

ENERGY VAULT[®]
Enabling a Renewable World

Sustainability Report 2023

START ▶

Contents

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY**
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY**
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

INTRODUCTION

COMPANY

CEO MESSAGE

IN THE VAULT

CLIMATE ACTION

ENERGY MARKET

- Market Demand
- Market Accelerators
- Technology Mix

SOLUTIONS

- G-VAULT™
- B-VAULT™
- H-VAULT™
- Software & Service
- Projects

SUSTAINABILITY

RESPONSIBLE BUSINESS

STRATEGY

- Principles & Philosophy
- Sustainability Team
- Materiality Assessment
- Roadmap & Targets

INNOVATION

- Life Cycle Assessments
- Research & Development

GLOBAL ALIGNMENT

- Associations & Initiatives
- UN Global Compact
- TCFD & SBTi

ACCOUNTABILITY

TRANSPARENCY

ENVIRONMENTAL

- Resource Consumption
- Greenhouse Gas Emissions
- Waste Management

SOCIAL

- Workforce
- Health & Safety
- Supply Chain

GOVERNANCE

- Leadership Team
- Business Ethics
- Risk Management
- Policies & Commitments

Looking Forward

Appendix | GRI Disclosures | Bibliography



Company Introduction

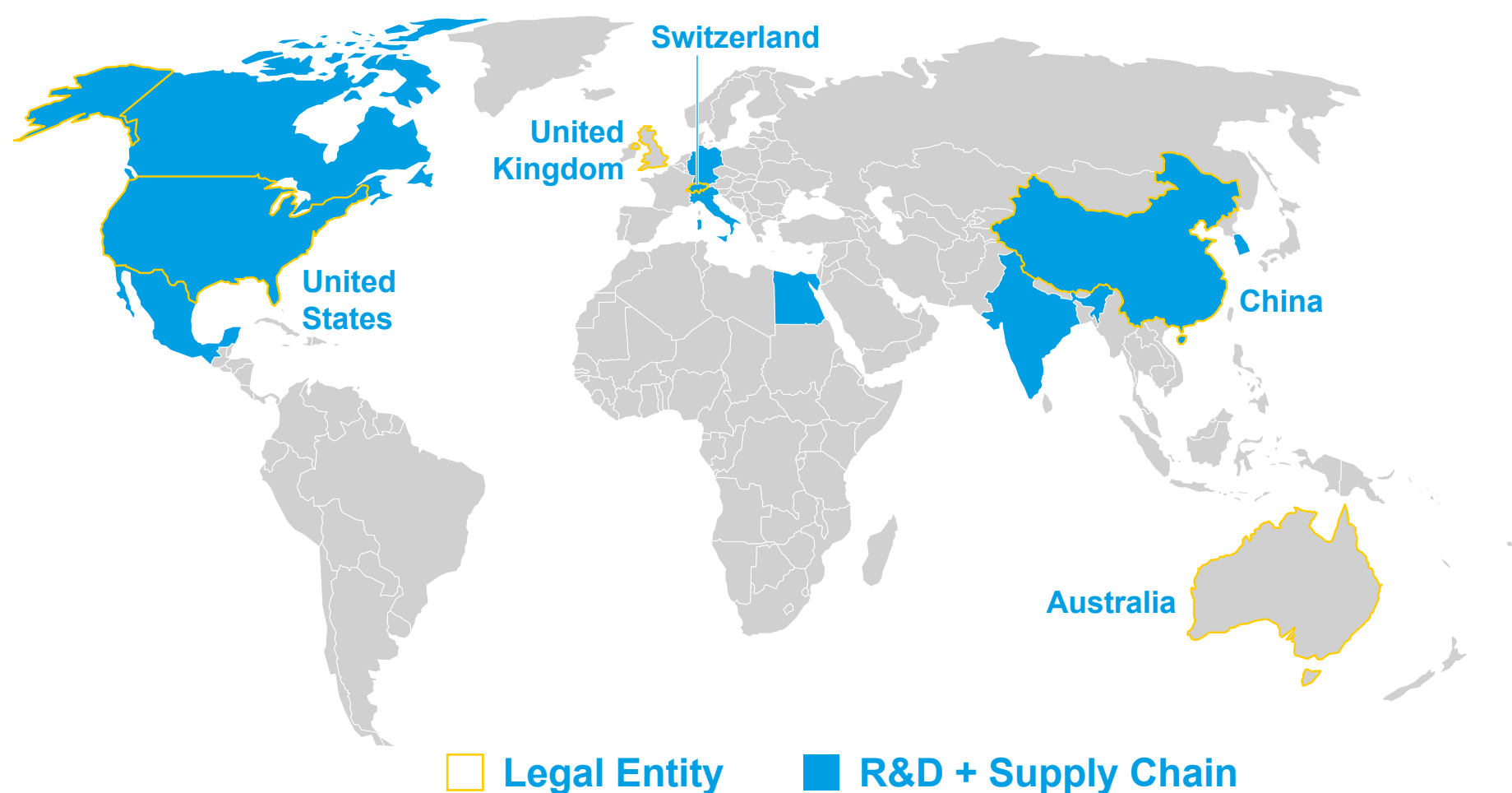
- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Enabling A Renewable World™

Energy Vault develops and deploys utility-scale energy storage solutions designed to aid in the global transition to a clean energy future. Our Company’s comprehensive offerings include proprietary gravity, battery, and green hydrogen energy storage solutions, supported by Energy Vault hardware technology-agnostic energy management software and integration platform. We incorporate a customer-centric, solutions-based approach towards helping utilities, independent power producers, and large industrial energy users reduce energy costs while maintaining power reliability. As we transition to an economy powered by intermittent renewable energy, the ability to provide clean and affordable electricity to a growing global population will depend heavily on the ability to store and distribute energy at the right time. At Energy Vault, we envision a planet where science and deep respect for our natural resources inspire technological advancements in energy storage and the solutions needed to deliver clean, sustainable, and affordable energy for all.

Corporate Sustainability Statement

Energy Vault is committed to providing transparency and progress on material non-financial sustainability & Environmental, Social, and Governance metrics. In our second annual Corporate Sustainability Report, we share early-stage data and 2023 activations of newly established sustainability infrastructure, systems, protocols, standards, and metrics from which our organization measures current and future success.



Purpose, Vision, Mission

At Energy Vault, we exist to enable a sustainably energized world. We strive to create a world powered by renewable resources. At the core of our existence lies the sense of urgency to meet the energy demands of the present, while enabling prosperity for future generations. We are driven by our respect and commitment for the balanced well-being of the three sustainability pillars: environment, society, and the economy. Our commitment is to continuously develop cutting-edge energy storage solutions, powered by renewable resources.

We envision a future where nature and humankind coexist in harmony. The fates of humanity and nature are intertwined. The future we are working towards is one in which human aspirations, earth’s natural resources and technological advancements are innately intertwined and mutually beneficial to one another. This inspiring vision serves as our guiding light in disrupting the status quo, pushing the limits of our thinking, and developing innovative energy storage solutions.

We provide energy solutions to accelerate the transition to renewable energy. Our investors, clients, and employees have a shared mission to innovate energy storage technologies for the global transition to renewable energy. We provide a diverse technology portfolio of turnkey energy storage platforms, including proprietary gravity, battery, and green hydrogen energy storage hardware technologies, orchestrated by our trademark energy management system software and integration platform. Our team of energy industry experts are providing short and long duration grid scale energy storage solutions to help utilities, independent power producers and large industrial energy users reduce the cost of abundant clean energy while maintaining power reliability.



CEO Message

- INTRODUCTION
- COMPANY
- CEO MESSAGE**
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

At Energy Vault, we are on a mission to advance the global transition to clean energy through a transformation of the world’s approach to energy storage. Since our founding, we have been focused on the development of a full suite of customer-centric energy storage solutions designed to meet a wide range of customer needs. Today, as we continue to expand our global footprint with new strategic partnerships while delivering turnkey energy storage systems and software to our customers, sustainability remains fundamental to our corporate strategy, and deeply ingrained in our day-to-day work. As evidence of this commitment, I’m proud that Energy Vault’s overall ESG score from S&P Global increased from 17 in 2022 to 51 in 2023, placing our company in the 94th percentile of our industry.

As the world continues to grapple with the challenge of climate change, Energy Vault believes the transition to renewable energy remains our greatest tool for turning the tide. The clean energy transition, however, has brought both material resource and economic challenges of its own, as variable energy costs and intermittency continue to disrupt the stability of power supply grids worldwide. Our goal at Energy Vault is to provide a range of tailored energy storage solutions that can help customers overcome these challenges in order to accelerate the global clean energy transition.

As the market evolves, and customer demands evolve with it, we are keenly aware that our success is directly tied to our ability to prioritize responsible business practices, transparency in business disclosures, and circular economic strategies. Our customer-centric approach to energy storage allows us to listen closely and respond to those customer needs while advancing innovation and driving shareholder value.

As a global company, we are also especially aware of the rapidly increasing demand for renewables across the globe, especially in regions with the highest human-caused emissions, and we are working diligently to engage with customers worldwide regarding our short, long, and ultra-long duration energy storage solutions

– a suite of products that is unique in the industry. In 2023, we entered a long-term agreement focused on the delivery of Energy Vault’s revolutionary gravity energy storage technology to the Southern Africa region, where coal currently supplies 62% of power generation and residents are plagued by frequent scheduled power shutoff events. Further, we have made tremendous progress in China, the world’s largest energy storage market, with the deployment of the world’s first commercial EVx™ gravity-based energy storage system just outside of Shanghai. That partnership has since expanded to include a total of eight EVx™ deployments, totaling 3.62GWh, in support of the country’s 30/60 goal. In the United States, we continue to make strong progress by completing and turning over operations of 275 MWh and 440 MWh battery energy storage systems to Wellhead Electric Company and NV Energy, respectively. We’re also excited to have broken ground on the world’s largest green hydrogen ultra-long storage system in Calistoga, California, in partnership with PG&E, and are on track for the deployment of a 200 MWh battery energy storage system at the Jupiter Power Facility near Fort Stockton, Texas, which will provide energy and ancillary services to ERCOT. The global market for renewables and storage continues to grow at an increasingly rapid pace, and we remain steadfast in our commitment to meeting demand around the world as nations race to meet decarbonization goals.

In just our second year as a publicly traded company and after only six years since our founding, we have made significant strides towards aligning our strategies are aligned with internationally agreed upon sustainable development and reporting goals. To accomplish that, we have implemented a framework to improve and analyze product design, operations, and end-of-life strategies, enabling us to consider and estimate the potential financial, social, and environmental value for the company’s energy storage and management solutions. This framework is focused on advancing our company’s three most important levers of sustainable impact: Purpose, Product, & Partnership.

Our sustainability roadmap leverages the frameworks of the Science Based Targets Initiative (SBTi) and the Task Force on Climate-related Financial Disclosure (TCFD). The roadmap informs decision-making related to advancing low carbon economies and evaluating climate-related physical and transition risks. In 2024, Energy Vault plans to submit our Communication on Progress as part of our commitment to the UN Global Compact and plans to track progress toward net-zero goals, have our data audited by a third party, and set an internal carbon price. Energy Vault remains steadfastly committed to reducing absolute scope 1 and 2 GHG emissions in line with our validated near-term SBTi targets and to achieve net-zero emissions by 2050, in keeping with the Paris Agreement.

Energy Vault is deeply committed to continuing to incorporate sustainability into the very fabric of everything we do. We are proud of both the work we have accomplished so far and confident in our ability to achieve our goals moving forward. As we continue to advance our mission of enabling a sustainably energized world by providing energy storage solutions that accelerate the transition to renewable energy, we deeply appreciate the support of customers, partners, and stakeholders across the globe.

Rob Piconi

Chairman, Co-Founder and CEO, Energy Vault



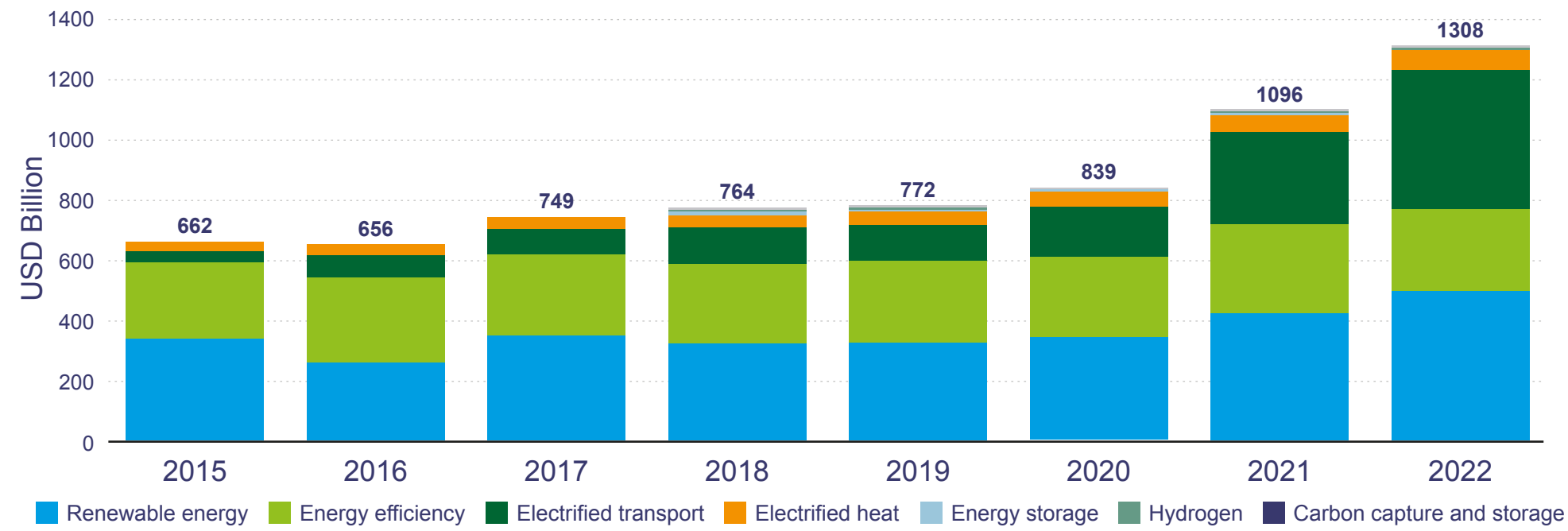
- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT**
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Long Term Value Creation

Energy Vault employs an agile business model to allow for continued capital redistribution to accelerate deployment of bespoke technology solutions for our customers. Economic sustainability is both a key measure of financial success and a core focus of corporate responsibility as we work to enable a sustainably energized world.

Despite global financial and energy security concerns, prevailing macroeconomic, geopolitical, and supply change challenges, global investments in the energy transition continues to grow year over year. In 2022, investments reached \$1.3 trillion which is a 19% increase from 2021 and a staggering 70% from 2019.¹ Energy Vault continues to work diligently in this sector to enable renewable energies by deploying energy storage solutions globally. We also understand that this is not enough investment or effort to keep the world on track to achieving the 1.5°C Scenario laid out by the Paris Agreement.

Annual global investment in renewable energy, energy efficiency, and other transition-related technologies 2015-2022



Source: IRENA & CPI, February 2023

Investments in renewable energy continued to see a steady positive increase since 2019. In 2021, renewable energy investments reached \$430 billion, increasing another 16% to \$499 billion in 2022. The recent investments into renewable energy have predominantly focused on 3 regions: East Asia & Pacific, North America, and Europe, totaling 90% of the total fund allocation.¹ Unfortunately, this omits ~120 developing and emerging markets to receive comparatively less. Developing economies need a resilient energy supply to weather the impending forecasts of climate change. They also need the provisions of clean energy suppliers, together with investment, to enable rapid adaptation and technology development.

In addition to investments for the energy transition, energy security and supply chain protection remain major topics of global concern. The crisis in Ukraine put a spotlight on the fact that 80% of the world's population lives in countries that are net energy importers, affecting not only security but affordability. The resulting effect is that governments are willing to pay a premium of 6%-15% for locally-sourced energy.² Energy Vault is uniquely positioned to help address and proliferate solutions to the opportunities and challenges of the global energy transition, energy security, and supply chain concerns as they relate to energy storage solutions. The G-VAULT™ has unique material aspects that facilitate local production while addressing the energy storage needs of longer duration requirements. With the B-VAULT™, we have created regional partnerships to keep the energy storage manufacturing to a local or regional level as much as possible and our energy management software solutions tie it all together. There are large decarbonization policy packages in the major regions that align with our goals to supercharge the transition regionally and push it forward globally. These include the Inflation Reduction Act, the EU Green Deal, and the EU's emission trading system.

