- 5.22 Chengdu Yinhe Magnet Co., Ltd.
- 5.23 Hengdian Group Dongci Magnetics Co., Ltd.
- 5.24 Sinosteel Anhui Tianyuan Technology Co., Ltd.
- 5.25 Bgrimm Technology Co., Ltd.
- 5.26 Shenghe Resources Holdings Co., Ltd.
- 5.27 Xiamen Tungsten Co., Ltd.
- 5.28 Minmetals Development Co., Ltd.

#### 6 PROSPECT OF CHINA'S RARE EARTH INDUSTRY, 2021-2025

- 6.1 Factors Influencing Development of China's Rare Earth Industry, 2021-2025
  - 6.1.1 Driving Forces and Market Opportunities
  - 6.1.2 Threats and Challenges
- 6.2 Forecast on Supply of Rare Earths in China, 2021-2025
  - 6.2.1 Forecast on Production Capacity of Rare Earths in China
  - 6.2.2 Forecast on Production Volume of Rare Earths in China, 2021-2025
  - 6.2.3 Forecast on Demand for Rare Earth in China, 2021-2025
  - 6.2.4 Forecast on China's Rare Earth Imports and Exports, 2021-2025



6.3 Forecast on Investment Opportunities in China's Rare Earth Industry, 2021-2025 Selected Charts

Chart China's Rare Earth Reserves, 2016-2020

Chart Production Volume of Rare Earths in China, 2016-2020

Chart Average Spot Price of Rare Earths in China, 2016-2020: Neodymium Oxide (Nd2O3/TREO 99.00%-99.90%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Lanthanum Oxide (La2O3/TREO 99.50%-99.90%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Cerium Oxide (CeO2/TREO 99.50%-99.90%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Praseodymium Oxide (Pr6O11/TREO 99.00%-99.90%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Lanthanum (La/TREM?99.00%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Praseodymium (Pr/TREM 96.00%-99.00%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Neodymium (Nd/TREM 99.00%-99.90%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Battery-grade Mischmetal (TREM?99.00% Nd/TREM?15%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Praseodymium-neodymium-dysprosium Alloy (TREM?99.00%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Dysprosium-iron Alloy (Dy 80%)

Chart Average Spot Price of Rare Earths in China, 2016-2020: Sintered Neodymium Iron Boron

Chart Major Policies on China's Rare Earth Industry, 2016-2020

Chart Volume of China's Legal Rare Earth Exports, 2016-2020

Chart Production Volume of New Energy Vehicles in China, 2016-2020

Chart Rare Earth Ores of China's Six Major Rare Earth Groups, 2020

Chart Operation Performance of JL MAG Rare Earth Co., Ltd., 2016-2020

Chart Operation Performance of China Minmetals Rare Earth Co., Ltd., 2016-2020

Chart Forecast on Legal and Actual Production Volumes of Rare Earths in China, 2021-2025

Chart Forecast on Production Volume of New Energy Vehicles in China, 2021-2025 Chart Volume of China's Rare Earth demand, 2021-2025



#### I would like to order

Product name: Investigation Report on the Chinese Rare Earth Market 2021-2025

Product link: https://marketpublishers.com/r/I077EEBE46BDEN.html

Price: US\$ 2,800.00 (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 <a href="https://marketpublishers.com/r/l077EEBE46BDEN.html">https://marketpublishers.com/r/l077EEBE46BDEN.html</a>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:	
Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <a href="https://marketpublishers.com/docs/terms.html">https://marketpublishers.com/docs/terms.html</a>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970