U.S. Federal Inflation Reduction Act Excludes 70% of EVs from Tax Credits

Stringent Domestic Production Requirements Give Manufacturers Little Time to Adapt Posted by Karen Heumann

The Inflation Reduction Act reinstated US EV tax credits which were slated to expire. However, the rules that companies have to play by in order to qualify for the tax credits has changed. In order to qualify for the \$7,500 tax rebate, consumer EVs must be manufactured in North America. Additionally, the <u>percentage of rare Earth minerals</u> that are extracted in North America for EV batteries is also a qualifier for half of the tax credit. Manufacturers must use North American minerals for at least 40% of the batteries in 2023,



and this percentage increases by 10% every year, up to 80% in 2026. Additionally, starting in 2025 vehicles will not qualify for the tax credit if the battery's critical minerals were extracted, processed, or recycled by a "foreign entity of concern" (ie. China, Russia, Iran). In short, EV manufacturers will be scrambling to qualify for part or all of these tax credits.

The focus on electric vehicle supply chains demonstrates the heightened global importance of electric vehicle manufacturing, as well as heightened global tension between the US, China and Russia. China leads the world in the <u>production of graphite</u>, a rare mineral that the US does not currently mine, and which is critical to the manufacturing of lithium-ion batteries. <u>Lithium, cobalt, manganese, nickel, and graphite</u> are five critical minerals that the US does not extract enough of to build electric vehicle batteries without being dependent upon foreign suppliers.

One overlooked benefit of shortened supply chains is lowered climate emissions in the transportation of manufacturing materials to factories. If the manufacturing of electric vehicles becomes (mostly) siloed to geographical regions, global carbon emissions may decrease. But the process of building regional supply chains will be expensive, both in terms of initial capital costs as well as raw material costs. This likely will drive up the cost of electric vehicles in countries and regions that employ these strict manufacturing standards.

However, this supply chain shift also has the potential to harbor technological advances that may benefit consumers. This includes a shift away from the use of graphite or other difficult to procure minerals in the creation of lithium-ion batteries, as well as investment in battery recycling and <u>mining technologies</u>. Investment funding for these technologies is provided by the <u>Infrastructure Investment and Jobs Act</u>.

Consumers can reference the <u>National Highway Traffic Safety Administration's VIN, or vehicle</u> <u>identification number, database</u> to check out a car's final assembly details.