According to a recent Reuters survey, energy storage is among the top energy transition technologies to invest in and with a favorable return on investment (ROI), with 40% of respondents planning to invest in energy storage and 35% believing that energy storage will have a favorable ROI.³ Energy Vault is well positioned to lead global innovation with energy storage solutions designed to drive technology advancement in energy storage and project deployments to support the clean energy transition.

A combination of mandatory reporting requirements, standardized assessment criteria applied on a global scale, and the vast amount of capital committed to ESG funds are all positive steps that can only be of benefit to the energy transition. There are great opportunities for renewable and low-carbon energy projects to secure funding, scale up, and start delivering the clean energy we all so desperately need. The need for the energy transition is clear. There is a role for energy companies to play in ensuring a just transition, but to do so will require a concerted effort from governments, policy makers, financiers, and energy companies to deliver that change – and they will need to be held to account for the progress made.

Climate Action

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION**
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Climate Change Mitigation

Energy Vault is working to address climate change, through sustainable energy storage and management solutions.

Climate change poses an existential threat to humanity. Decreasing human generated greenhouse gas (GHG) emissions is among the world’s most pressing challenges today. Since the industrial revolution, human activities have been the main driver of climate change: the long-term shift in global temperatures and weather patterns. Global warming results from increased planetary greenhouse gas concentrations that cause additional heat to be trapped within the earth’s atmosphere, also known as the ‘greenhouse effect’.

There is ample physical evidence that shows carbon dioxide (CO₂) is the single most climate-relevant greenhouse gas in the Earth’s atmosphere.⁴ The energy sector is estimated to account for more than three-quarters (3/4) of total GHG emissions globally.⁵ Burning fossil fuels contributes to global warming by releasing carbon dioxide (CO₂) and nitrous oxide (N₂O) greenhouse gases into the atmosphere.⁶ Demand for fossil fuels remains too high to stay within reach of the Paris Agreement goal to limit the rise in average global temperatures to 1.5 °C. The suggested actions to get the global energy sector on track by 2030 include tripling global renewable capacity, doubling the rate of energy efficiency improvements, and tripling clean energy investments in emerging and developing economies, as well as measures to ensure an orderly decline in the use of fossil fuels.⁷

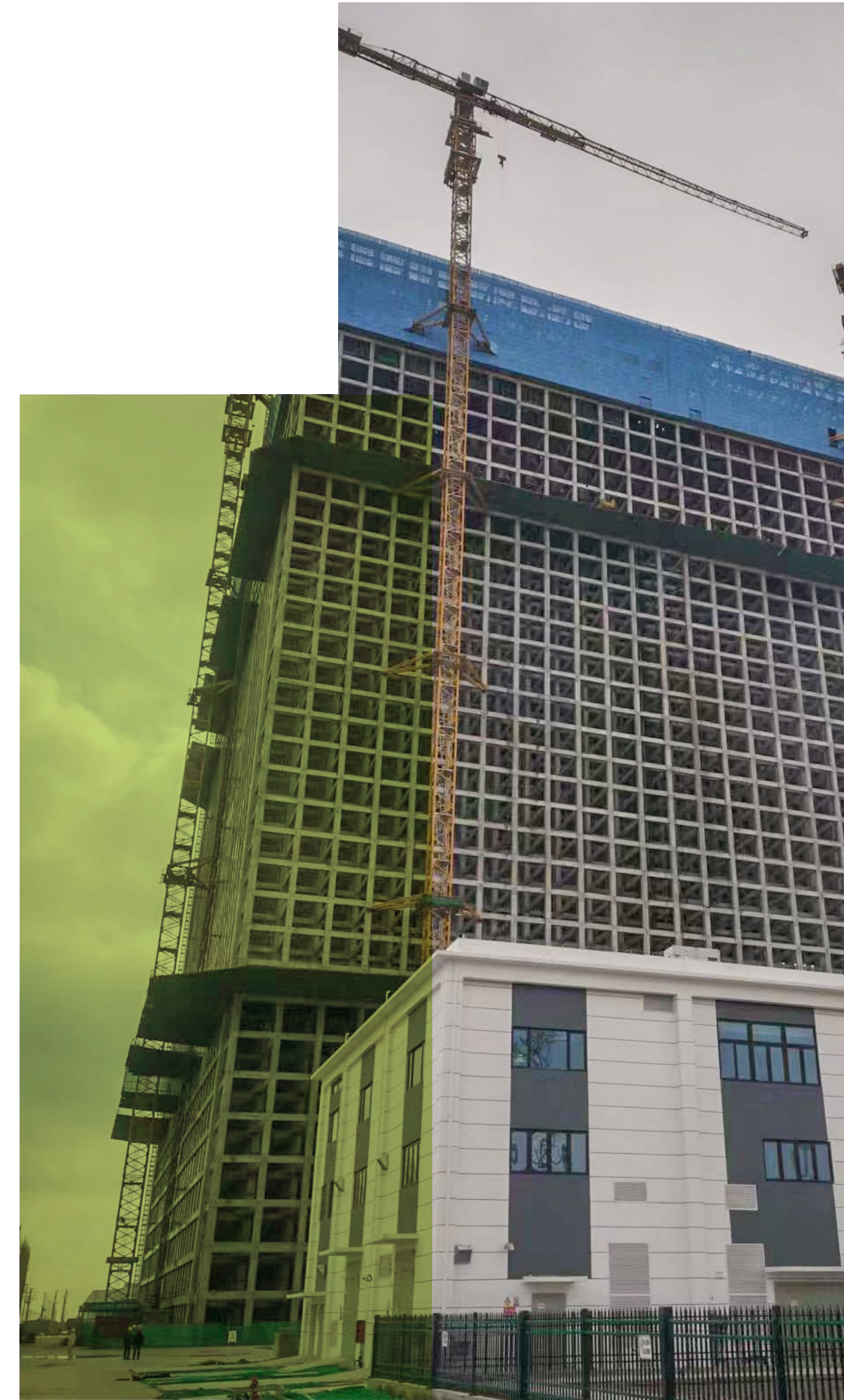
Clean Energy Transition

Energy Vault supports the clean energy transition through the development of advanced energy storage solutions.

The United Nations outlines the critical factors to ensure universal access to affordable, reliable, and modern energy services to a larger proportion of the global population.⁸ Sustainable Development Goal #7, “Clean and Affordable Energy for All” is supported by these critical factors which include an increased share of renewable energy in the global energy mix, improvement in energy efficiency, enhanced international cooperation to support clean energy research, and expansion of infrastructure and upgrade technologies.

The global transition to clean and affordable energy is contributing to the energy market dynamic shift, driving demand for additional renewable power generation and subsequently increasing the capacity and duration requirements for energy storage solutions.

Renewable technologies offer environmental advantages over fossil fuels in terms of finite natural resource usage and GHG emission profile. Variable renewable energy [VRE] generation from wind and solar depends upon solar exposure and wind patterns, which fluctuate greatly at any given time or location around the world. Energy storage, management, and integration solutions are required to balance the production intermittency of VRE technologies and support our future clean-energy electrical grid infrastructure. Energy Vault aims to propel the clean energy transition by developing advanced energy storage infrastructure that supports increased VRE sources and by advancing energy efficiency through innovative, proprietary software technology solutions for the management and integration of energy system services.



Market Demand

Energy Storage Demand

There is a massive demand for grid-scale energy storage that is vital to decarbonizing our electrical grid. Clean energy demand is growing rapidly, with the global energy storage demand expected to rise at 27% compound annual growth rate until 2030, with annual additions reaching 110 GW or 372 GWh. The worldwide energy storage market size is expected to expand from US\$ 17.7 billion in 2023 to US\$ 77 billion by 2033.⁹

Managing Aging Infrastructure

Over the next decade, renewable developers face hurdles in establishing interconnection agreements that require costly upgrades to aging transmission systems. Energy storage can serve as a technology gap bridge by allowing developers to build out the required renewable generation with co-located energy storage to support demand that exceeds the current interconnection capabilities.

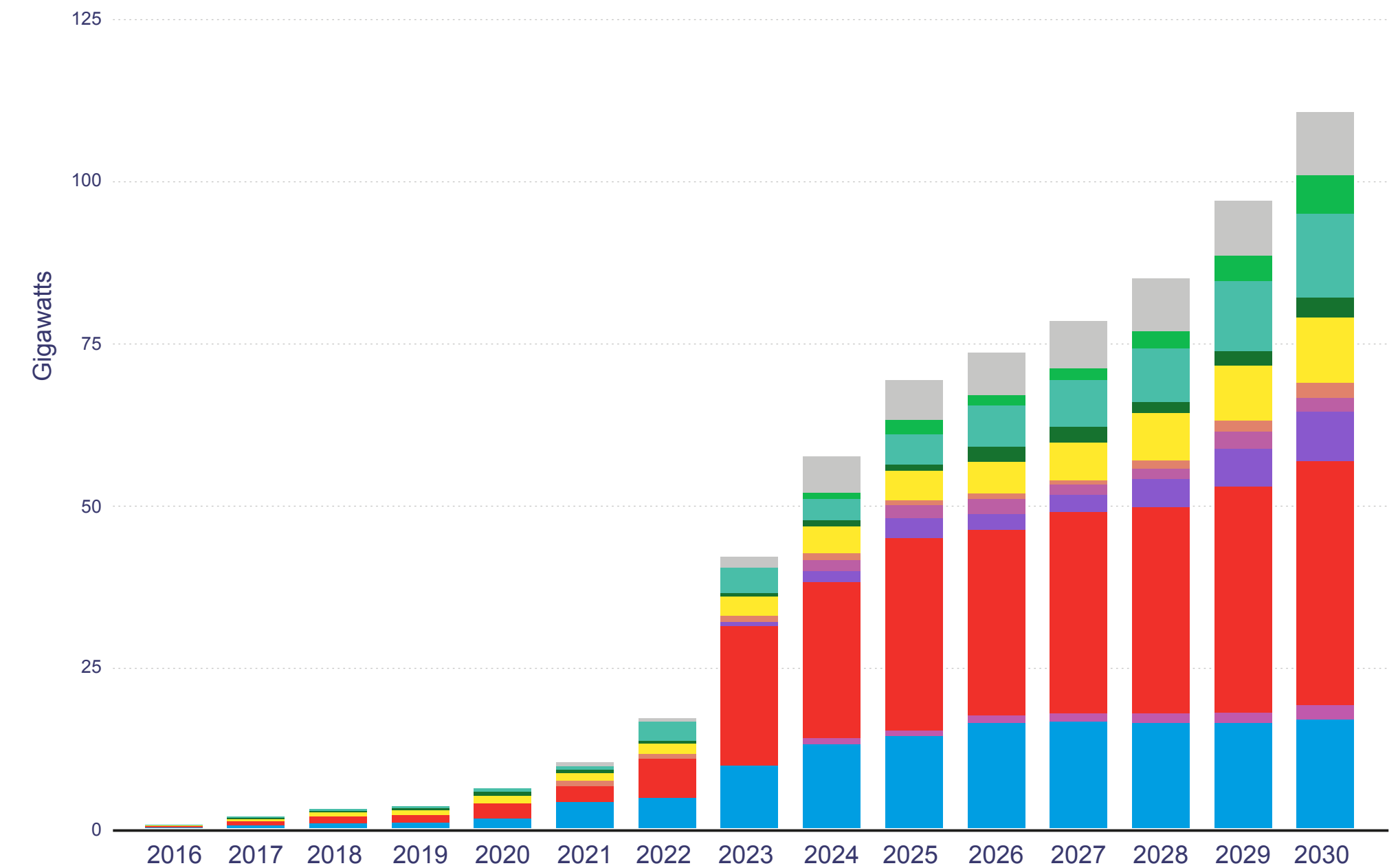
Supporting Wholesale Market Operators

Wholesale market operators have advanced market design to price the flexibility needed to reliably operate the grid. Revenue streams for ancillary services, such as frequency regulation and fast ramping capabilities, alongside energy shifting and capacity payments have helped to create the economic case for energy storage.

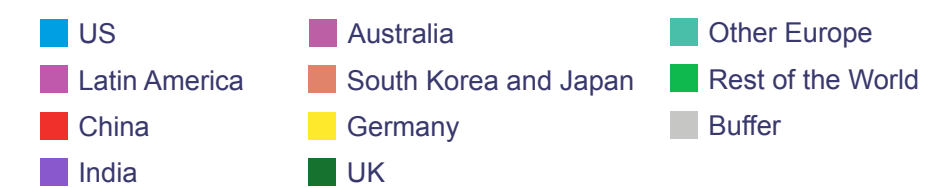
Energy Transition Index

The Energy Transition Index [ETI] benchmarks 120 countries on macroeconomic, institutional, social, and geopolitical factors to provide a global index of performance and readiness of each country for an effective energy transition. According to the World Economic Forum's [WEF] 2023 Fostering Effective Energy Transition report, the ETI has plateaued amid the energy crisis and geopolitical volatilities. The WEF report finds that, while we have seen broad progress on clean sustainable energy, equity of the transition is challenged by an emerging shift in focus that prioritizes energy security over the just, affordable access to energy and sustained economic development.¹⁰ Energy Vault is aware of the challenges in the duality of the energy transition and continues to recognize the evolving priorities of market demand.

Global gross energy storage capacity additions by market



Source: BloombergNEF, October 2023



Market Accelerators

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET**
 - Market Demand
 - Market Accelerators
 - Technology Mix
- SOLUTIONS
- SUSTAINABILITY
 - RESPONSIBLE BUSINESS
 - STRATEGY
 - INNOVATION
 - GLOBAL ALIGNMENT
- ACCOUNTABILITY
 - TRANSPARENCY
 - ENVIRONMENTAL
 - SOCIAL
 - GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Policy Drivers | National Incentives

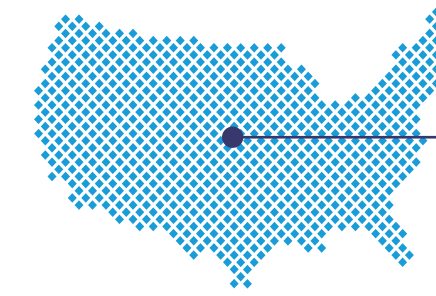
Based on current policy settings of governments around the world, the energy system in 2030 is expected to include renewable generation of global electricity mix nearing 50% (up from 30% today).¹¹ Government policy drivers can act as market accelerators to reduce cost and increase adoption of energy storage. The resulting improved economics are expected to reduce the cost to implement storage within the domestic market and may amplify and accelerate the adoption of energy storage, management, and integration technologies offered by Energy Vault. In addition to the major initiatives listed to the right, many countries, regions, and corporations have also established aggressive decarbonization targets that we believe will encourage market acceptance of energy storage technology development. It is also important to note that various incentives and policies address circular economy and local sourcing strategies which are specific to local regions.

Legislation | Regional Bills

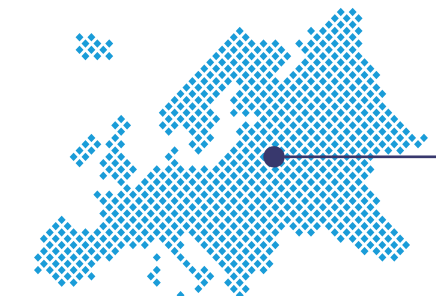
In 2023, California passed two senate bills, SB-253 and SB-261, which address the state's Climate Accountability Package. These bills mandate GHG reporting in alignment with GHG protocol as well as alignment with the Task Force on Climate-related Financial Disclosures. California, which leads the United States in sustainability initiatives, also passed assembly bill AB-1305, requiring certain companies to verify data, disclose progress on sustainability goals, and inform the public on the details of carbon offset projects.

Social Drivers | Independence & Security

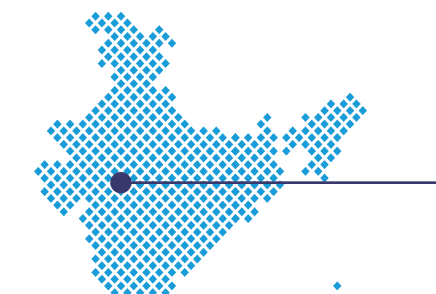
Energy Independence and Security remain a central focus to combat the effects of the recent global energy crises, continued combat in Ukraine, and the risk of sustained conflict and further destabilization in the Middle East. During what is considered the first true global energy crisis, oil prices hit their highest level since 2008, and the price of natural gas reached unprecedented highs, resulting in record high electricity costs in some markets.¹² Rising energy prices impacted vulnerable households, causing significant economic, social, and political strains. Higher energy prices also contributed to extreme poverty, and in some areas, reversed progress towards achieving universal and affordable energy access for all. These social drivers could accelerate the expansion of clean energy deployments and policies to support renewable development as an avenue for nations to secure energy independence by reducing dependencies on foreign oil. Building new clean energy infrastructure can support grid resilience in times of climate catastrophe and political unrest.



