



NEWS RELEASE

# Energy Vault EVx™ Gravity Energy Storage Technology Named a TIME Best Invention of 2024

2024-10-30

TIME's list of 200 groundbreaking inventions highlights innovations that are changing how we live , work, play , and think about what's possible

EVx gravity energy storage system technology, developed for large-scale storage projects, combines time-tested energy storage principles, modern hardware and software engineering, and cutting-edge materials science to deliver long-duration storage with no performance degradation

WESTLAKE VILLAGE, Calif.--(BUSINESS WIRE)-- Energy Vault Holdings Inc. (NYSE: NRGV) ("Energy Vault" or the "Company"), a leader in sustainable, grid-scale energy storage solutions, is honored to announce the selection of its EVx gravity energy storage system (GESS) technology to TIME's **Best Inventions of 2024 list**, in the "Green Energy" category. This recognition highlights growing awareness of the need for reliable, cost-effective and sustainable energy storage solutions to meet global decarbonization goals, as well as the significant potential of gravity energy storage technology to play a key role in advancing the world's transition to clean, renewable energy.

Energy Vault EVx™ Gravity Energy Storage Technology Named a TIME Best Invention of 2024 (Graphic: Business Wire)

"Energy Vault was founded with a vision to enable a sustainably energized world through the development of energy storage solutions that help utilities,

independent power producers and large industrial energy users reduce the cost of abundant clean energy while maintaining power reliability," said Robert Piconi, Chairman and Chief Executive Officer of Energy Vault. "The selection of EVx to be a part of TIME's Best Inventions of 2024 list is testament not only to the immense potential this technology holds, but also to the dedication and commitment of the Energy Vault team to pursue our mission."



Energy Vault's EVx GESS systems are based on the proven physics and mechanical engineering fundamentals of pumped hydro, which currently accounts for about 90% of the world's energy storage capacity, but replace water with custom-made, environmentally-friendly composite blocks which do not lose storage capacity or degrade over time. The blocks can be made from low-cost and locally sourced materials, including the excavated soil at customer construction sites. Importantly, waste materials that traditionally must be remediated at considerable cost, such as mine tailings, coal combustion residuals (coal ash), and fiberglass from decommissioned wind turbine blades, can also be used to make the blocks, creating a circular economy that is both more economical and sustainable.

EVx decouples power and energy while maintaining a high round-trip efficiency exceeding 80%, without the need for specific topography. The result is a flexible, low-cost, 35-year (or more) infrastructure asset with a long technical life, zero degradation in storage medium, and modular architecture that can scale to multi-GW-hour storage capacity, enabling utilities, independent power producers and large industrial energy users to significantly reduce their levelized cost of energy while maintaining power reliability. The systems are automated leveraging Energy Vault's proprietary advanced computer control and machine vision software that orchestrate the charging and discharging cycles while meeting a broad set of storage durations starting from 2 hours and continuing to 12 hours, or more.

The EVx platform is prominent member of Energy Vault's **G-VAULT™** suite of long duration gravity energy storage solutions, which also include **EVu™**, **EVc™**, **EVy™**, and **EV0™**.

Energy Vault's EVx GESS technology, **currently being commissioned** in Rudong, China, will be the world's first grid-scale gravity energy storage system when fully operational. To date, nine EVx deployments **are underway** across China via a licensing agreement with China Tianying (CNTY) and Atlas Renewable, totaling more than 3.7 GWh.

Earlier this year, Energy Vault **announced** its expansion into Southern Africa with an agreement that includes multi-year license revenues and additional royalty revenue streams tied to gravity energy storage project deployments in South Africa and the broader 16 member-state Southern African Development Community (SADC) region.

Energy Vault also previously **announced** a global exclusive partnership with world-renowned architecture and engineering firm Skidmore, Owings & Merrill (SOM), to incorporate gravity energy storage technology into tall buildings in urban environments and deployable structures in natural environments, to maximize sustainability, accelerate carbon payback and lower the levelized cost of energy consumption.

