



North American Metals Council
Managed by B&C® Consortia Management, L.L.C.

Response to U.S. Department of Energy Request for Information
For Updated Critical Materials Strategy

Submitted by
North American Metals Council (NAMC)
Kathleen M. Roberts, Executive Director
2200 Pennsylvania Avenue, N.W.
Suite 100W
Washington, DC 20037
202-557-3800
kroberts@namc.org
April 11, 2016

The North American Metals Council (NAMC)¹ appreciates the opportunity to provide these comments in response to the U.S. Department of Energy’s (DOE) February 10, 2016, Request for Information (RFI) on rare earth elements and other materials used in energy technologies, as well as key materials used in the manufacturing of energy technologies. 81 Fed. Reg. 7087.

While NAMC commends DOE for recognizing the need to evaluate future accessibility to the materials that are vital to U.S. energy independence, we note that multiple federal organizations, including the Department of Defense, the National Science Foundation, and the White House’s Office of Science and Technology Policy, have undertaken similar studies over the last few years. It would be far more practical and cost effective if the various government groups could coordinate and cooperate on these evaluations of critical materials. Instead, industry is faced with responding to multiple requests for essentially the same type of information, which unnecessarily drives up costs and wastes time for those groups that look to be helpful by responding to these requests.

NAMC members remind DOE that, in addition to “rare earth elements,” metals and metal substances play an essential role in current and emerging energy technologies. Copper, aluminum, nickel, and other metals are key manufacturing materials and new energy technology infrastructure will likely rely on these metals. To maintain its international

¹ NAMC is an unincorporated, not-for-profit group formed to provide a collective voice for North American metals producers and users (*i.e.*, the North American “metals industry”) on science- and policy-based issues that affect metals in a generic way. NAMC members include trade associations as well as individual companies.



North American Metals Council

NAMC Response to DOE RFI
April 11, 2016
Page 2

leadership edge, the U.S. must be able to address and ensure continuous supplies for these metals. NAMC offers the below input on Category 4: Primary Production and Material Processing, and Category 6: Recycling Opportunities.

Primary Production and Material Processing

In response to the DOE question on technical, economic, or regulatory factors that may lead to barriers or delays in bringing on new production or increasing current production, NAMC notes that regulatory permitting policies are one of the greatest barriers to pursuing domestic opportunities for locating and developing additional resources. Due to the overly complex and duplicative permitting scheme, it can take seven to ten years to permit a new mining project in the U.S. As DOE specifically is interested in rare earth elements, it should review the 2010 United States Geological Survey (USGS) study entitled “The Principal Rare Earth Elements Deposits of the United States -- A Summary of Domestic Deposits and a Global Perspective.”² In the study, USGS reviewed permit times for U.S. metal mines in order to better appreciate the length of time it would take to develop new rare earth mines here. As that report reflects, permitting timeframes are often lengthy and unpredictable: “[t]he time to obtain a permit has required as many as 17 years, and one mine, the Pogo, Alaska gold mine, was developed under an expedited permitting schedule that still took 7 years.”³

Companies cannot implement long-term strategic planning on materials availability with decades-long permitting delays. In fact, the length, complexity, and uncertainty of the permitting process are the primary reasons investors give for not investing in U.S. minerals mining. As SNL Metals & Mining’s recent report “Permitting, Economic Value and Mining in the United States” demonstrates, a typical mining project in the U.S. loses more than one-third of its value as a result of bureaucratic delays in receiving the numerous permits needed to begin

² See “The Principal Rare Earth Elements Deposits of the United States -- A Summary of Domestic Deposits and a Global Perspective,” United States Geological Survey, 2010, available at <http://pubs.usgs.gov/sir/2010/5220/>.

³ *Id.* at page 21.



North American Metals Council

NAMC Response to DOE RFI
April 11, 2016
Page 3

production.⁴ Further, the higher costs and increased risks that often arise from a prolonged permitting process can cut the expected value of a mine in half before production even begins.⁵ This, coupled with other duplicative regulatory regimes, including those applicable to financial assurance requirements, results in the U.S. being viewed as an unfavorable area for investment in mineral and metal mining and production.