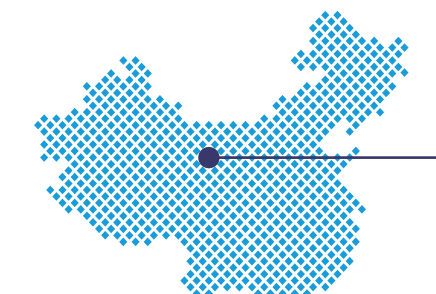
UNITED STATES: In 2023, these market accelerators have resulted in strong performance in key targeted industries including solar and wind energy, grid energy storage, and electric vehicles. The latest forecasts, following the passage of the Bipartisan Infrastructure Law and the Inflation Reduction Act, show a dramatic expansion in capacity for grid-scale battery storage, far outpacing previous estimates.¹³



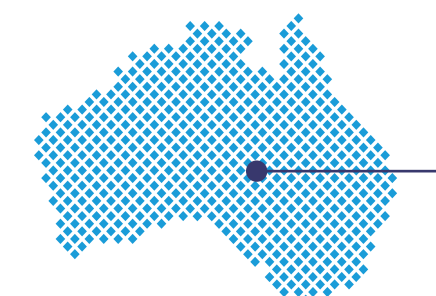
EUROPE: Under the European Green Deal, the European Commission implemented the REPowerEU Plan, which aims to reduce dependency on Russian fossil fuels, save energy consumption, and double the deployment of renewables in response to the hardships and global energy market disruption cause by the war in Ukraine.¹⁴



INDIA: India announced the 2030 target to reach 50% electricity requirements from renewable energy sources and the 2070 target to reach net zero emissions. This includes installing 500 gigawatts of renewable energy capacity, decreasing the emissions intensity of the nation's economy by 45%, and reducing a billion tons of CO₂.¹⁵



CHINA: In 2023, China announced the Renewable Energy Electricity and New Energy Vehicle subsidy policies. The 14th Five-Year Plan for New Energy Storage Development Implementation identifies energy storage as a key element of the decarbonization of the energy sector and a critical asset to support energy security.¹⁶



AUSTRALIA: The Powering Australia Plan, passed by the Australian Government in 2022, is focused on creating jobs, cutting power bills, and reducing emissions by boosting renewable energy. The Plan includes a commitment of \$224.3 million in funding over four years in the 2022-23 budget to deploy four hundred community battery systems across the country.¹⁷

Technology Market Mix

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- Market Demand
- Market Accelerators
- Technology Mix
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Energy Storage Technologies

Energy storage technologies are needed to support the clean energy transition for both grid-scale long duration energy storage and localized shorter duration energy storage applications. The current mix of energy storage solutions on the market includes mechanical, electrochemical, chemical, and thermal technologies.

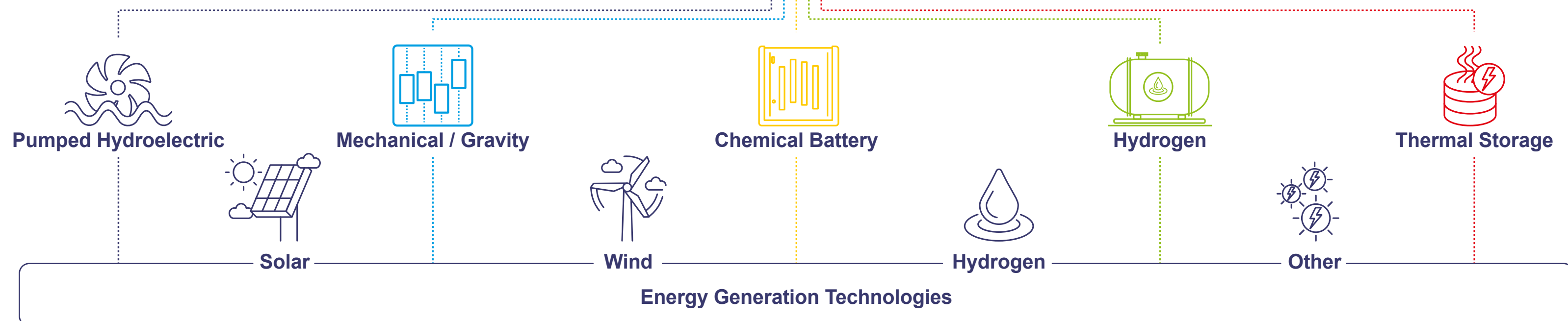
The most common form of energy storage, **Pumped Hydroelectric Storage (PHS)**, accounts for over 90% of existing global stationary energy storage.¹⁸

Other **Mechanical energy storage** systems harness the physics principles of kinetic (motion) and potential energy or gravity to store and release energy.

Battery energy storage technologies store energy via an electrochemical process utilizing different battery chemistries and demand continues to grow, making it the leading technology for short duration applications.

Hydrogen is the most abundant element in the universe and can be stored as a liquid or gas to support energy storage applications. Green Hydrogen is produced using non-fossil-fuel feedstocks and emits zero or minimal amounts of greenhouse gases on a lifecycle basis.

Thermal energy storage systems can store heat or cold to be used later, under varying conditions in temperature, location, or power.



Energy Software Technologies

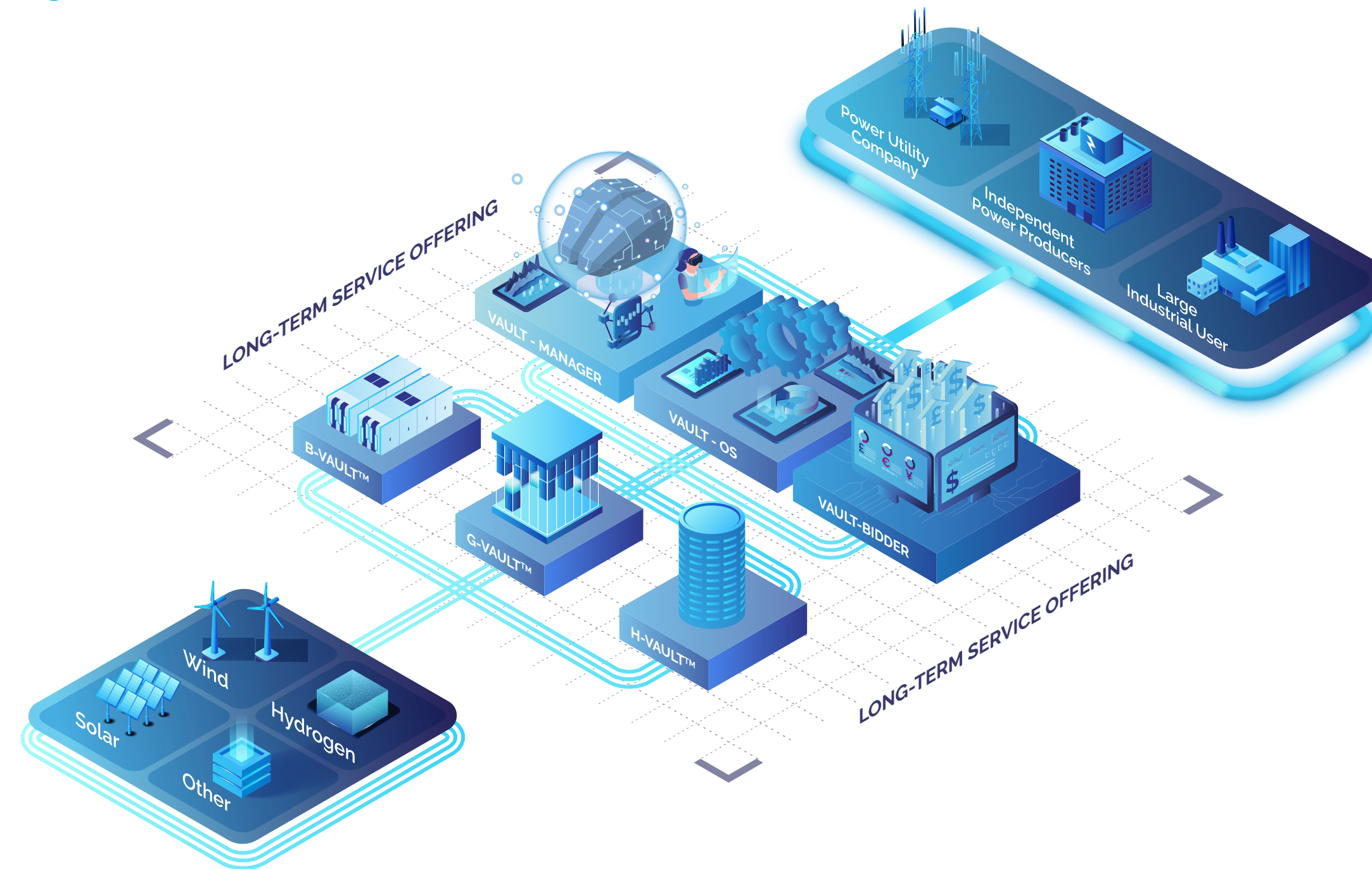
As we work to enable the transition from fossil fuels to clean energy sources and improve system efficiencies, energy software technologies will play a significant role in the clean energy transition. Advancements in software technologies can optimize system operations, improve economics, boost safety & security, extend asset life, facilitate infrastructure automation, and improve efficiencies to achieve the energy demand delivery required for just and affordable access to clean energy on a global scale.

Energy Management software offers energy asset level capabilities to monitor, control, and optimize energy efficiency across a diverse portfolio of energy assets, providing fast-response services to changing grid conditions at the gigawatt level scale.

Portfolio Management software enables site level optimization of diverse energy system asset operations through visibility and analysis of performance, maintenance, financial, and environmental data to support analytics for management, augmentation, and expansion decisions.

Advanced Analytics tools use artificial intelligence to leverage diverse, live data from directly monitored assets and external drivers to provide dispatch optimization across energy markets. These tools provide transparency through centralized insights of lifetime site performance, trend analysis, and historical event tracking.

Energy Vault Solutions



Portfolio

Energy Vault set out to solve one of the greatest challenges facing our planet today—how to store renewable energy in both an economical and sustainable way to end the world’s reliance on fossil fuels. Our energy storage and software solutions enable utilities, independent power producers, and large energy users to manage their energy asset portfolios.

Our energy storage solutions are designed to accommodate a wide variety of renewable power sources and achieve an attractive levelized cost of energy relative to fossil fuels. Collectively, these abilities greatly broaden the use cases and time duration scenarios that can be addressed by certain sources of renewable power, thereby driving a faster transition to more pervasive renewable power.

Energy Storage

Energy Vault’s turnkey energy storage solutions are designed to meet the demands of the market for shorter duration and longer duration storage needs. In addition, our hybrid systems, which incorporate other energy storage mediums (such as green hydrogen), address the growing demand for extended duration energy storage. Energy storage can balance supply and demand over short and long periods of time. Asset owners require design and operational flexibility to maintain reliability for a rapidly evolving energy landscape, along with innovative technologies to mitigate supply chain and fleet change risk. As energy supply and demand become increasingly variable, grid operators need agile support from fast-responding energy resources. To create reliable outcomes for communities now and into the future, asset owners and investors need adaptable and bankable energy storage solutions.

Energy Software

Energy Vault’s technology-agnostic software solutions platform can orchestrate management of various storage mediums and underlying generation assets to harmonize power delivery for multiple use cases. Leveraging the latest advances in software and analytics is a must have for managing the diversity and scale of energy storage projects. Energy Vault’s focus on large and complex projects underlies our drive to develop the industry’s most sophisticated Energy Management System. With modern architecture, we unlock the value of energy storage solutions by continuously optimizing grid integration as use cases evolve over time. VaultOS™ EMS provides real-time monitoring, operational control, and optimized dispatch across an array of generation and short to ultra-long duration energy storage assets. The user interface makes it easy for customers to securely manage a single asset, hybrid power plant, or fleet of resources at a glance while minimizing operational costs.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS**
- G-VAULT™
- B-VAULT™
- H-VAULT™
- Software & Service
- Projects
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

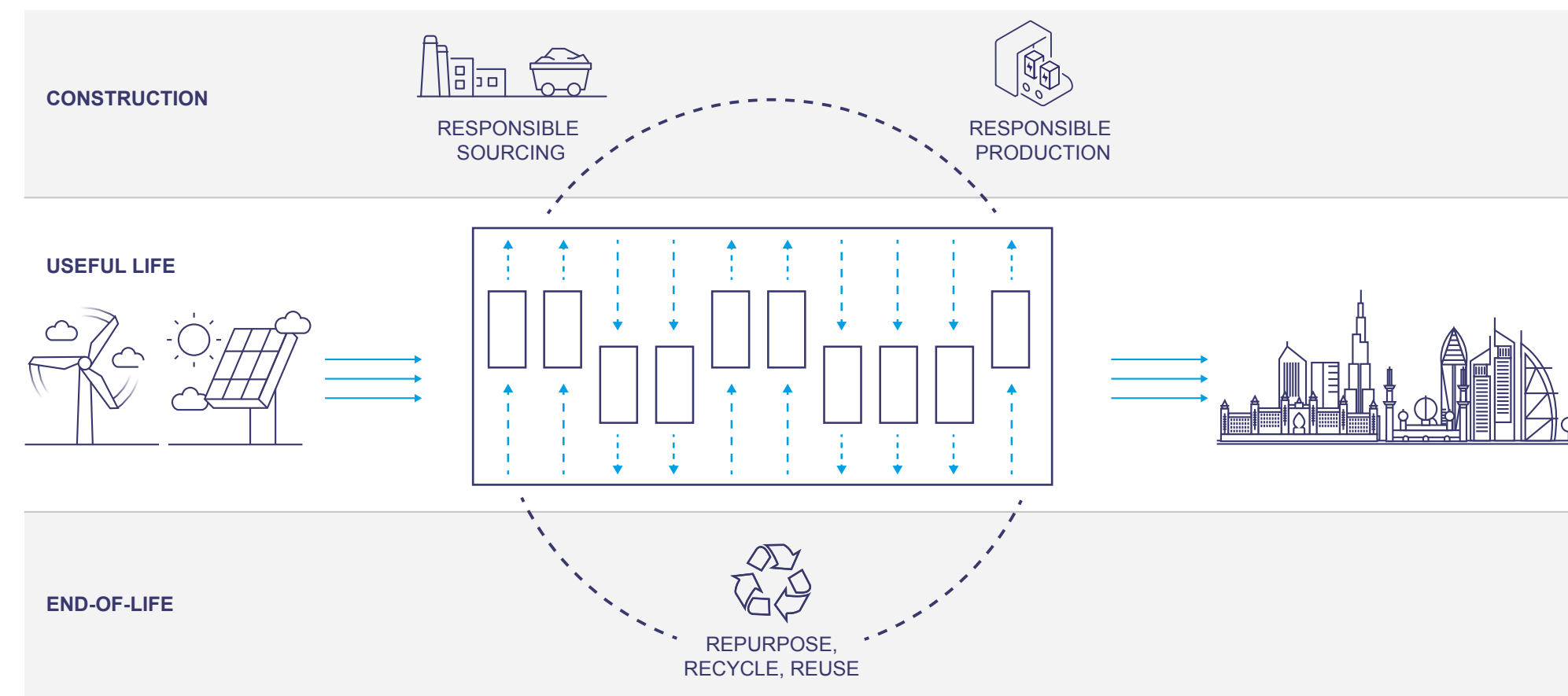
Long Duration Gravity Energy Storage

Energy Vault long duration energy storage solutions are based on our proprietary gravity energy technology. Ideally suited for use cases that require four or more hours of storage capacity, the G-VAULT™ gravity energy storage technology features a patented mechanical process for lifting and lowering composite blocks to store and dispatch electrical energy that supports grid reliability and promotes renewable energy integration. Utilizing our VAULT-OS™ software, customers can run G-VAULT™ slices in parallel or in sequence, decoupling power from energy and providing increased flexibility.

Impact

Energy Vault worked with several of the largest utilities and energy companies in the world to optimize the gravity energy storage system for improved flexibility to address our customers' evolving needs for storage duration and operational characteristics.

G-VAULT™ | Life Cycle



Sustainable Delivery

Based upon the underlying principles of pumped hydroelectric storage (PHS), G-VAULT™ reduces the topographic constraints and disruptive impact of traditional PHS by replacing water with proprietary composite blocks that can be made from local soil and waste materials. Energy Vault developed efficient construction processes that use precast elements to increase speed and decrease waste typically associated with construction.