To compile the TIME Best Inventions of 2024 list, nominations were solicited from TIME's editors and correspondents, and through an online application process, paying special attention to growing fields—such as AI, green energy, and sustainability. Each contender was then evaluated on a number of key factors, including originality, efficacy, ambition, and impact.

See the full list here: [time.com/best-inventions-2024](https://time.com/best-inventions-2024)

## About Energy Vault

Energy Vault® develops and deploys utility-scale energy storage solutions designed to transform the world's approach to sustainable energy storage. The Company's comprehensive offerings include proprietary gravity-based storage, battery storage, and green hydrogen energy storage technologies. Each storage solution is supported by the Company's hardware technology-agnostic energy management system software and integration platform. Unique to the industry, Energy Vault's innovative technology portfolio delivers customized short-and-long-duration energy storage solutions to help utilities, independent power producers, and large industrial energy users significantly reduce levelized energy costs while maintaining power reliability. Utilizing eco-friendly materials with the ability to integrate waste materials for beneficial reuse, Energy Vault's G-Vault™ gravity-based energy storage technology is facilitating the shift to a circular economy while accelerating the global clean energy transition for its customers. Please visit [www.energyvault.com](https://www.energyvault.com) for more information.

## Forward-Looking Statements

This press release includes forward-looking statements that reflect the Company's current views with respect to, among other things, the Company's operations and financial performance. Forward-looking statements include information concerning possible or assumed future results of operations, including descriptions of our business plan and strategies. These statements often include words such as "anticipate," "expect," "suggest," "plan," "believe," "intend," "project," "forecast," "estimates," "targets," "projections," "should," "could," "would," "may," "might," "will" and other similar expressions. We base these forward-looking statements or projections on our current expectations, plans, and assumptions, which we have made in light of our experience in our industry, as well as our perceptions of historical trends, current conditions, expected future developments and other factors we believe are appropriate under the circumstances at the time. These forward-looking statements are based on our beliefs, assumptions, and expectations of future performance, taking into account the information currently available to us. These forward-looking statements are only predictions based upon our current expectations and projections about future events. These forward-looking statements involve significant risks and uncertainties that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including changes in our strategy, expansion plans, customer opportunities, future operations, future financial position, estimated revenues and losses, projected costs, prospects and plans; the uncertainty of our awards, bookings and backlogs equating to future revenue; the lack of assurance that non-binding letters of intent and other indication of interest can result in binding orders or sales; the possibility of our products to be or alleged to be defective or experience other failures; the implementation, market acceptance and success of our business model and growth strategy; our ability to develop and maintain our brand and reputation; developments and projections relating to our business, our competitors, and industry; the ability of our suppliers to deliver necessary components or raw materials for construction of our energy storage systems in a timely manner; the impact of health epidemics, on our business and

the actions we may take in response thereto; our expectations regarding our ability to obtain and maintain intellectual property protection and not infringe on the rights of others; expectations regarding the time during which we will be an emerging growth company under the JOBS Act; our future capital requirements and sources and uses of cash; the international nature of our operations and the impact of war or other hostilities on our business and global markets; our ability to obtain funding for our operations and future growth; our business, expansion plans and opportunities and other important factors discussed under the caption “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2023 filed with the SEC on March 12, 2024, as such factors may be updated from time to time in its other filings with the SEC, accessible on the SEC’s website at [www.sec.gov](http://www.sec.gov). New risks emerge from time to time, and it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Any forward-looking statement made by us in this press release speaks only as of the date of this press release and is expressly qualified in its entirety by the cautionary statements included in this press release. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable laws. You should not place undue reliance on our forward-looking statements.

## Energy Vault

Media

**[media@energyvault.com](mailto:media@energyvault.com)**

Investors

**[energyvaultIR@icrinc.com](mailto:energyvaultIR@icrinc.com)**

Source: Energy Vault Holdings, Inc.