

Recent trends in the flows of minerals commodities

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Abstract

Minerals and raw materials are highly important for development of any economy. In many countries, including Russia, they are the basis of business activity. The rates of increase in their production and utilization grow year in year out. By experts' estimates, the volume of mining production is going to build up more than 5 times in the nearest 50 years, at the concurrent multiple zooming of the consumption of the produced materials.

Today none of the countries in the world possesses all wanted minerals. Nonuniform distribution of global mineral resources conditions the need to transfer huge amounts both of raw materials and conversion products all over the world. The scope and direction of flows of mineral commodities are influenced by natural geography factors and by many other factors, such as science and technology and geopolitics. Considerable changes in this sphere take place on the background of the promoting globalization of the world economy.

Russia is a significant player in the global market of minerals and raw materials as the largest mineral mining country in the world and a leading exporter of many kinds of minerals. However, in terms of the domestic consumption of extracted minerals, Russia gives way to many countries. As for the use of the most important reserves per capita, Russia falls behind the postindustrial countries by 2 to 5 times.

At the present time, Russia is simultaneously an exporter and importer of many kinds of raw materials. The import content of some marketable raw materials makes 25 to 100% of net consumption. The import flows of some crude materials offer almost a 100% supply for the national industry, which is a certain threat to the Russian economy.

The import dependence of the industries calls for close attention to be paid to its causes, question pertinent to optimization of flows of mineral commodities and for searching for potentiality of the import substitution based on the inner capabilities. In the conditions of insufficient financial resources for implementation of new import substitution projects and in view of the heightened competition at the end of the foreign supplies of minerals and raw materials, it is required to explore new optimization scenarios for flows of import commodities.

Keywords: minerals and raw materials, world market globalization, flows of minerals commodities.

References

1. Mineral commodity summaries 2015. *U.S. Geological Survey*. Virginia, 2015. 196 p. Available at:

<https://minerals.usgs.gov/minerals/pubs/mcs/2015/mcs2015.pdf> (accessed: 25.01.2017).

2. Kozlovskiy E. A. Mineral resources in economics of Russia and other countries. *Promyshlennye vedomosti*. 2014. No. 4. Available at: <http://www.asgeos.ru/article/564.html> (accessed: 25.03.2017).

3. Mineral commodity summaries 2010. *U.S. Geological Survey*. Virginia, 2010. 193 p. Available at: <https://minerals.usgs.gov/minerals/pubs/mcs/2010/mcs2010.pdf> (accessed: 25.01.2017).

4. Statistics. *International Energy Agency, OECD/IEA, 2017*. Available at: <http://www.iea.org/statistics/statisticsearch/> (accessed: 25.01.2017).

5. Rustad J. R. Peak Nothing: Recent Trends in Mineral Resource Production. *Environmental Science and Technology*. 2012. Vol. 46(3). pp. 1903–1906.

6. Ebner J. The Sino-European race for Africa's minerals: When two quarrel a third rejoices. *Resources Policy*. 2015. Vol. 43. pp. 112–120.

7. Klare M. T. *The Race for What's Left: The Global Scramble for the World's Last Resources*. New York: Metropolitan Books, 2012. 320 p.

8. Kozlovskiy E. A., Komarov E. A., Makrushin R. N. The union of states – Brazil, Russia, India, China. Problems of mineral raw materials and subsoil use. Moscow: LLC «Geoinformmark», 2011. 400 p.

9. Koloskova I. S. Production structure and market of manganese raw materials in Russia. *Mineralnye resursy Rossii. Ekonomika i upravlenie*. 2014. No. 1. pp. 74–77.

10. Review of manganese market (manganese raw materials, ferroalloys and manganese compounds) in Russia. Moscow: «INFOMAYN», 2013. 155 p. Available at: <http://www.infomine.ru/> (accessed: 15.01.2017).

11. Khatkov V. Yu., Boyarko G. Yu. Counterflows of import and export of mineral raw materials in Russia. *Uspehi sovremennogo estestvoznaniya*. 2004. No. 9. pp. 125–126.

12. Russian raw material complex. *Informatsionno-analiticheskiy tsentr «Mineral»*. Available at: <http://www.mineral.ru/Facts/russia/index.html> (accessed: 15.01.2017).

13. Khatkov V. Yu., Boyarko G. Yu. Regulation of import of the mineral resources deficient for Russia. *Gornyi Zhurnal*. 2005. No. 9–10. pp. 53–56.

14. Sinkov L. S., Lebedeva O. Yu. Current state and development prospects of mineral raw material base of Russian mining industry. *Vestnik TsKR Rosnedra*. 2015. No. 2. pp. 10–15.

15. Natalenko A. E., Pak V. A., Stavskiy A. P. Basic ways of development of mineral-resource base of Russian Federation. *Mineralnye resursy Rossii. Ekonomika i upravlenie*. 2015. No. 1. pp. 2–8.

16. Khloponina V. S. Increasing of investment attractiveness of reproduction of mineral-resource base of deficient mineral raw materials: thesis of inauguration of Dissertation ... of Candidate of Economic Sciences. Saint Petersburg, 2013. 24 p.

17. Matveev A. S., Matveev O. A. Role of raw material sector in Russian innovation development. *Mineralnye resursy Rossii. Ekonomika i upravlenie*. 2014. No. 5. pp. 53–59.

18. Malyshev Yu. N. Development of mining-industrial complex in escalating competition on the global markets of mineral resources. *Mineralnye resursy Rossii. Ekonomika i upravlenie*. 2013. No. 1. pp. 17–19.

19. Kozlovskiy E. A. Natural resources in the economy of Russia and in the world. *Gornyi Zhurnal*. 2015. No. 7. pp. 47–53. DOI: 10.17580/gzh.2015.07.07

20. Development strategy of mineral-resource base of Russian Federation to 2030: project. Moscow, 2017. 24 p. Available at: http://www.mineral.ru/Analytics/rutrend/168/557/RF_MSB_Strategy-Project_2017-01-16.pdf (accessed: 18.02.2017).

ПАМЯТИ КУТУЗОВА БОРИСА НИКОЛАЕВИЧА



С глубоким прискорбием извещаем горно-техническую общественность, что на 87-м году жизни скончался Борис Николаевич Кутузов, известный ученый в области взрывного разрушения горных пород, профессор, доктор технических наук, действительный член Академии горных наук.

Б. Н. Кутузов внес большой вклад в совершенствование технологии и повышение безопасности взрывных работ на карьерах, в подготовку специалистов в этой области. Под его руководством защищены 8 докторских и 70 кандидатских диссертаций. Им опубликовано более 300 научных работ, в том числе 25 учебников и 12 монографий; получено свыше 150 авторских свиде-

тельств и 10 патентов. Более 50 лет Борис Николаевич работал в составе редколлегии «Горного журнала».

Учебная и научно-исследовательская деятельность Б. Н. Кутузова отмечена государственными наградами и ведомственными знаками отличия. Он удостоен звания заслуженного деятеля науки и техники России, является лауреатом премии Правительства РФ.

Выражаем глубокие соболезнования семье и близким Бориса Николаевича. Его творческое наследие будет и впредь служить на благо горному делу.

Горный институт НИТУ «МИСиС», Ростехнадзор, редколлегия и редакция «Горного журнала»