Supply Chain

G-VAULT™ offers the unique opportunity for the beneficial reuse of waste materials as energy storage components. The construction and operation of the G-VAULT™ platform distinctively offers an attractive opportunity for significant local, regional, and domestic economic participation, primarily in the form of labor and materials.

Life Cycle Strategy

During the procurement phase, we aim to evaluate G-VAULT™ system components against a waste management hierarchy (reduce, extend life, recycle, energy recovery, disposal) to identify which G-VAULT™ components can be made from materials that are reusable, recyclable, or available for energy recovery. Our G-VAULT™ product end-of-service-life goal is to divert 100% of materials away from landfills through reuse and recycling.

Positive Externalities

G-VAULT™ provides opportunity to become a market accelerator for the production and innovation of green steel and concrete. Energy Vault is committed to working with leading industry partners to advance green steel and concrete products where feasible in the construction of gravity energy storage structures. Additionally, the efficient precast construction process can be adapted for high rise construction to equally improve efficiency, material use, and waste.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- G-VAULT™**
- B-VAULT™
- H-VAULT™
- Software & Service
- Projects
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

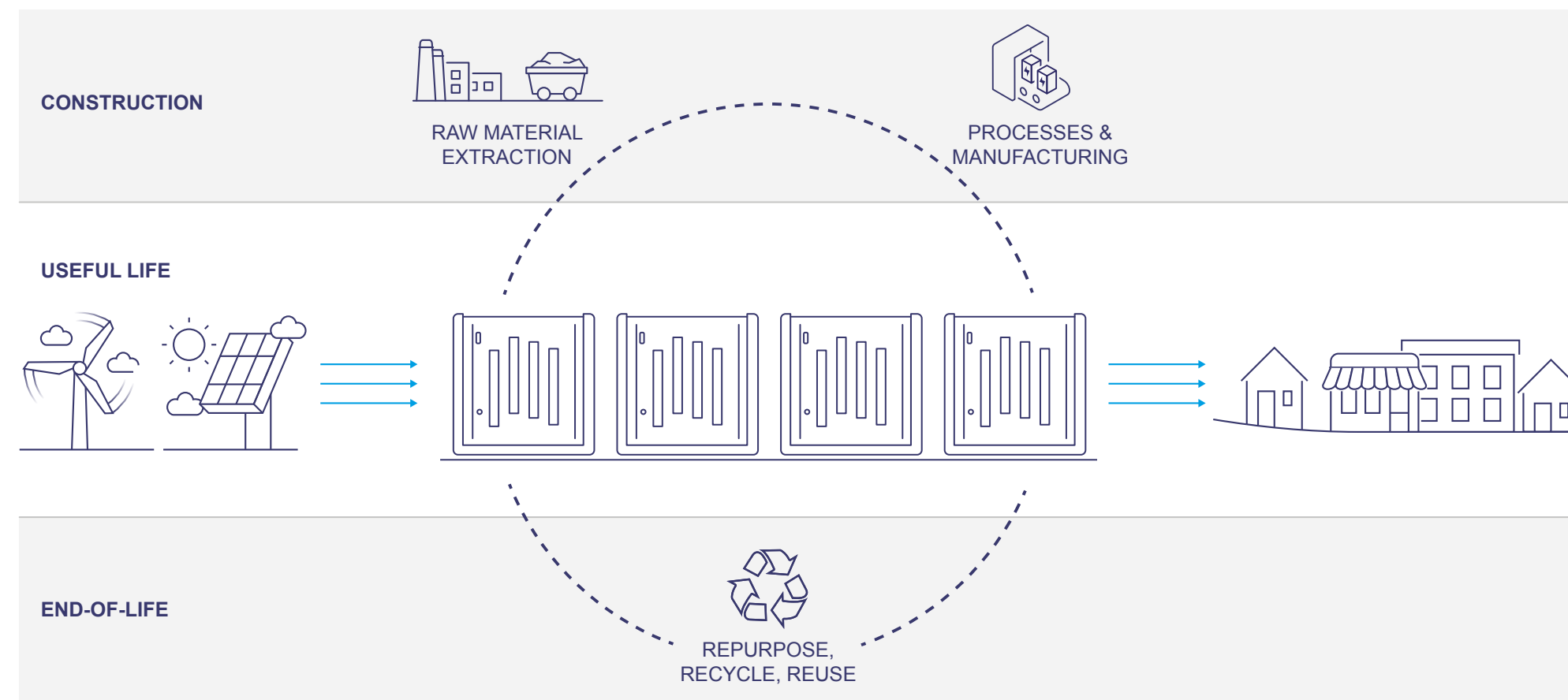
Short Duration Battery Energy Storage

Energy Vault focuses on deployment of energy storage solutions that serve grid demand. Electrochemical battery energy storage (specifically lithium-ion) is currently the most widely accepted and fastest growing technology for short duration energy storage applications. B-VAULT™ uses a custom-built battery and inverter system with an innovative architecture that lowers cost, improves performance, and promotes high levels of project safety. Energy Vault is one of the few companies that offers unique AC-coupled and DC-coupled configurations allowing for in-depth project customization.

Impact

Short duration energy solutions – requiring up to 4 hours – are needed to manage renewable energy variability, balance supply and demand, and respond to outages. Energy Vault utilizes suppliers in key regions around the world to provide supply chain flexibility and ensure customers can realize the advantages of and incentives for local content.

B-VAULT™ | Life Cycle



Sustainable Delivery

Energy Vault is committed to sustainable product delivery, as reflected in our supply chain responsibility strategy. Energy Vault recognizes the challenges in the sourcing of raw materials for batteries, and we work with partners who are committed to joining reputable associations and organizations, such as the Responsible Minerals Initiative (RMI) and Responsible Cobalt Initiative (RCI).

Supply Chain

Energy Vault is actively involved in the key elements of our global, domestic, regional, and local supply chains that support our battery product solutions. Through our sustainability conscious procurement process, we aim to deliver vetted sources of integrated components to support our customers' energy storage needs within the required project timelines.

Life Cycle Strategy

Energy Vault recognizes many nations and reliant industries are working vigilantly to reduce the environmental impact of battery technologies during raw material extraction, cell manufacturing, and end-of-life. We have begun to develop relationships with these organizations, and we continuously evaluate opportunities to advance the development of the underlying processes through global partnerships. For example, we work directly with REPT to understand the impacts of battery cell manufacturing and incorporate this data into our product life cycle assessments.

Positive Externalities

Energy Vault is focused on accelerating the demand for advanced battery recycling solutions. We are working in collaboration with leading battery recycling innovators to advance initiatives focused on (but not limited to) hydrometallurgical processes, material recovery, and metal purity recovery.

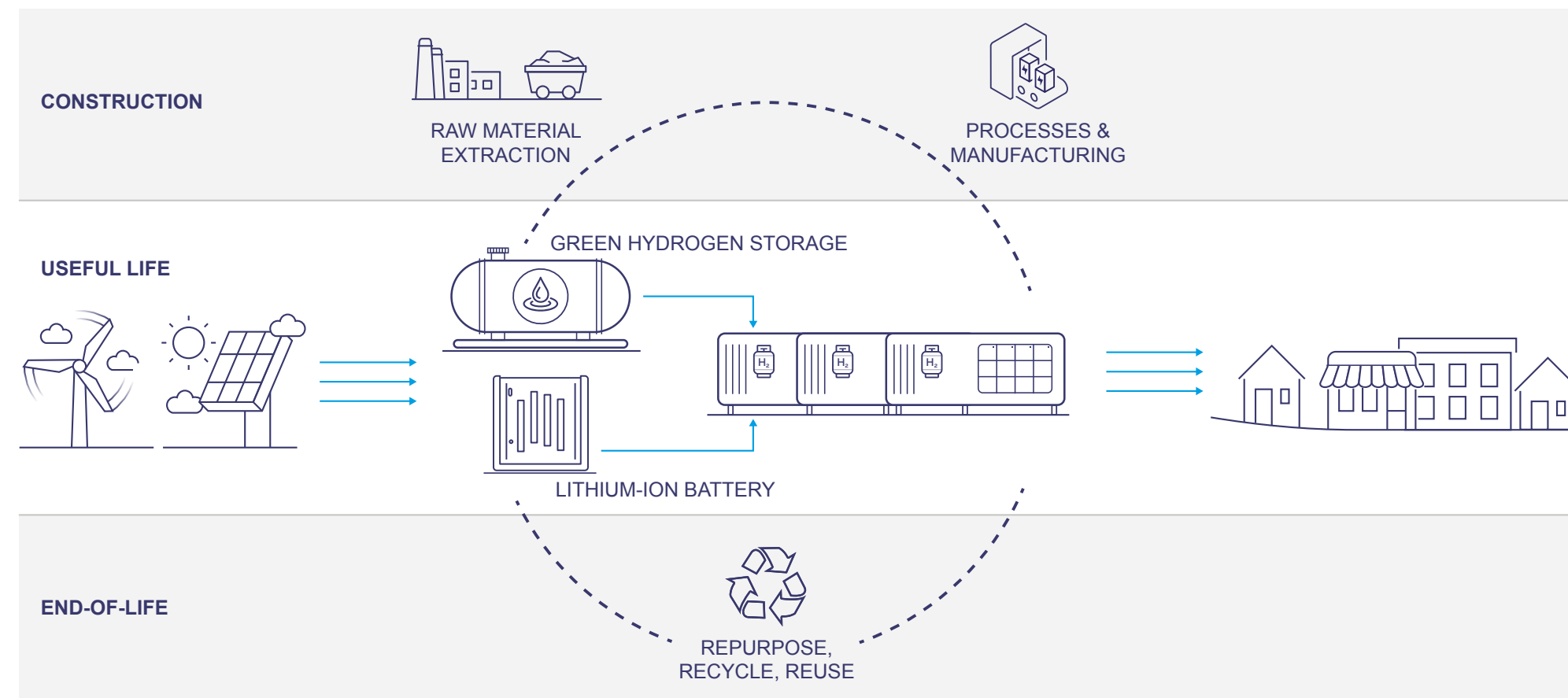
Ultra-Long Duration Hybrid Energy Storage

Energy Vault offers hybrid energy storage solutions, including systems that integrate green hydrogen. For example, green hydrogen combined with the B-VAULT™ battery energy storage technology can fulfill ultra-long duration energy storage needs, as well as provide black start and grid-forming capabilities for communities supported by microgrids or other critical infrastructure.

Impact

H-VAULT™ introduces cleaner storage support for community-scale, microgrid generation over the use of incumbent diesel-fueled generators for emergency backup power that emit approximately 2.15 times more carbon emissions than power serving the United States grid today.¹⁹ Alternatively, green hydrogen is produced via electrolysis that is powered by renewable energy; and, does not emit any carbon emissions when used to store energy for long periods of time or when used in a fuel cell to produce electricity.

H-VAULT™ | Life Cycle



Sustainable Delivery

H-VAULT™ is a battery plus hydrogen solution designed to provide net-zero power at the point of use. Whereas diesel fuel (refined from crude oil) produces numerous harmful emissions when it is burned; and, diesel-fueled vehicles are major sources of pollutants, such as ground-level ozone and particulate matter.

Supply Chain

H-VAULT™ technology deployment will be focused on areas that offer sufficient hydrogen production within a reasonable distance for fuel transportation. H-VAULT™ system battery component procurement strategy aligns with our overarching global, domestic, regional, and local supply chain strategy to support our battery product solutions.

Life Cycle Strategy

We aim to assess life cycle impacts of each H-VAULT™ system across seven different categories, including considerations for tracking the construction impacts associated with the transportation of materials, resource scarcity, waste production, and biodiversity disruption, while also evaluating the impacts associated with green hydrogen production and the transportation emissions associated with systems that are not co-located or near a green hydrogen production facility.

Positive Externalities

H-VAULT™ development has the potential to advance testing, commissioning, and deployment for hybrid energy storage systems that incorporate hydrogen and battery technologies to achieve ultra-long duration energy storage needs and microgrid support applications.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
 - G-VAULT™
 - B-VAULT™
 - H-VAULT™**
 - Software & Service
 - Projects
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
 - TRANSPARENCY
 - ENVIRONMENTAL
 - SOCIAL
 - GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Software & Service

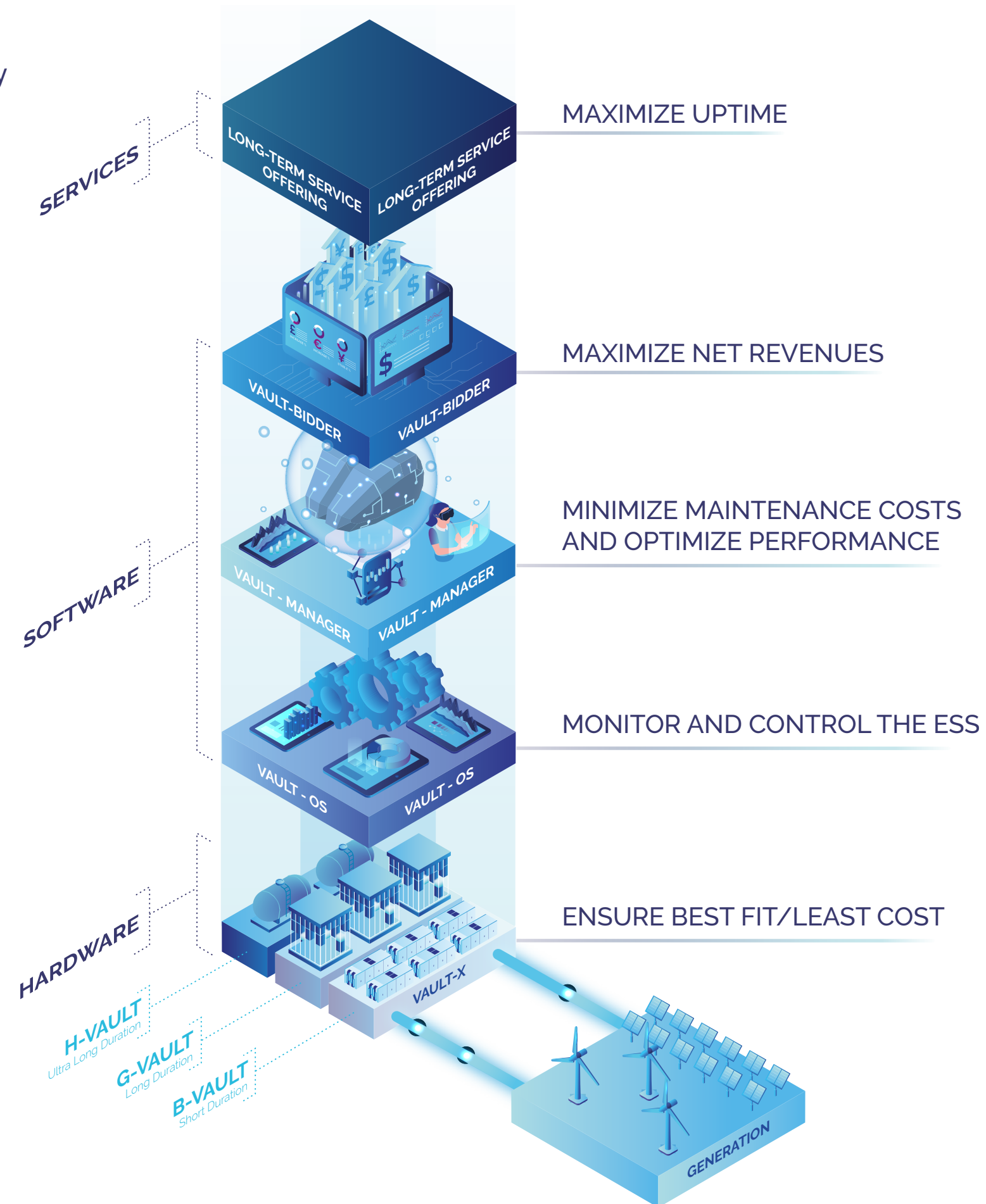
Software Solutions

Energy Vault uniquely offers proprietary, technology-agnostic energy management system and integration software solutions that aim to maximize the economic and environmental value of energy generation and storage assets.

VAULT-BIDDER™ uses artificial intelligence to leverage diverse, live data from directly monitored assets and external drivers to provide dispatch and revenue optimization.

VAULT-MANAGER™ optimizes business ROI by transforming diverse, real-time data into asset performance visibility and insights that support better decision making around maintenance, augmentation, and expansion.

VAULT-OS™ energy management system (EMS) provides real-time monitoring, operational control, and optimized dispatch across an array of generation and short to ultra-long duration energy storage assets.



