Status of China's Mineral Resources in 2013

HAO Ziguo^{1,2}, FEI Hongcai^{1,2}, HAO Qingqing³ and Susan TURNER²

- 1 Chinese Academy of Geological Sciences, Beijing 100037, China
- 2 Editorial Office of Acta Geologica Sinica (English edition), Geological Society of China, Beijing 100037, China
- 3 Editorial Office of Geology and Exploration, Institute of Mineral Resources Research, China Metallurgical Geology Bureau, Beijing 100025, China

On 22nd April 2014, with the approach of the 45th World Earth Day, China's Ministry of Land and resources issued the status of China's mineral resources in 2013. The first task of the prospecting breakthrough strategy action implemented in the last five years has been completed, and China's security capacity for mineral resources has been significantly improved. In the future, the enforcement of the economical and intensive utilization of mineral resources will be strengthened, and economic transformation and upgrading will be promoted to ensure sustained and stable development of China's economy.

1 Mineral Exploration and Reserves

Until the end of 2013, the proven reserves of major minerals maintained an increase. Among these, natural gas reserves increased by 8.9% over the last year; proved reserves of lead, tungsten, molybdenum and precious metals increased by 10.0%; those of iron, manganese, copper, antimony and phosphorus ores also grew to varying degrees. Mineral exploration has made remarkable achievements: 173 large- to medium-sized mineral deposits, including 36 oil and gas deposits and 137 mineral including 36 large-sized deposits, were newly-discovered. The Jiyuan oilfield in Changqing, the Anyue oilfield and the Zhundong coalfield in Xinjiang have significant prospecting results. In 2013, the country's total investment in geological survey was 122.38 billion yuan, including 76.4 billion yuan invested in oil and gas mineral exploration and 45.98 billion yuan invested in solid mineral deposits (Table 1).

Vol. 88 No. 3

Table 1 Newly increased proven resource reserves of main mineral exploration in 2013

Minerals	Unit	Identify resources	Unit	Minerals	Identify resources	
Coal	10 ⁹ t	520.7	Tin	Metal, 10 ⁴ t	7.7	
Oil	10 ⁹ t	10.8	Molybdenum	Metal, 10 ⁴ t	307.1	
Gas	10^9 m^3	6159.1	Antimony	Metal, 10 ⁴ t	17.3	
Iron	Ore,10 ⁹ t	41.3	Gold	Metal, t	761.4	
Copper	Metal, 10 ⁴ t	314	Silver	Metal, t	16982.5	
Lead	Metal, 10 ⁴ t	538.6	Pyrite	Ore,10 ⁴ t	8490.5	
Zinc	Metal, 10 ⁴ t	1183.2	Phosphorus	Ore,10 ⁹ t	4.7	
Aluminum	Ore,10 ⁹ t	2.6	Potash	Ore,10 ⁴ t	1109	
Wolfram	WO_3 , 10^4 t	17.4				

2 Foreign Trades of Mineral Products

The foreign trade in mineral products in 2013 was brisk, and the total imports and exports were worth 1030 billion US dollars, with a yearly growth of 4.0%. Imports increased by 2.9%, while exports increased by 6.3%. The imports of mineral products, such as crude oil, coal, iron ores, copper and aluminum also had different growth rates. Coal was notable, with imports exceeding 0.3 billion tons, showing a yearly increase of 13.4%.

3 Transfers of Mining Rights

In 2013, an overall 1343 exploration rights were transferred, with a yearly growth of 27.3%; a contract price of 1.38 billion yuan was transferred, with a yearly increase of 16.9%. A total of 1962 mining rights were granted, increasing by 5.4%; 5.29 billion of contract prices were transferred, with a yearly decrease of 31.0%. An overall 257 exploration rights were granted through bidding, auction and listing, with a granted contract price of 1.272 billion yuan; 1597 mining rights were transferred through bidding, auction and listing, with a granted contract price of 3.383 billion yuan.

4 Rational Development and Comprehensive Utilization of Mineral Resources

To improve the rational development and utilization of minerals, the "three rates" were first used for annual inspection of mining enterprises, and these were reported online to make known their dynamic rational development and utilization. Field investigation, field verification and data reliability assessment of national oil and gas, coal and iron ores were completed. A series of policies about promotion of advanced technologies introduction to improve the conservation and comprehensive utilization of mineral resources was announced, of which there were five oil and gas policies, seven for coal, 15 for metal ores and 10 for nonmetal ores. By the end of 2013, a total of 99 advanced and applicable technologies had been announced (Fig. 1).

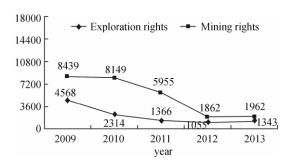


Fig. 1. Chart showing newly granted exploration rights and mining rights in 2009–2013.

(Excerpt from "China Land and Resources Communiqué in 2013" of China's Ministry of Land Resources)

E-mail: haoziguo@126.com