



## Energy storage requires sodium-ion batteries

Much of the attraction to sodium (Na) batteries as candidates for large-scale energy storage stems from the fact that as the sixth most abundant element in the Earth's crust and the fourth most abundant element in the ocean, it is an inexpensive and globally accessible commodity. Proponents say sodium-ion batteries degrade more slowly, operate more efficiently and have lower fire risk. But high-profile failures cloud the U.S. market. Denver-based Peak Energy powered up what it says is the United States' first grid-scale sodium-ion battery installation. Courtesy of Peak

Sodium-ion batteries are a type of rechargeable batteries that carry the charge using sodium ions (Na<sup>+</sup>). The development of new generation batteries is a determining factor in the future of energy storage, which is key to decarbonisation and the energy transition in the face of the challenges of Without diving into the well-discussed benefits of sodium-ion versus lithium-ion batteries, let's focus on the primary advantages: affordability and stability. Sodium ranks sixth in abundance in the Earth's crust, over a thousand times more abundant than lithium, making its raw material Technology Strategy Assessment

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