## Congress of the United States Washington, DC 20515

January 12, 2018

The Honorable Ryan Zinke Secretary of the Interior 1849 C Street NW Washington, D.C.

The Honorable Wilbur Ross Secretary of Commerce 1401 Constitution Ave. Washington, D.C. 20250 The Honorable James Mattis Secretary of Defense 1000 Defense Pentagon Washington, D.C. 22202

The Honorable Rick Perry Secretary of Energy 1000 Independence Ave. Washington, D.C. 20585

Dear Secretaries Zinke, Mattis, Ross and Perry:

We are writing to urge the Administration to affirm the critical importance of scandium, a rare earth element with numerous strategic military and civilian uses, by including it in the "Critical Minerals" list called for by President Trump in his December 20, 2017, Executive Order to Ensure Secure and Reliable Supplies of Critical Minerals.

Scandium is used in a variety of defense and civil applications including lasers, electronics, and high-performance lighting. When added to aluminum, scandium makes an extraordinarily light and strong alloy for use in bulkheads, heat shields, fuel and exhaust systems, aircraft fuselage and landing gear assemblies, mobile bridges, missiles, and other defense systems. In the commercial sector, scandium alloys are poised to drive major advances in commercial aircraft and surface transportation systems through greater fuel efficiency and reduced emissions. Scandium is also a critical component of Solid Oxide Fuel Cells which provide highly efficient and reliable power generation for DoD, NASA, and companies such as Home Depot, Walmart, Apple, Google, and Verizon.

Despite these strategic uses, today our nation is 100% dependent on imported scandium, primarily from China and Russia. We share the concerns of many of our colleagues in Congress who consider this a significant national security vulnerability for the United States. For this reason, the FY2018 National Defense Authorization Act included language that specifically mentions scandium and the need to develop domestic sources of this strategic material. We also note that the European Union added scandium to its 2017 list of Critical Raw Materials, further illustrating its growing importance in global commodity supply chains.

Fortunately, efforts are now underway to produce scandium in the United States from multiple sources in the next several years. Known deposits in the State of Nebraska alone have

the potential to yield more than 100 tonnes/year of scandium, nearly 10 times the current global production capacity of this critical commodity.

Assured access to strategic materials is a bedrock requirement for the nation. Therefore, we urge you to include scandium in the Administration's "Critical Minerals" list that will be published later this year.

Sincerely,

Don Bacon (NE-02) Member of Congress Adrian Smith (NE-03) Member of Congress