Service

Performance and availability are essential to realizing an asset's net revenues and operating when prices spike. As risks - and costs to address those risks - evolve over the lifetime of an asset, having an operations and maintenance partner can enhance future cost certainty while optimizing revenue.

Energy Vault leverages asset and fleet level data to plan ahead to strive to maximize uptime. We target maintenance windows least likely to impact revenue potential. Our long-term service agreements strive to meet customers where they want to be - both now and in the future - by recognizing and balancing tradeoffs between cost and levels of risk management.

The long-term service agreement offers peace of mind by working to get assets back online quickly when the unexpected happens. It helps navigate uncertainty with preventative and corrective maintenance, performance guarantees, and support. VAULT-OS™ continuously tracks usage and suggests maintenance windows to maximize asset value. The LTSA offers customers flexibility in selecting a service that aligns with cost and risk goals to perform the desired level of service through long-term agreements.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- G-VAULT™
- B-VAULT™
- H-VAULT™
- Software & Service
- Projects
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Projects

2023 Project Development & Execution



Maximizing Footprint Capacity

In 2023, Energy Vault deployed a 68.8 MW / 275.2 MWh battery energy storage system in Stanton, California. This project was specially designed to meet challenging energy density requirements and equipment delivery time frames. As one of Southern California's largest energy storage systems, we believe this project marks the beginning of a new era in energy management for the region. A landmark energy storage project, the system was built on the Energy Vault software solutions platform to control, manage, and optimize the battery energy storage system operations.



Accelerating Global Deployment

Energy Vault enlisted a licensing model to accelerate global deployment of the proprietary gravity energy storage solution EVx™. Under construction in 2023, the 100 MWh EVx™ was built adjacent to a wind farm and national grid site in Rudong, Jiangsu Province to augment and balance China's energy grid through the delivery of renewable energy to the State Grid Corporation of China (SGCC). SGCC is the world's largest utility and provides power to more than 1.1 billion Chinese citizens in 26 provinces, autonomous regions, and municipalities, covering 88% of the Chinese national territory.



Collaborative Community Solutions

Energy Vault is deploying the first-of-its-kind H-VAULT™ system in Calistoga, California to provide energy storage resiliency to the established community microgrid infrastructure during transmission outages. The Calistoga Resiliency Center project is a prime example of how technology providers, utilities, and regulators can collaborate to streamline clean power deployment through the co-creation of localized systems solutions. This breakthrough collaboration provides a template for future, renewable community-scale microgrids that replace fossil fuel gensets.

These are a selection of Energy Vault's 2023 projects to showcase our various solution offerings.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- G-VAULT™
- B-VAULT™
- H-VAULT™
- Software & Service
- Projects**
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Sustainability

Energy Vault’s co-founders set out to create The Energy Storage Company with sustainability embedded into the core of its business and product design. Our sustainability directive is to enable a renewable world through the implementation of sustainable business practices that will ultimately yield a positive impact on the environment. Energy Vault is committed to sustainability as reflected in our core mission, our focus on sustainable business management practices, and our dedication to sustainable production design and supply chain management. Energy Vault respects our business relationships and strives to be a good, responsible partner to our suppliers and customers around the world.

Responsible Business

Corporate Social Responsibility

At Energy Vault, we believe a responsible business benefits society and addresses negative impacts on society, people, and the planet. We maintain a responsible business perspective to ensure our team and stakeholders are empowered to make conscientious decisions that balance financial health with environmental impact and social accountability.

In 2023, Energy Vault put plans to action and made promising progress towards becoming a true champion for people and planet. We worked to build trust and strengthen stakeholder relationships through transparency reporting as released in our 2022 Corporate Sustainability Report.

The Sustainability Team also worked tirelessly in collaboration with our organization to implement the sustainable practices outlined in our disclosures to set quantifiable goals and to tie all actions to sustainability performance within the Environmental, Social, and Governance [ESG] Framework.

At Energy Vault, we utilize an ESG framework as a guiding principle and risk assessment tool to measure our responsible business practices on factors besides financial performance. As a responsible business community, our understanding of ESG is constantly evolving, and such, the impact on finance and the energy transition is continually changing.

This ESG framework is a broad-ranging guiding principle for all levels of the company, influencing leadership and Board-level decision alike. The ESG framework strengthens the business and positions our company to seek investments and brand recognition.

When the United Nations Conference of Parties on Climate Change signed the Paris Climate Agreement in 2015, the imperative to decarbonize moved into the mainstream of public and political consciousness. The Paris Agreement aim to limit global warming to below a rise of 2°C compared to pre-industrial levels launched a global effort to decarbonize our planet with the clean energy transition at the core.

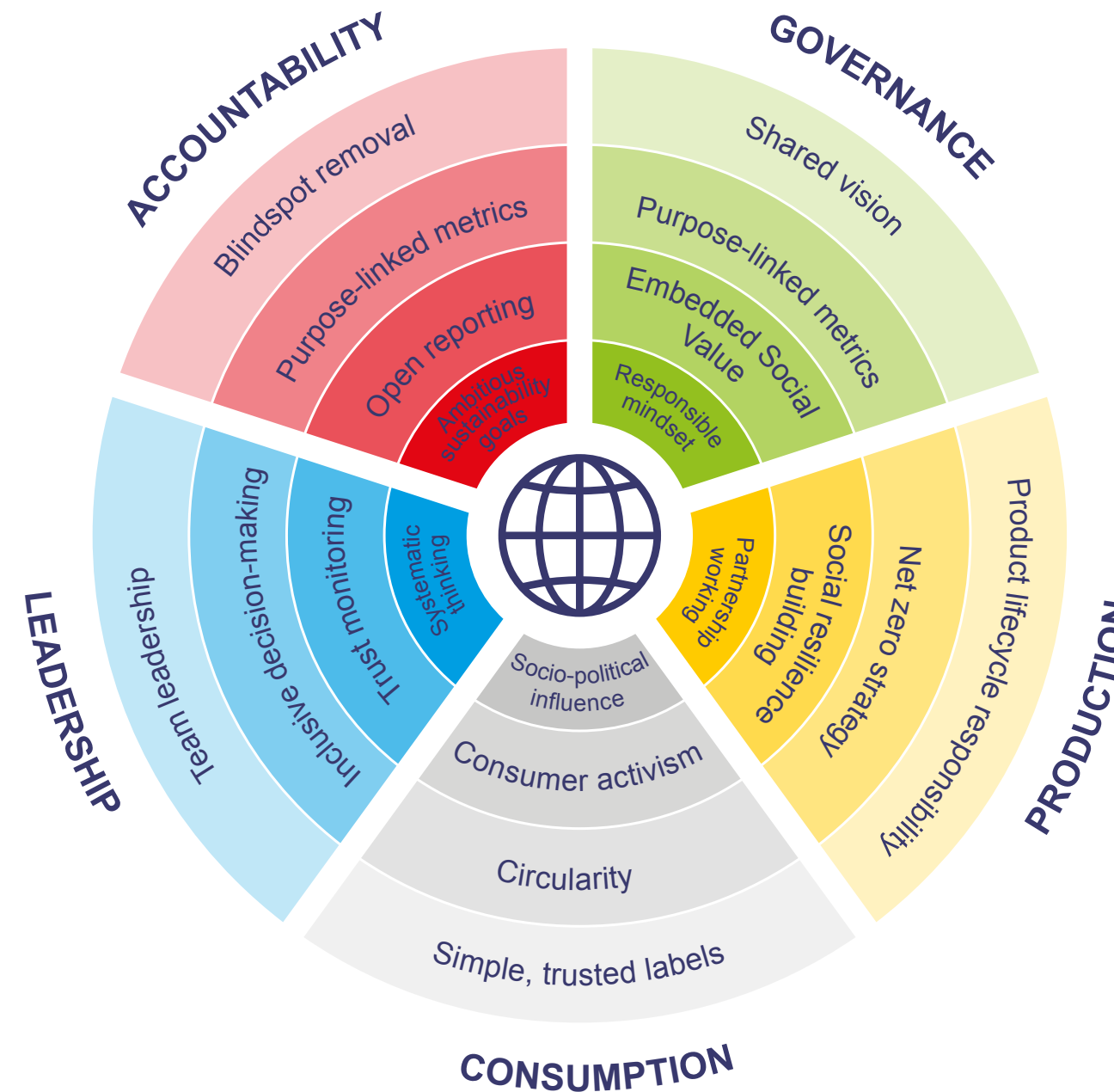
Today, 195 of 198 countries have signed the Paris Climate Agreement, and more than 140 have set target years for their goals. Setting goals is the first step to effectuating action on climate change and implementing ESG schemes.

Governing organizations have developed unifying and comparative principles, frameworks, and standards to guide companies and countries on responsible strategies to sustainably achieve their goals.

The United Nations Global Compact [UNGC], the International Sustainability Standards Board [ISSB], and the Task Force on Climate-related Disclosures [TCFD] continue to develop and lead in setting a comprehensive global baseline of sustainability-related disclosure standards to provide transparency of sustainability related company risks and opportunities.

As global agreements and voluntary standards become legally required for larger corporations, these regulations are also expected to matriculate to all companies in the future. Alignment initiatives include the Corporate Sustainability Reporting Directive [CSRD], the European Union taxonomy, as well as the future United States Securities and Exchange Commission regulations.

The shifting focus and global push towards transparency and regulation has driven interest within the investment community to offer more robust services for sustainable finance to support the energy transition.



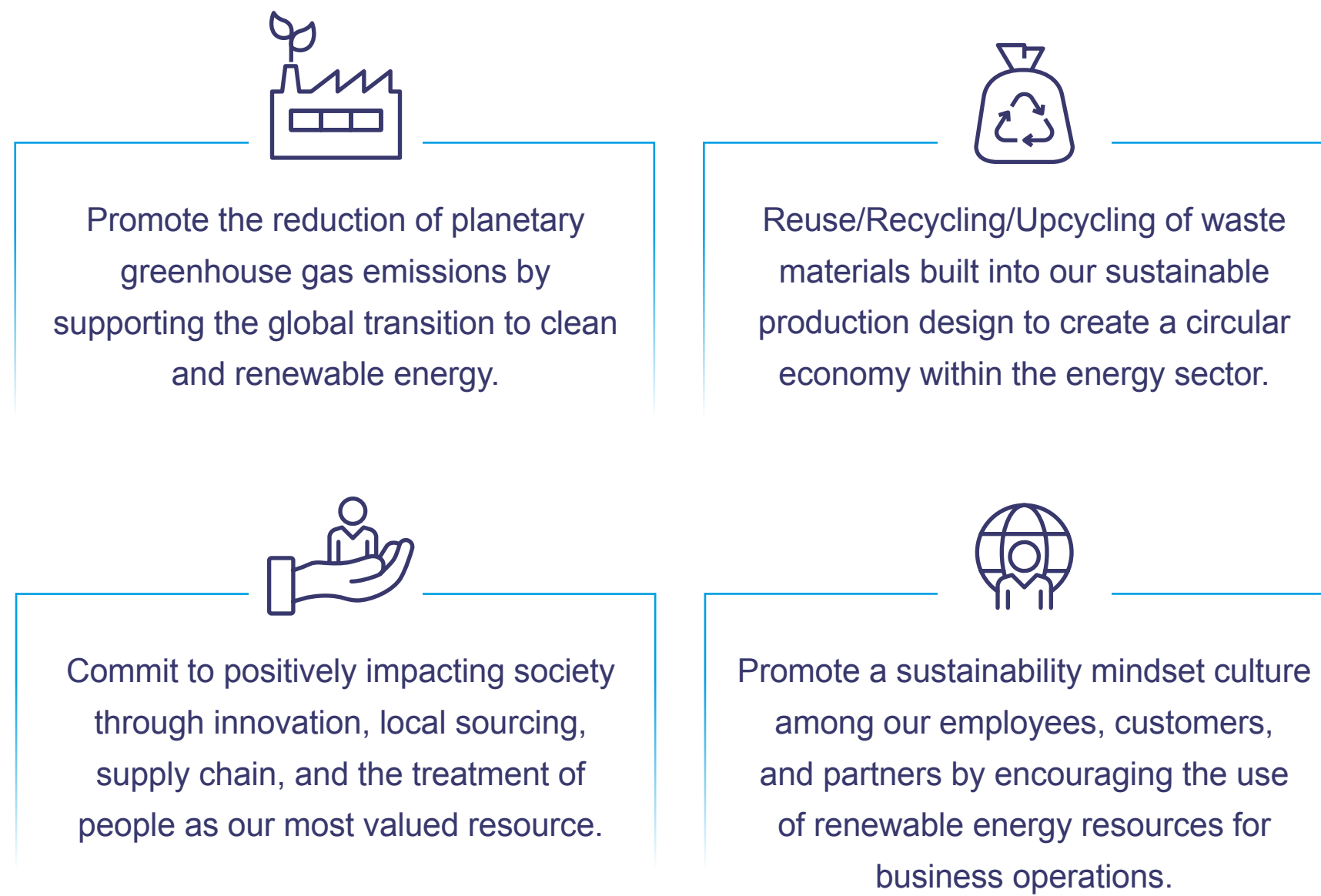
Sustainability Strategy

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
 - Principles & Philosophy
 - Sustainability Team
 - Materiality Assessment
 - Roadmap & Targets
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Principles Framework

Energy Vault was created with the vision to accelerate the decarbonization of our planet, by introducing the most advanced, economical, and sustainable energy storage technologies. By implementing a Triple Bottom Line framework to develop our product life cycle strategies, Energy Vault maintains a broad perspective of business value, considering all potential financial, social, and environmental value for the Company's energy storage and management solutions. We believe this approach is important to reflect evolving stakeholder demands and to contribute to Energy Vault's long-term performance.

Energy Vault is committed to protecting the environment by applying the following principles to all aspects of our business:



ESG Philosophy Focused on Core Areas of Impact

Our foundational Environmental, Social, Governance Philosophy is centered around the three most critical levers of our company's impact - Purpose, Product, & Partnership.

Purpose Energy Vault Purpose Champions work to embed sustainable business management strategies into departments within the organization and infuse our ESG Philosophy into business operations, product development, and accountability reporting. Our Sustainability Task Force empowers Purpose Champions to co-create departmental sustainability strategies based on core subject matter expertise, enable the central Sustainability Team to focus on market-driven innovation, and develop sustainability strategies centered on company growth and long-term changes.

Product Adopting an environment-first approach to product design, development, and deployment is a crucial factor toward establishing Energy Vault as a sustainable organization. Early product analysis empowers business units to refine and improve upon sustainable production design, environmental impact, community integration, and circular economics. As a new company, Energy Vault is in a unique position to measure our impact at all stages of product development and with each project delivered.

Partnership Energy Vault understands that securing a clean energy future will require global and inclusive partnerships. We proactively foster partnerships that share our passion for sustainability, responsibility, and the urgent need to address climate change. We actively support, encourage, and expect sustainable business plans and strategies within partnerships that support responsible sourcing, supply chain management, and environmental impact. We collaborate to achieve sustainable business practice standards with our partners, in alignment with our corporate sustainability goals.

