

American Government takes Disruptive Steps through the ORE Act to end Chinese Control of Rare Earths (including Scandium), Cobalt, Graphite, Lithium and Manganese

Earlier last week Texan Senator Ted Cruz introduced the Onshoring Rare Earths Act (the "ORE Act") with the goal to end Chinese control over the American supply chain of critical materials necessary for battery materials. The ORE Act offers amendments to the Internal Revenue Code of 1986 and addresses American dependence on the Chinese supply chains for rare earths (including scandium), cobalt, graphite, lithium and manganese.

Perhaps the most notable highlights of the ORE Act include the following 3 items:

(1) The Catalyst for the ORE Act are Battery Materials: The ORE Act addresses only 6 of the full 35 critical materials introduced by the U.S. Government in 2018. What does it focus on? For starters, it focuses on all of the rare earth elements*. Now this requires clarification in that the ORE Act includes 16 of the 17 rare earths listed under rare earths, and then lists the 17th rare earth scandium separately. Then the ORE Act lists cobalt, graphite, lithium and manganese.

Please take the time to review the qualified list of 35 critical materials recognized by the U.S. Government listed

below. We have numbered these for you and then we have underlined the 6 critical materials from this list that are the recipients of any and all benefits from the ORE Act. The U.S. List of 35 Critical Materials include the following: (1) Aluminum (bauxite); (2) Antimony; (3) Arsenic; (4) Barite; (5) Beryllium; (6) Bismuth; (7) Cesium; (8) Chromium; (9) Cobalt; (10) Fluorspar; (11) Gallium; (12) Germanium; (13) Graphite (natural); (14) Hafnium; (15) Helium; (16) Indium; (17) Lithium; (18) Magnesium; (19) Manganese; (20) Niobium; (21) Platinum Group of Metals; (22) Potash; (23) The Rare Earth Elements Group: (Cerium, Dysprosium, Erbium, Europium, Gadolinium, Holmium, Lanthanum, Lutetium, Neodymium, Praseodymium, Promethium, Samarium, Terbium, Thulium, Ytterbium and Yttrium); (24) Rhenium; (25) Rubidium; (26) Scandium; (27) Strontium; (28) Tantalum; (29) Tellurium; (30) Tin; (31) Titanium; (32) Tungsten; (33) Uranium; (34) Vanadium and (35) Zirconium.

So just to clarify, the U.S. Government lists 35 Critical Materials and the ORE Act addresses only 6 on this list. Again, for ease, here are the 6 ORE Act's Recipient List for Benefits: Cobalt, Graphite, Lithium, Manganese, the 16 Rare Earth Elements (plus Scandium).

(2) The ORE Act provides Tax Incentives: "There shall be allowed as a deduction for the taxable year an amount equal to 200% of the cost paid or incurred by the taxpayer for the purchase or acquisition of critical minerals and metals which have been extracted from deposits in the United States." – As we have just highlighted from an ORE Act excerpt, the ORE Act allows a tax deduction of 200% for the cost paid or incurred for the purchase of critical minerals or metals extracted from US deposits. This helps the buyer but not the producer directly as the producer is making the investment and taking the risk.

The focus of the ORE Act is on tax incentives like a 100% depreciation allowance in year one of a property being put

into service. It does not indicate specifically about capital expenditures to start production, which is typically the largest investment, but appears to be focused on the real estate portion. Also, no indication on breaks for investment in extraction, concentration and separation which are critical to production of the elements.

(3) The ORE Act will Award Grants: “A grant awarded under subsection (a) may not exceed \$10,000,000. (c) ECONOMIC VIABILITY. –In awarding grants under subsection (a), the Secretary of Defense shall give priority to projects the Secretary determines are likely to be economically viable over the long term. (d) SECONDARY RECOVERY. –In awarding grants under subsection (a) during a fiscal year, the Secretary of Defense shall seek to award not less than 30 percent of the total amount of grants awarded during that fiscal year for projects relating to secondary recovery of critical minerals and metals. (e) AUTHORIZATION OF APPROPRIATIONS. –There are authorized to be appropriated to the Secretary of Defense \$50,000,000 for each of fiscal years 2021 through 2024 to carry out the grant program...”

The Department of Defense (DoD) would develop a grant program of \$50 million per year from 2021 to 2024 to finance pilot projects for the development of critical minerals or metals in the USA only and is limited to \$10 million per grant. An interesting part of this program is 30% of the awards should be for recycling. Included in this is mining waste, tailings among others. This does beg the question what about the recycling of the other critical materials not listed in the ORE Act?

My view is the scope of this act should include a broader range of the 35 critical materials when it comes to recycling as this approach can address some of the elements not available for mining in the USA. Pilot projects are necessary to develop the process, but it is a small part of the overall investment needed to produce materials domestically.

While the Ore Act is the first step in a marathon to re-establish the rare earth supply chain domestically, it needs to expand its focus beyond USA projects in mining and recycling to look at the complete supply chain, including metal/alloy production and manufacturing of final assemblies and components. Excluding allies as sources of these technology metals, ignores the possibility of collaboration and utilization of existing assets and technology developments.