

# United States Senate

WASHINGTON, DC 20510

July 16, 2010

Secretary Steven Chu  
Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

Dear Secretary Chu:

As you are aware, the U.S. is dependent upon China for more than 97 percent of our rare earth supply, including 100 percent of rare earth metals and 80 percent of rare earth magnets needed for critical clean energy technologies, including electric vehicles, wind turbines, and compact florescent light bulbs. China's economic growth has resulted in greater consumption of its own rare earth resources, which has resulted in fewer exports. According to projections, the U.S. and the rest of the world could face rare earth shortages as early as 2011.

Such a supply crisis could jeopardize our ability to deploy key clean energy technologies and reach our broader energy policy objectives. It also raises serious national security concerns. In fact, a recent report by the Government Accountability Office found that rare earths are responsible for the "functionality" of equipment in many defense technologies, and it concluded that it is "difficult to replace [rare earths] without losing performance."

We were pleased to see the Department's recently announced intent to develop a rare earths strategic plan that will focus on increasing supply, encouraging recycling, and investigating substitution strategies. However, we believe that more immediate action may be necessary to avert near-term rare earth shortages.

As such, we urge you and your agency to expeditiously consider any application under the Loan Guarantee Program (LGP) that would help to rebuild the domestic rare earth supply chain and manufacturing sector. This supply chain should include several downstream steps, including: creation of high purity rare earth oxides; production of rare earth metals; fabrication of rare earth alloys; and the manufacture of permanent magnets, advanced batteries, and other rare earth components of clean energy technologies.

These early stages of the supply chain have obvious strategic value, and rebuilding them here in the U.S. will provide a catalyst for domestic manufacturing job growth. Rare earths play an important role in the reduction of greenhouse gas emissions, because a long list of key renewable energy and clean energy technologies rely on them. It makes good sense that the United States would seek to establish a domestic manufacturing base for these important resources.

We applaud your commitment to developing a long-term strategy to ensure an adequate supply of rare earths, and we look forward to reviewing the Department's plan. In the interim, we urge you to consider utilizing the LGP to accelerate the redevelopment of these critical manufacturing capabilities and to make certain that our nation's economic, energy, and national security are not jeopardized by a rare earth supply shortage.

Sincerely,



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Mimi Carbone  
 Paul Udell  
 John Barrasso  
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 Mary Gaudreau  
 Howard Brown  
 Mike Croy  
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