Sustainability Strategy

INTRODUCTION

COMPANY

CEO MESSAGE

IN THE VAULT

CLIMATE ACTION

ENERGY MARKET

SOLUTIONS

SUSTAINABILITY

RESPONSIBLE BUSINESS

STRATEGY

Principles & Philosophy

Sustainability Team

Materiality Assessment

Roadmap & Targets

INNOVATION

GLOBAL ALIGNMENT

ACCOUNTABILITY

TRANSPARENCY

ENVIRONMENTAL

SOCIAL

GOVERNANCE

CONCLUSION

APPENDIX

DISCLOSURES

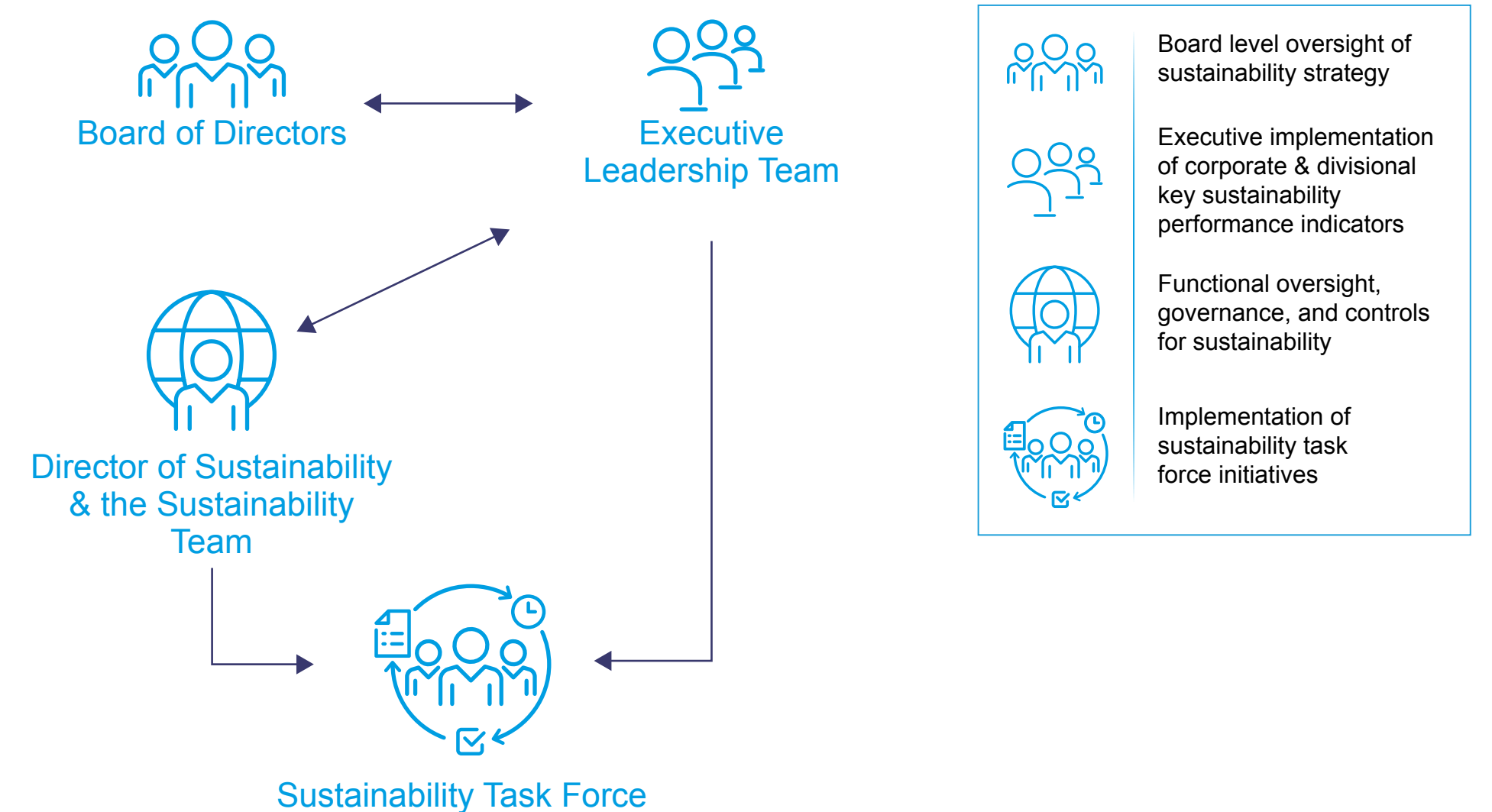
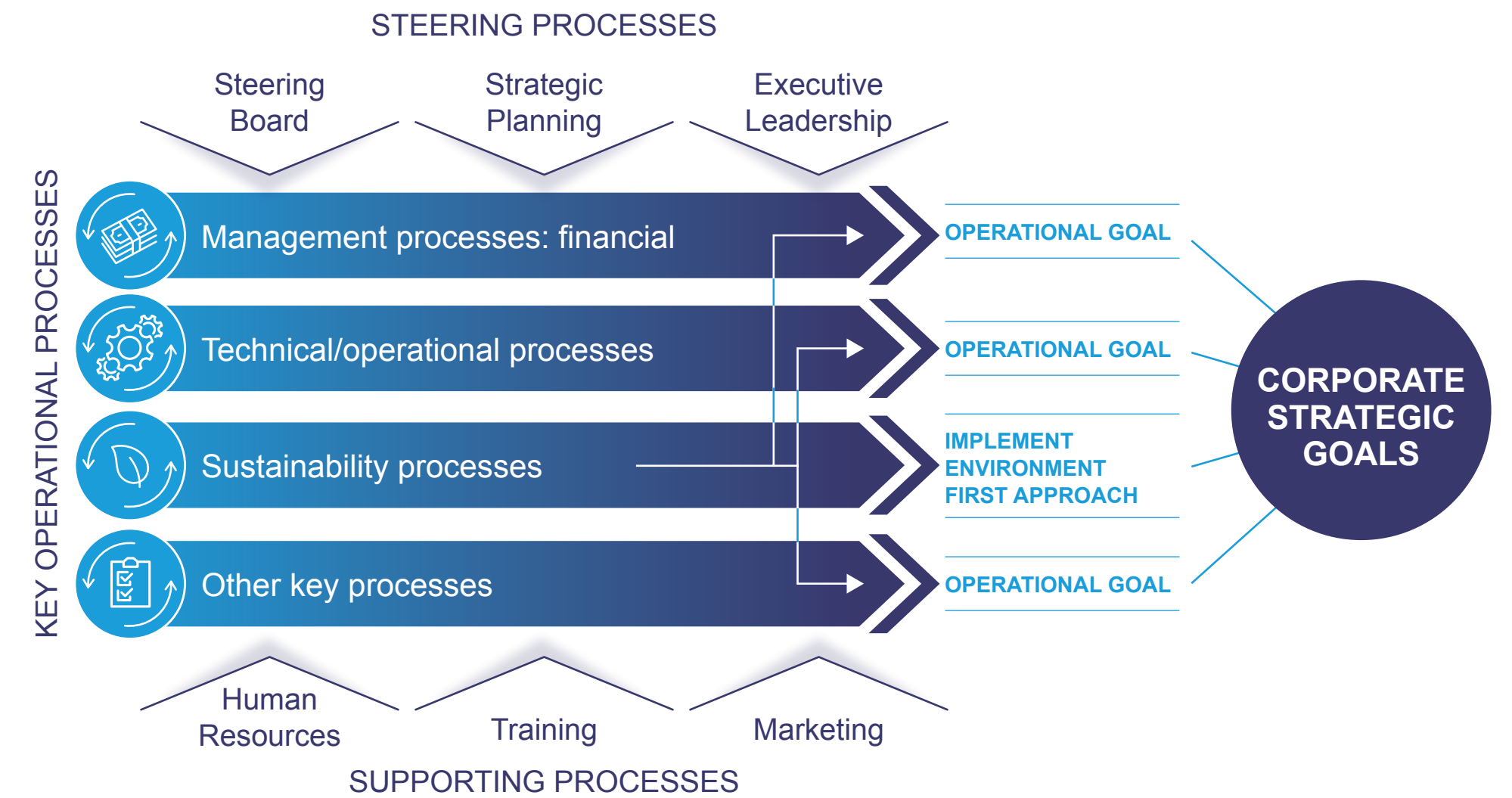
Sustainability Team

The Sustainability Team works to develop sustainable business management strategies for the organization through the evaluation of company operations and implementation of monitoring and reporting systems to track and improve areas of impact. The Sustainability Team works with business units to implement an “environment first” approach to key operational processes, including reporting and disclosure frameworks, environmental policy compliance, professional education, and other key support processes for innovation and responsible development. Operational, financial, and technical data collection and analysis provide the framework to set corporate strategic goals.

Structure

Understanding the function of the Sustainability Team helped us to develop its structure, in line with sustainability-focused organization design publications.²⁰

- **Design for sustainability topics that the company is prioritizing.** Energy Vault prioritizes the energy transition, the decarbonization of our energy sector, and the move from fossil fuels to renewable energy through the adoption of energy storage technologies. A list of topics was developed to hone the focus of the sustainability team.
- **Empower the sustainability team to make decisions that effect change.** Our lean central team has the authority to execute changes regarding sustainability topics that have cross-functional, material impact at Energy Vault with access to engage executive leadership and the Board of Directors.
- **Build a structure that best fits Energy Vault’s sustainability and corporate agenda.** At Energy Vault, we chose to have a lean central team that has direct contact with executive leadership and the Board of Directors, as well as the authority to integrate sustainability initiatives and incubate ideas.
- **Prioritize the design of processes and governance that account for sustainability’s complexity and dynamic nature.** Our Sustainability Team engages in frequent discussion with the Sustainability Task Force, allowing for fast decisions and cross-functional engagement to address topics quickly and tackle issues once they are escalated.



Sustainability Strategy

Sustainability Task Force

In our first year as a public company, Energy Vault established a Sustainability Task Force to encourage the interdepartmental collaboration and cross-functional support required to embed sustainability into the nucleus of employee behavior. At the department level, Sustainability Task Force members are responsible for identifying functional sustainability metrics, setting sustainability goals, tracking ESG performance, and contributing to sustainability-related reporting.

Sustainability Champions are identified from each department to represent the sustainable business practice interests of their respective business unit. Sustainability Task Force Champions are empowered to optimize sustainable business management practices across the entire organization, understand the required actions to mitigate and adapt to climate-related risks as well as encourage the implementation of climate-related opportunities, and to explore unified partnership with external stakeholders.

Our Director of Sustainability chairs the Sustainability Task Force, holding monthly collaboration meetings designed to upskill sustainability development and foster collaboration between departments. The Director then takes a strategic view of issues and advises the Executive Committee on tactics to drive our sustainability strategy throughout the organization. In 2023, the Sustainability Task Force achieved the foundational milestone of internally setting and reporting sustainability key performance indicators for the company with a dynamic focus on areas for ESG performance improvement, which will be reported on a year-by-year basis in our efforts to establish internal accountability.

Sustainability achievements are now routinely acknowledged alongside traditional KPIs. The sustainability key performance indicators are co-created between the Sustainability Team, the Champions, and the Executive Sponsor. Each KPI will be reevaluated on an annual basis to assess relevance and alignment with material topics. We believe sustainability considerations are important to our long-term value and performance and are working to identify and consider additional initiatives in connection with our sustainability efforts, such as: assessing our strategy against evolving standards and frameworks, tying key performance indicators in executive compensation, and considering additional policies or practices on various sustainability matters. “Once ESG factors are integrated into strategy, linking them to pay is a natural next step, particularly as a tool for mobilizing efforts behind new sets of priorities.” – PWC²¹

List of Material Topics	Key Performance Indicator / Identified ESG Alignment Goals
Sustainability 7 8 10 11 12 13 14 16 19 22 23 24 25 31	Corporate Sustainability Plan (DJSI world inclusion) ESG Score Improvement
Corporate Development 7 8 10 11 12 13 14 16 19 22 23 24 25 31	Criteria Alignment ESG Funds, Corporate Policy Development, Sustainability & ESG messaging to external stakeholders
Finance 12 13 23	Proportion of operating activities aligned towards climate opportunities (%), Employee air travel (mt CO2e/FTE)
Business Operations 8 10 11 12 13 14 23 25	ISO certifications (%offices), Waste Diverted from landfill R&D site (%), Incidents of Injury, Health & Safety Training (hrs/FTE), Data privacy, Cybersecurity Training (hrs/FTE)
People 7 8 10 11 16 19 22	Average Employee Training, Employee Retention Rate (%), Team Diversity (%), Incident Tracking (discrimination/harassment)
Procurement 8 12 13 14 16 19 22 23 24 25	Supplier Code of Conduct (% Acknowledgement) Supplier Scope 1&2 emissions (% Submission)
Marketing 12 13 14 19 23 24	Footprint Challenge - Zero Waste Marketing Goal BrainPrint Challenge – ESG/JEDI & Compliance Community Engagement
Product Development & Commercialization 12 13 14 22 23 24	ESG metric inclusion signed agreements & product dev. gate review, Product emissions avoidance, total cost of ownership, local supply chain footprint, Energy Security (incidents/MWh)
Project Delivery 8 10 12 13 14 23	Diversion of Waste from Landfill, Local Labor metrics, Local Spend (% of construction budget)

Cluster Key

- Human Rights
- Labor Practices
- Environment
- Fair Operating Practices
- Consumer Issues
- Community Involvement & Development

*full description of numbers can be found on next page

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
 - Principles & Philosophy
 - Sustainability Team ●●
 - Materiality Assessment
 - Roadmap & Targets
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

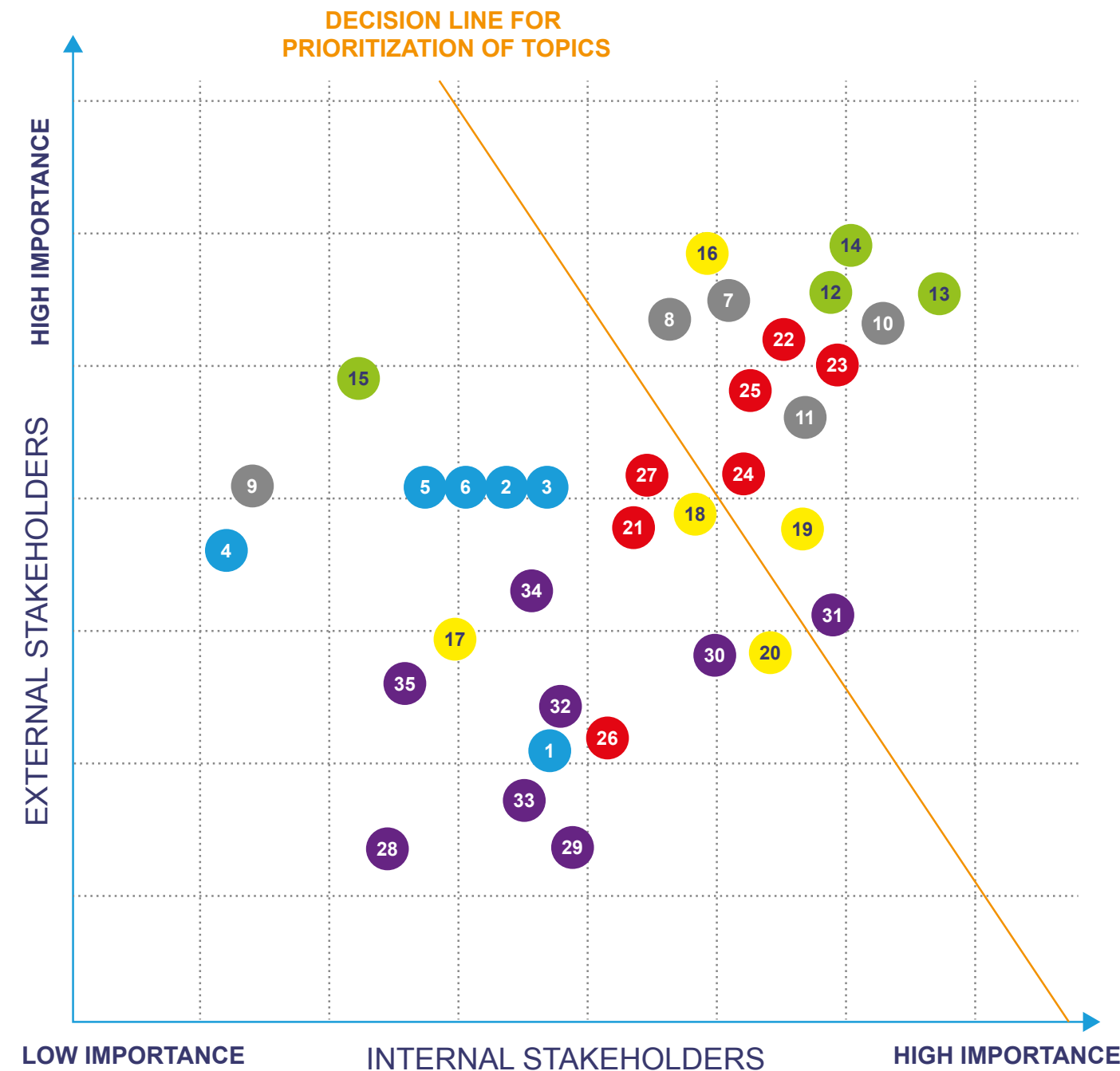
Sustainability Strategy

Materiality Assessment

In 2022, Energy Vault conducted the first comprehensive materiality and double materiality assessment to identify the relevance and priority of sustainability topics for the organization and to understand their potential effects on regulatory compliance and performance. The initial assessment, involving numerous internal and external stakeholders, highlighted fourteen material issues. The double materiality assessment generated an external perspective on social and environmental impact, as well as perceived financial impacts of the company. These impacts have the potential to erode company value, which may influence the company in the short-, medium- or long-term. Energy Vault is committed to conducting both materiality and double materiality assessments every other year to ensure relevance and priority of sustainability topics are understood and addressed. The next assessment is planned to occur in 2024. All materiality assessment results have been signed off by the Board of Directors and senior management.

