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A recent report issued by the Boston Consulting Group called "What Next for Alternative Energy" raises concerns about material availability for the future of electric vehicles.

The report stats that "constraints on raw materials - such as lithium used in lithium-ion batteries and rare-earth metals used as magnets in electric motors" could hinder EV depoloyment, despite the fact that " ample lithium exists to supply the needs of EV batteries, the potential for rapid market growth could cause temporary supply disruptions."

The report gives the example of polysilicon shortages affecting in solar photovoltaic manufacturers in 2007-2008. "During the shortage, manufacturers that hadn't contracted for a secure supply of polysilicon were forced to procure it on the open market at very high spot rates." The report continues, "Similar periods of rapid growth or temprorary supply disruptions - a potential concern given that four countries account for 90 percent of global lithium reserves and China alone accounts for the vast majority of rare earth metal prodution - could negaitvely impact both EV manufacturers and battery manufacturers"

Read the full report here:

http://www.bcg.com/documents/file65187.pdf