

ENERGY

BHP Signs Energy Storage Deal in Its Plan to Go Carbon Neutral

By Al Root

Going green—moving away from fossil fuel-based power generation—requires not only wind, solar and water power generation assets, but energy storage solutions too. That usually means battery backup power, but not all the electricity storage has to be batteries. Gravity can help too.

Mining giant BHP (ticker: BHP) acknowledged that idea Wednesday, signing a memorandum of understanding with energy storage technology company Energy Vault.

Energy Vault functions as, well, an energy vault by raising large weights to heights. That takes energy. That energy can be released as weights are lowered slowly, spinning turbines to generate electricity. It's a gravity-based solution to storing power.

BHP is interested in storage options because it wants to cut its carbon footprint. The company wants to reduce its emissions of carbon dioxide—the main gas blamed for global climate change—by 30% by 2030, compared with 2020 levels and achieve carbon neutrality by 2050. Carbon neutrality essentially means all company operations don't add any carbon dioxide, on a net basis, to the atmosphere.

Practically speaking, for a global miner that means using electricity generated from renewable sources as well as displacing diesel used by mining trucks and trains with no-carbon fuels such as hydrogen gas. That can mean using electricity to split water into oxygen and hydrogen.

The problem with moving a mining company's operations to renewable power



Energy Vault commercial demonstration unit. Business Wire

sources is essentially that the sun doesn't always shine while BHP's need power and fuel 24/7. That's where energy storage comes in.

"Powering a process like green hydrogen, where you need 8 hours to keep running the plant in the night, you need a longer duration technology," explained Energy Vault CEO Robert Piconi. "You need [a technology] that has longer duration and [no] degradation over time." Batteries wear out. Piconi believes his technology is the best option for zero-carbon industrial operations.

The BHP deal is one example he can cite

which should help his argument and his company's stock price.

Partnerships with large companies are generally good for startup company stocks. Energy Vault isn't a publicly traded company yet, but its merging with SPAC Novus Capital Corp II (NXU). Novus stock was up 0.6%.

The SPAC merger is on track to wrap up in the first quarter of 2022. Investors interested in Energy Vault today can buy Novus stock. Novus shares will turn into Energy Vault, with the new stock symbol "GWHR," if Novus shareholders approve the merger.