Double Materiality

The Corporate Sustainability Reporting Directive [CSRD] requires a “double materiality” assessment. Although Energy Vault is not currently required to report under the CSRD, we understand the importance of the assessment and will continue to assess our company using these guidelines. The key term is “double”, signaling that companies reporting on sustainability must consider an inside-out view as well as an outside-in view. An example of the former would be our company’s damage to the environment or human rights, while an example of the latter would be reputational risk (or opportunity) or financial risk due to introduction of carbon tax. A sustainability topic can be material from a risk & opportunity standpoint and from an environmental impact perspective. The assessments help guide our corporate strategy and allow us to identify risks and opportunities related to sustainability.



Cluster Key

- Human Rights
- Labor Practices
- Environment
- Fair Operating Practices
- Consumer Issues
- Community Involvement & Development

List of Material Topics	
13	Sustainable resource use
10	Occupational health and safety
12	Pollution prevention
14	Climate change mitigation
22	Protecting customers' health and safety
23	Sustainable consumption
8	Working conditions and social protection
11	Training and professional development
16	Anti-corruption
7	Employment and labor relationships
25	Customer data protection and privacy
24	Customer service, support, complaint, dispute resolution
19	Promotion of social responsibility in the value chain
31	Technology development and access

* For additional information on Energy Vault’s Materiality Assessment, please refer to the 2022 CSR.

Sustainability Strategy

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
 - Principles & Philosophy
 - Sustainability Team
 - Materiality Assessment
 - Roadmap & Targets
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Roadmap

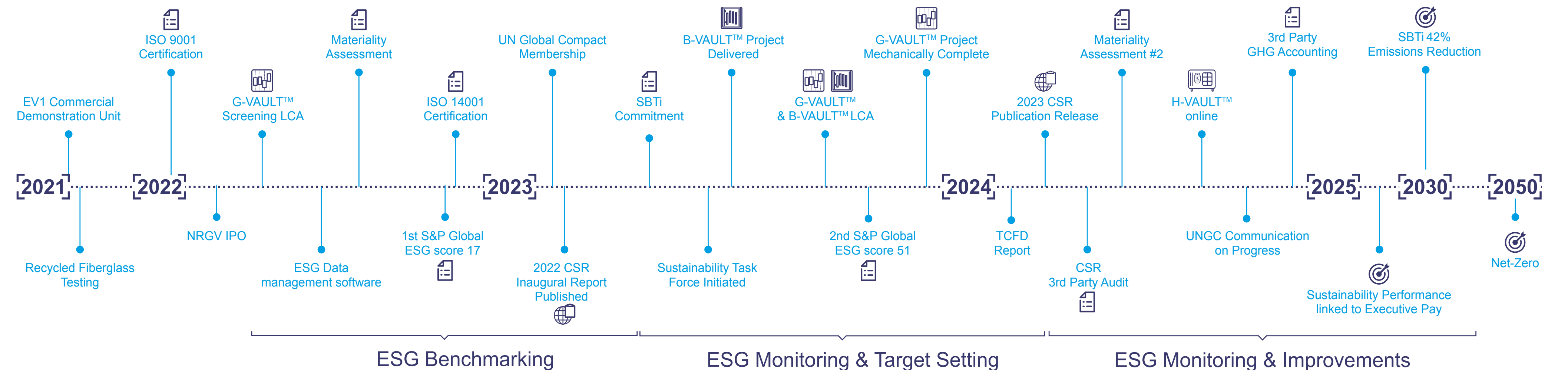
Energy Vault's sustainability roadmap is influenced by the analysis and work performed with the standards established by the Science Based Targets initiative [SBTi] and the Task Force on Climate-related Financial Disclosures [TCFD]. The adoption of TCFD has become a part of Energy Vault's risk management and strategic planning, while the SBTi helps drive ambitious climate action, enabling Energy Vault to set science-based emissions reduction targets. It has and will continue to inform our decision making as it relates to a low carbon economy and climate-related transition and physical risks. The information is used for decision making, risk and opportunity analysis; it allows our stakeholders to make informed decisions when investing in or working with Energy Vault.

The Science Based Targets provide a clearly defined pathway for Energy Vault to reduce GHG emissions. Energy Vault published its near-term emissions reduction targets in 2023 and had these targets approved through SBTi's small and medium enterprises [SME] route. We also announced our 2050 net-zero target and are committed to seeking validation from SBTi for this target.

Targets and Goals

- 2024: Energy Vault will submit our Communication on Progress as part of our commitment to UN Global compact. It is intended to inform stakeholders on progress made in implementing the [Ten Principles](#).
- 2024: Energy Vault plans to track progress towards net-zero goals, have our ESG data audited by a 3rd party, and plans to set an internal carbon price.
- 2024: Energy Vault plans to perform our 2nd materiality assessment and commits to performing the assessment every other year, including double materiality.
- 2025: The Sustainability Task Force, working together with Executive Leadership, plans to identify ways to link key performance indicators with executive compensation.
- 2030: SBTi validated commitment to reduce scope 1 & 2 GHG emissions by 42% from a 2022 base year, and to measure and reduce scope 3 emissions.
- 2050: Energy Vault is committed to reach net zero across scopes 1, 2, and 3 by 2050.

Timeline & Targets



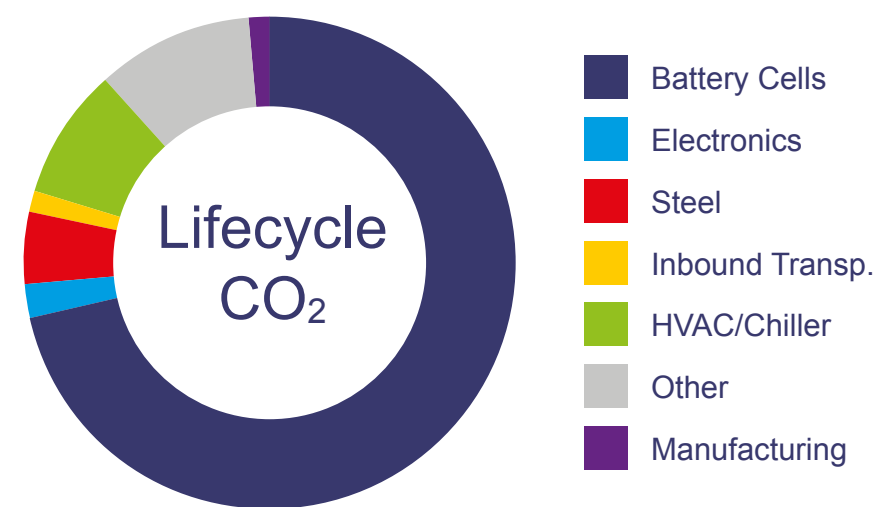
Life Cycle Assessment & Modelling

Energy Vault performs Life Cycle Assessments [LCAs] on our various offerings, leveraging the ISO 14040:2006 framework, the results of which provide actionable data that inform sustainable product improvement decisions. The LCA data highlights areas of high environmental impact so our teams and partners can support manufacturing processes and improve product design to address impact categories. Once aligned with partners in our value chain, our teams can set realistic near-term emissions reduction targets and better understand product social benefits.

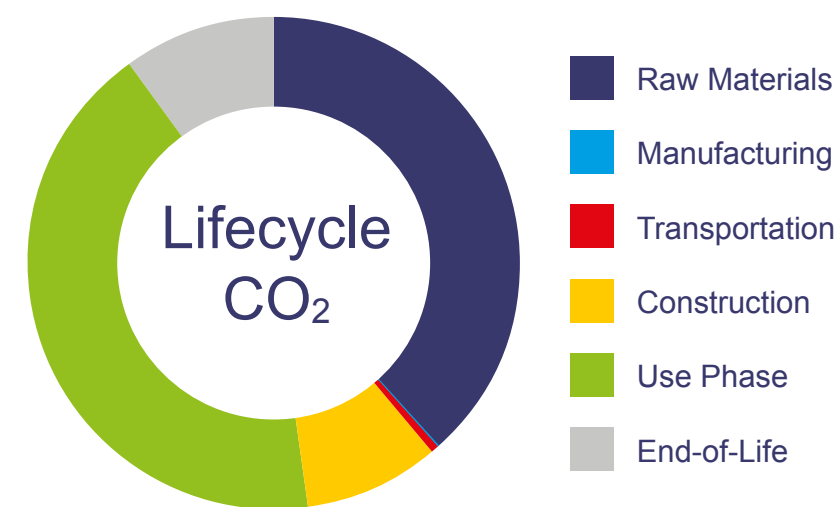
B-VAULT™

In 2023, Energy Vault conducted the B-VAULT™ system LCA and worked with key B-VAULT™ suppliers to assess and understand the environmental impact of manufacturing, shipping, and operating the battery energy storage system over a 20-year lifetime.

Cradle-to-gate LCA on Energy Vault's AC B-VAULT™



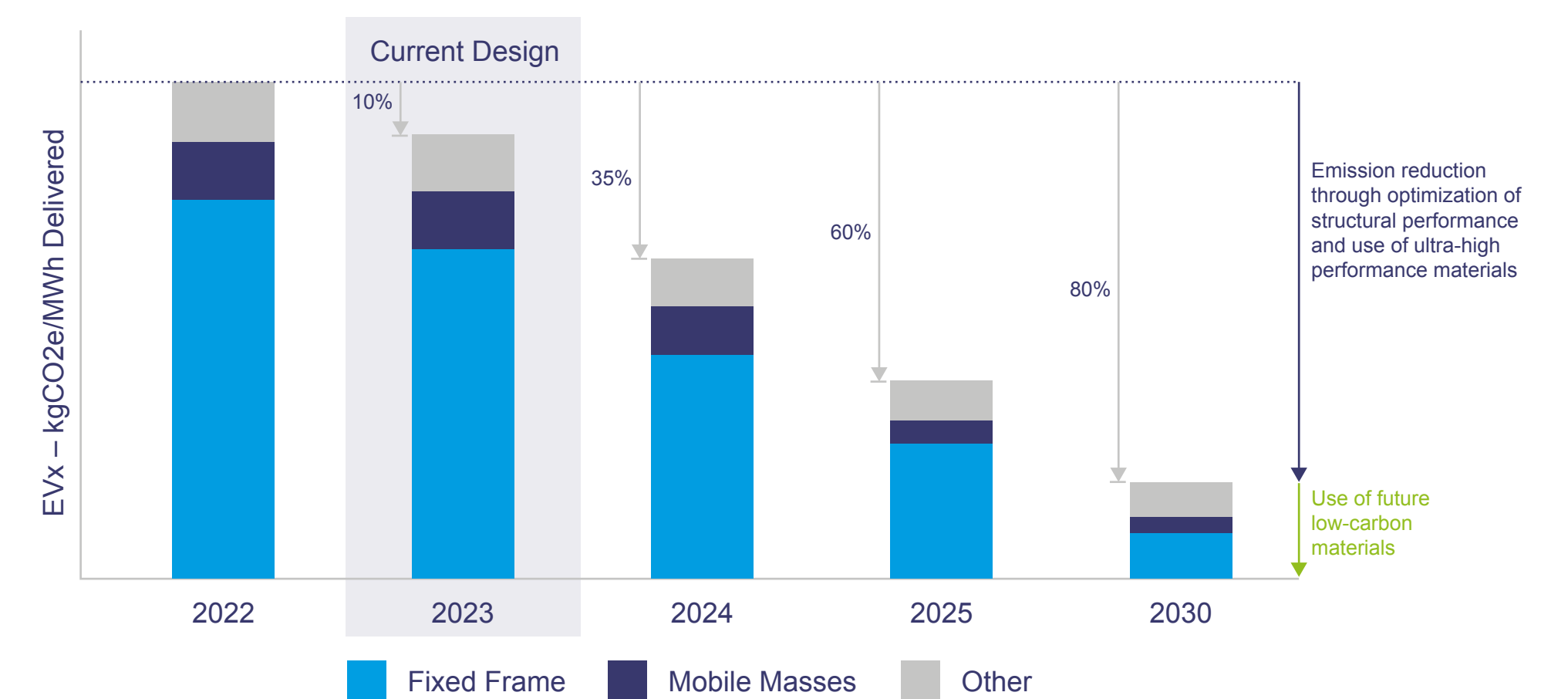
Full LCA on wind-powered B-VAULT™ Facility



G-VAULT™

Energy Vault continuously evaluates environmental impacts. New material innovations, technology advancements, and emissions are reviewed for adaptation into our products. We collaborate with industry experts and accelerate low carbon products contributing to positive externalities.

Gravity Energy Storage Decarbonization Roadmap



For detailed information on product LCAs please reach out to Energy Vault 's Commercial and Sustainability Teams.

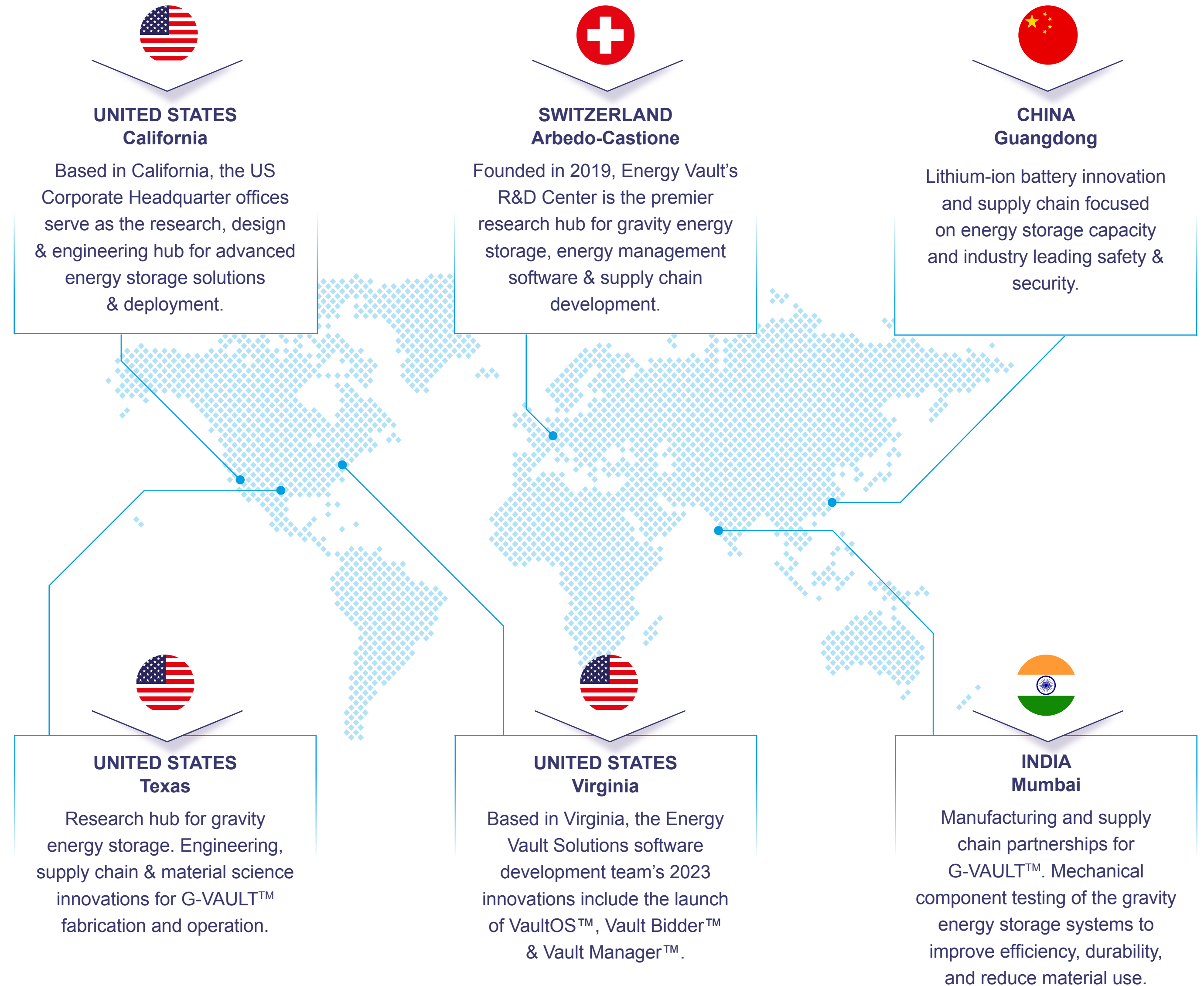
- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
 - Life Cycle Assessments
 - Research & Development
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Innovation

Research & Development

Energy Vault is committed to technology innovation in the pursuit of solving one of the largest global problems facing the planet today: how to store renewable energy in both an economical and sustainable way to end the world's reliance on fossil fuels. A shared commitment to a clean energy future drives every effort in technology research and development. To support the company's primary directive, Energy Vault has established foundational locations and partnerships in sustainable production, design innovation, advanced materials science development, and proprietary machine-vision software testing.