The U.S.'s protracted permitting process puts it at a disadvantage compared to other major mining countries such as Canada and Australia. These countries complete the mine permitting process in two to three years and these projects undergo extensive environmental reviews similar to the U.S. It is significant to note that Canada and Australia share our same core principles of responsible resource development, but they have managed to demonstrate that permit reviews and decisions can be both thorough and timely.

An additional significant barrier to new production or increases in current production is access to federal lands. Twelve western states are the source of much of our nation's mineral endowment. Federal lands comprise almost 40 percent of the land area in those states. Half of that is either off-limits or under restrictions for mineral development. Unknown amounts of resources on adjacent state and private lands are also sterilized because of federal land restrictions. Yet, the administration continues to propose placing more of these lands off-limits. The most recent example is the U.S. Department of the Interior's proposed withdrawal of ten million acres of federal lands in the western U.S. The withdrawal would be the largest ever in the history of the Federal Land Policy and Management Act (FLPMA). The department maintains that the withdrawal is necessary to conserve sage grouse and its habitat. Yet, mining is not even considered a major threat to the bird or its habitat as evidenced by the department's own supporting documents, which point to wildfires and invasive species as the greatest threats.

While NAMC recognizes that regulations on land use and mine permitting are important aspects of environmental protection, more reasonable and pragmatic implementation of these regulations is necessary to allow for expansion of access to critical raw materials within

⁴ See "Permitting, Economic Value and Mining in the United States," SNL Metals & Mining, 2015, available at <http://mineralsmakelife.org/resources/details/permitting-economic-value-and-mining-in-the-united-states>.

⁵ *Id.*



North American Metals Council

NAMC Response to DOE RFI

April 11, 2016

Page 4

the U.S. Otherwise, we will become even more reliant on foreign sources of these materials which risk our national and mineral security given the fact that our nation's import dependence for key mineral commodities has doubled over the past two decades. Currently, the U.S. is import dependent for nineteen key mineral resources and more than 50 percent import dependent for an additional 24 mineral commodities.

Recycling Opportunities

NAMC commends DOE for recognizing that a strategic review of raw material supply also must include consideration of the generation of such materials through recycling and reuse efforts. Recycling provides access to many critical materials; in some cases, it can do so in greater concentrations than traditional metal mining. Careful analysis and execution of comprehensive recycling programs is necessary, particularly for products -- such as electronics or cell phones -- that contain critical materials. In essence, a well-developed recycling system would allow the U.S. to tap into these "above-ground mines," resulting in increased U.S. materials security.

In its consideration of policies that impact recycling, DOE must address the problematic interpretation of the U.S. Environmental Protection Agency (EPA) under the Toxic Substances Control Act (TSCA). Under TSCA, there are significant disincentives to recycling and reuse. In particular, because metals recovered from byproducts or waste streams are extracted through a chemical reaction, EPA considers these metals to be newly manufactured materials and, as such, subject to burdensome regulatory requirements. More importantly, under this interpretation, the byproducts from which the metal is extracted, which would typically be viewed as waste products, are also viewed as commercially manufactured materials. This means the byproducts are also subject to chemical regulatory requirements under TSCA, solely because a company opted to send its byproducts for recycling instead of disposal. This creates a perverse incentive to dispose of, rather than recycle, the material -- because a company can avoid the regulatory requirements, and potential enforcement actions associated with them, by simply disposing of the byproducts. The imposition of strenuous regulatory burdens on companies that are looking to reduce waste and support sustainability practices is counterproductive.

DOE should strive for regulatory reform that supports industry's efforts to increase recycling techniques to extract commercially valuable metals or other materials from streams that previously were disposed of as waste, particularly for metals and other materials that



North American Metals Council

NAMC Response to DOE RFI

April 11, 2016

Page 5

are considered essential for DOE programs. Recycling these metals allows reduced need for further mining of raw ore, which again, supports the goal of sustainability.

* * * *

Thank you for the opportunity to provide this input. We look forward to the outcome of DOE's analysis of the information provided.