

Statement for the Record
U.S. Department of the Interior
before the
Subcommittee on Energy
Committee on Energy and Natural Resources
United States Senate
on
S. 383
June 9, 2011

Good afternoon, Madam Chairwoman and Members of the Subcommittee. Thank you for the opportunity to discuss S. 383, the Critical Minerals and Materials Promotion Act of 2011. The bill directs the Secretaries of Energy and of the Interior to perform a number of activities intended to promote the domestic production of critical minerals and materials. In this statement, we will address the provisions relevant to the Department of the Interior. The Department of the Interior supports the goals of this bill, although we note that the Departmental activities called for in S. 383 are within the scope of existing Department of the Interior authorities.

The U.S. Geological Survey (USGS) is responsible for conducting research and collecting data on a wide variety of nonfuel mineral resources. Research is conducted to understand the geologic processes that concentrated known mineral resources at specific localities in the Earth's crust and to estimate (or assess) quantities, qualities, and areas of undiscovered mineral resources, or potential future supply. USGS scientists also conduct research on the interactions of mineral resources with the environment, both natural and as a result of resource extraction, to better predict the degree of impact that resource development may have on human and ecosystem health. USGS mineral commodity specialists collect, analyze, and disseminate data and information that document current production and consumption for about 100 mineral commodities, both domestically and internationally for 180 countries. This full spectrum of mineral resource science allows for a comprehensive understanding of the complete life cycle of mineral resources and materials – resource formation, discovery, production, consumption, use, recycling, and reuse – and allows for an understanding of environmental issues of concern throughout the life cycle.

Global demand for critical mineral commodities is on the rise with increasing applications in consumer products, computers, automobiles, aircraft, and other advanced technology products. Much of this demand growth is driven by new technologies that increase energy efficiency and decrease reliance on fossil fuels. To begin the process of understanding potential sources of critical mineral commodities, the USGS has recently completed an inventory of known domestic rare-earth reserves and resources (Long and others, 2010). This study restates basic geologic facts about rare earths relevant to assessing domestic security of supply and reviews current U.S. consumption and imports of rare earths, current knowledge of domestic resources, and possibilities for future domestic production. The report also includes an overview of known global rare-earth resources and discusses the reliability of alternative foreign sources of rare earths.

Though rare earth elements are currently of most concern to many, including the Department of Defense, which funded the inventory, it should be noted that in 2010 the United States was 100 percent dependent on foreign suppliers for 18 mineral commodities and more than 50 percent dependent on foreign sources for 43 mineral commodities. Import partners include Brazil, Canada,

China, France, Germany, Japan, Mexico, Russia, and Venezuela. In 2008, a National Research Council committee, funded largely by the USGS, developed a “criticality matrix” that combines supply risk with importance of use as a first step toward determining which mineral commodities are essential to the Nation’s economic and national security (National Research Council, 2008).

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S. 383 directs the Secretary of the Interior, acting through the USGS, to establish a research and development program to (1) provide data and scientific analyses for research on, and assessments of the potential for, undiscovered and discovered resources of critical minerals and materials in the United States and other countries; (2) analyze and assess current and future critical minerals and materials supply chains; and (3) if appropriate, cooperate with international partners to ensure that the research and assessment programs provide analyses of the global supply chain of critical minerals and materials.

These actions are within the scope of existing authorities, and already underway at the USGS. The USGS continuously collects, analyzes, and disseminates data and information on domestic and global rare-earth and other critical mineral reserves and resources, production, consumption, and use. This information is published annually in the USGS Mineral Commodity Summaries (USGS, 2011) and includes a description of current events, trends, and issues related to supply and demand.

The USGS stands ready to fulfill its role as the federal provider of unbiased research on known mineral resources, assessment of undiscovered mineral resources, and information on domestic and global production and consumption of mineral resources for use in global critical-mineral supply chain analysis. Any study conducted to fulfill the objectives of the bill would require substantial resources and would need to compete for funding with other Administration priorities.

Thank you for the opportunity to present the views of the Department on S. 383. We are happy to answer any questions you or the other Members may have.

For More Information

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