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Macro Roundup Artcile

Headline: Why China Could Dominate the Next Big Advance in Batteries

Article Link: https://www.nytimes.com/2023/04/12/business/china-sodium-batteries.html

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Tweet: Sodium-ion batteries might be around the corner. Sodium is 1-3% of the price of lithium. The US has 90% of the world's readily mined soda ash reserves, the primary source of sodium.

Summary: China is positioning itself to command the next big innovation in rechargeable batteries: replacing lithium with sodium, a far cheaper and more abundant material. Sodium, found all over the world as part of salt, sells for 1 to 3 percent of the price of lithium and is chemically very similar. Recent breakthroughs mean that sodium batteries can now be recharged daily for years, chipping away at a key advantage of lithium batteries. The energy capacity of sodium batteries has also increased. Research into using sodium for batteries began in earnest in the 1970s, led then by the United States. Japanese researchers made crucial advances a dozen years ago. Chinese companies have since taken the lead in commercializing the technology. Out of 20 sodium battery factories now planned or already under construction around the world, 16 are in China, according to Benchmark Minerals, a consulting firm. In two years, China will have nearly 95 percent of the world's capacity to make sodium batteries. Lithium battery production will still dwarf sodium battery output at that point, Benchmark predicts, but advances in sodium are accelerating. The United States accounts for over 90 percent of the world's readily mined reserves for soda ash, the main industrial source of sodium. Deep under the southwestern Wyoming desert lies a vast deposit of soda ash, formed 50 million years ago. Soda ash there has long been extracted for America's glass manufacturing industry.

Primary Topic: Innovation/Research

Topics: Factoid, Innovation/Research, News article, Productivity

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