Technology	Key R&D Milestones - 2023
B-VAULT™	<ul style="list-style-type: none"> Design & deployment of higher density BESS storage system Supply chain partnerships & innovation
G-VAULT™	<ul style="list-style-type: none"> First ever global deployment of GESS 10% reduction in overall product emissions
H-VAULT™	<ul style="list-style-type: none"> Successful design of long duration, black start, grid forming energy storage system for multi-day operation
Software	<ul style="list-style-type: none"> VaultOS™, Vault Bidder™ & Vault Manager™ launched at RE+ in September 2023



- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION**
 - Life Cycle Assessments
 - Research & Development
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Global Alignment

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
 - Associations & Initiatives
 - UN Global Compact
 - TCFD & SBTi
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Associations and Initiatives

Energy Vault accomplished all established 2023 goals disclosed in our 2022 Corporate Sustainability Report.

- We have completed a climate risk analysis aligned with the Task Force on Climate-related Disclosures [TCFD], of which the full report can be viewed on our website.
- We joined the United Nations Global Compact [UNGC]. Our employees participated in UNGC Accelerator programs and will continue to engage in 2024.
- Energy Vault submitted our near-term emissions reduction targets to the Science Based Targets initiative [SBTi], and they have been validated by the 3rd party non-profit.
- We enhanced our Global Reporting Initiative [GRI] disclosures.
- Continued participation in the S&P Global Corporate Sustainability Assessment [CSA], showing a 200% increase from our 2022 ESG score.

Energy Vault is committed to navigating complex ESG reporting with transparency and integrity. We are confidently outlining aspirational goals that are aligned with major global standards and grounded in validated comparative data. We are mindful that stakeholders may desire detailed accounts of our ESG goals and initiatives. We endeavor to align with global initiatives and standards in our transparency to combat against cultural greenhushing and corporate greenwashing.

Energy Vault values flexibility in this ever-changing landscape of ESG, while simultaneously focusing on advancing our efforts to exceed internal and external stakeholder expectations. We have made a strategic decision to use S&P Global CSA to perform annual assessments of our sustainability strategy. The CSA covers over 10,000 companies from around the world, and we consider it to be one of the leading external sustainability assessments. In conjunction with CSA, Energy Vault augments our assessments using the TCFD framework and our disclosures with GRI. To highlight the ever-changing landscape, as of October 12, 2023, the TCFD progress will be monitored by the International Financial Reporting Standards [IFRS] Foundation and incorporated into the International Sustainability Standards Board [ISSB].

Energy Vault measures and tracks qualitative and quantitative ESG performance, based on globally recognized standards, and uses the information to set ESG improvement objectives and goals. We also have identified the UN's Sustainable Development Goals as a unifying global and concerted effort to improve our impact on this planet both environmentally and socially. Energy Vault is intent on setting meaningful goals that are intended to drive performance against material ESG objectives. We are implementing a strategy to link ESG objectives and achievements to business objectives and rationale. We find this to be the strongest way to continue maintaining our commitment to ESG and sustainability.

WE SUPPORT



Global Alignment

United Nations Global Compact

In 2023, Energy Vault joined the UNGC and committed to supporting relevant SDGs to enable change. In doing so, we are aligning our strategies and operations with the Ten Principles on human rights, labor, environment, and anti-corruption. We believe in advancing societal goals with an emphasis on partnerships and innovation.

Energy Vault's participation in the UNGC accelerators promotes engagement with local and global companies to generate corporate behavioral change at scale to achieve the SDGs. We are accelerating progress and impact deep into business operations and across our value chain to meet the 2030 agenda. Through this program we are building partnerships with our peers and learning best practices and resources to share with our employees for professional development opportunities.

The Climate Ambition Accelerator was a highlight of 2023, helping Energy Vault to better understand the Science Based Targets Initiative, and highlighting the small or medium enterprise route for getting short-term targets approved.

WE SUPPORT



Current & Planned UNGC Accelerators

2023 | Climate Ambition Accelerator

2024 | Business & Human Rights Accelerator

2024 | SDG Ambition Accelerator

2025 | Target Gender Equality Accelerator

Energy Vault supports the Sustainable Development Goals

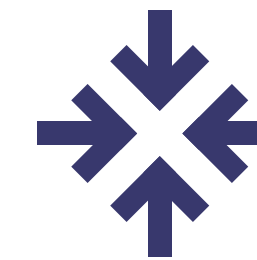
Ten Principles

HUMAN RIGHTS



- Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2:** make sure that they are not complicit in human rights abuses.

LABOUR



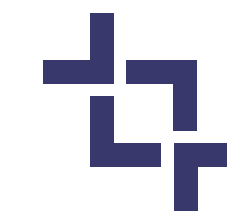
- Principle 3:** Businesses should uphold the freedom of association and effective recognition of the right to collective bargaining;
- Principle 4:** the elimination of all forms of forced and compulsory labor;
- Principle 5:** the effective abolition of child labor; and
- Principle 6:** the elimination of discrimination in respect of employment & occupation.

ENVIRONMENT



- Principle 7:** Businesses should support a precautionary approach to environmental challenges;
- Principle 8:** undertake initiatives to promote greater environmental responsibility; and
- Principle 9:** encourage the development and diffusion of environmentally friendly technology.

ANTI-CORRUPTION



- Principle 10:** Businesses should work against corruption in all its forms, including extortion and bribery.

Global Alignment

Task Force on Climate-Related Financial Disclosures

Energy Vault remains rooted in our sustainable values by leveraging our products and solutions to create a positive lasting impact on the environment and future generations. At Energy Vault, we realize the urgency that is required to transition to a low-carbon economy to prevent the worst impacts of climate change.

In 2023, we worked to better understand the recommendations of the Task Force on Climate-related Financial Disclosures [TCFD] and how they could be implemented at Energy Vault. We also conducted our first climate scenario analysis, assessing both transition and physical risks across our global operations. We've made a concerted effort to better understand the potential climate-related risks that could impact the organization and how those risks change in terms of likelihood and impact under different climate scenarios. Conducting a climate scenario analysis is a relatively new and rapidly expanding area for many organizations, including Energy Vault. As a result, while we feel confident in the outcomes of our climate analysis, we also expect data, methodology, and scenarios to continue to evolve in the coming years.

As we continue to develop our business strategy and operations, we look for opportunities to further integrate sustainability into our day-to-day decision-making. We are continuing to find innovative technologies to support our products' contribution to the transition towards a low-carbon economy. Please refer to the Sustainability page of the Energy Vault website to read our full [TCFD Report](#).



Governance



Strategy



Risk Management



Metrics & Targets

Science Based Targets Initiative

The 2015 Paris Agreement saw world governments commit to cutting global temperature rise to well-below 2°C. In 2018, the Conference of the Parties [COP] indicated that global warming must not exceed 1.5°C to avoid potential catastrophic impacts of climate change.²² More recently at COP28, the Science Based Targets initiative [SBTi] announced that more than 4000 companies worldwide have set science-based targets aligned with this 1.5°C pathway.

In 2023, Energy Vault was proud to join this global effort by setting science-based targets through SBTi. Energy Vault Holdings, Inc. made a formal commitment to reduce scope 1 and scope 2 GHG emissions 42% by 2030 from a 2022 base year, and to measure and reduce scope 3 emissions. The Company's near term, 1.5°C target was approved using a streamlined target validation route exclusive to small and medium-sized enterprises (SMEs).



Accountability

Energy Vault is committed to accountability and transparency throughout our business. This section is dedicated to public disclosures of our Environmental, Social, and Governance data. The data is designed to align with global standards, allowing the information to be comparative and competitive. It also allows for the year-over-year tracking of our ESG journey.



Accountability

INTRODUCTION

COMPANY

CEO MESSAGE

IN THE VAULT

CLIMATE ACTION

ENERGY MARKET

SOLUTIONS

SUSTAINABILITY

RESPONSIBLE BUSINESS

STRATEGY

INNOVATION

GLOBAL ALIGNMENT

ACCOUNTABILITY

TRANSPARENCY

ENVIRONMENTAL

SOCIAL

GOVERNANCE

CONCLUSION

APPENDIX

DISCLOSURES

Transparency

Energy Vault is committed to environmental, social, and governance [ESG] transparency throughout global operations. We are continually working to improve our data collection and reporting, and we will document this progress in our annual sustainability reports.

Energy Vault utilizes the carbon accounting software Metrio to collect and track primary data. Where needed, this data is supplemented with industry standard assumptions (EIA CBECS) and emissions factors (GHG Protocol, EPA, EXIOBASE). All activities consolidated for financial reporting purposes are covered in the environmental, social, and governance disclosures of this report. This financial control methodology allows us to properly segment and track our company's global impact.

Energy Vault is aware of the environment in which we operate and the challenges of the new millennium. Energy Vault is committed to environmental protection through a series of principles and guidelines:

- Greater efficiency in the rational use of natural resources, and the beneficial reuse of waste materials, such as coal combustion residues
- Promoting the reuse or recycling of waste materials within our production cycle and projects to create a circular economy
- Promoting the reduction of emissions into the atmosphere through the design of energy storage systems that reduce consumption of fossil fuels to the benefit of sustainable systems.

In 2023, Energy Vault operated five (5) leased office spaces. Primary data is collected at offices and sites where possible, and (when necessary) this data is supplemented with industry standard assumptions and intensity metrics.

Office Location	Electricity	Natural Gas	Diesel	Water
Westlake Village, CA, USA	Estimated	Estimated	n/a	Estimated
Vienna, VA, USA	Estimated	Estimated	n/a	Estimated
Arbedo-Castione, Switzerland	Primary	n/a	Primary	Primary
Lugano, Switzerland	Estimated	n/a	n/a	Estimated
Victoria, Australia	Estimated	n/a	n/a	Estimated



Resource Consumption

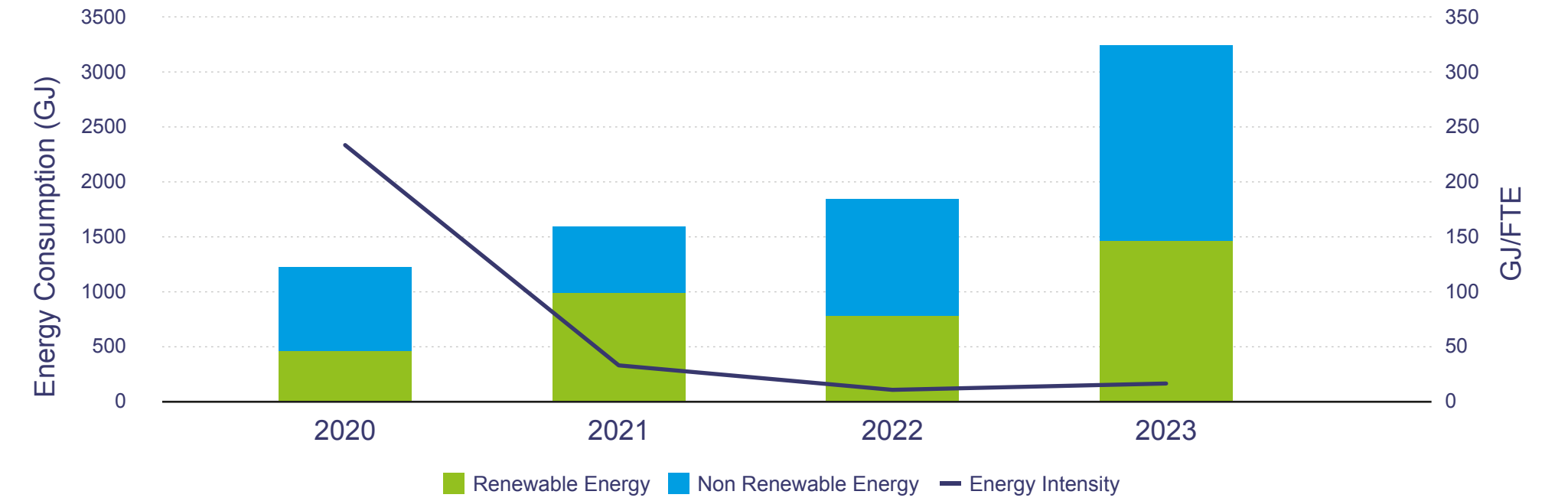
Energy Use

Energy Vault tracks energy, water, and material consumption across all global operations. While the company is currently prioritizing accuracy and transparency in reporting, priorities are expected to shift in the coming years to global energy use reduction. The following energy and fuel types are covered under our resource consumption disclosures.

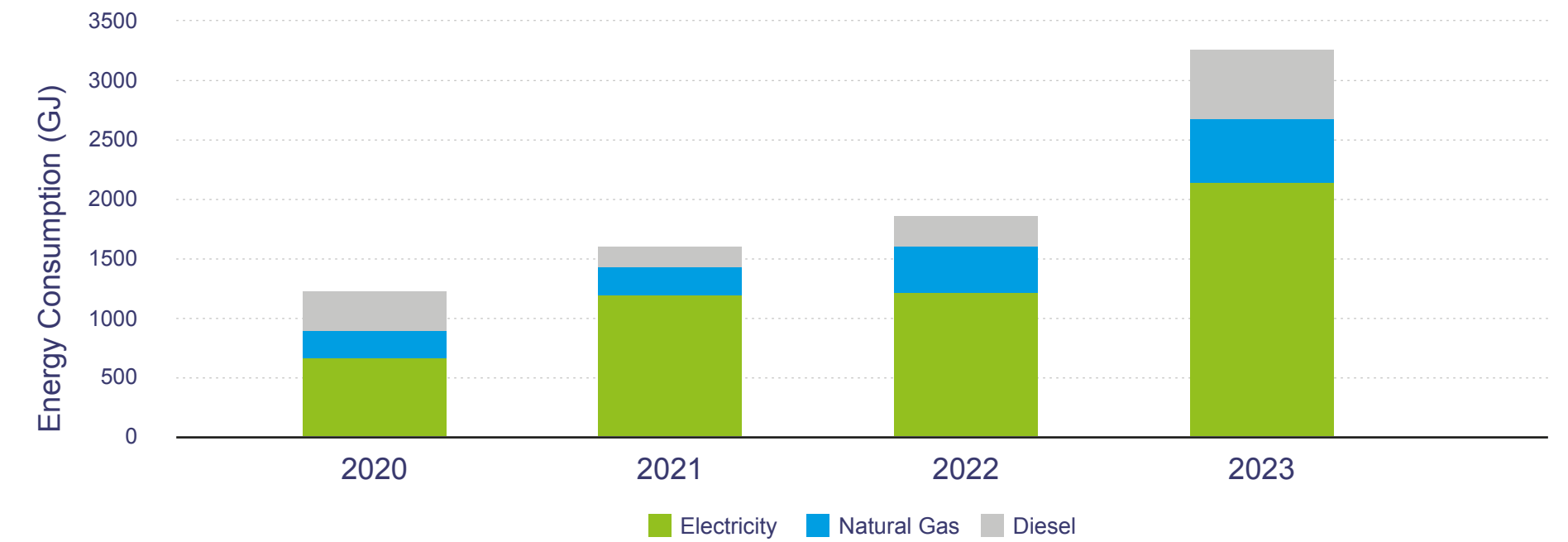
- **Diesel** consumption is tracked monthly at our R&D facility in Arbedo-Castione. Diesel is used in standard research & development activities.
- **Natural Gas** consumption is estimated at applicable offices using a CBECS natural gas intensity figure for office spaces.
- **Electricity** is used at Energy Vault’s offices worldwide. Primary electricity consumption data is available at our R&D facility in Arbedo-Castione, and consumption is estimated at the remaining offices using a CBECS electricity intensity figure for office spaces.

Total energy consumption is tracked year over year [YoY], and the GHG Protocol’s location-based methodology is used to separate electricity use into renewable and non-renewable electricity generation sources. Currently, all fuel consumption within the organization comes from non-renewable sources.

Energy intensity is tracked YoY with a GJ per Full-Time Employee calculation methodology. All of the above listed energy types within the organization are included in this calculation.



	2020	2021	2022	2023
Total Energy Consumption (GJ)	1226	1593	1851	3243
Renewable Energy %	38%	62%	43%	45%
Non-Renewable Energy %	62%	38%	57%	55%
Total Energy Consumption Intensity (GJ/FTE)	231	22	11	18



	2020	2021	2022	2023
Total Electricity (GJ)	661	1192	1217	2125
Total Fuel (GJ)	565	401	634	1118
Natural Gas	241	241	381	538
Diesel	324	160	253	580

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
 - Resource Consumption ●●
 - Greenhouse Gas Emissions
 - Waste Management
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Resource Consumption

Water Use

In 2023, Energy Vault implemented the necessary systems to monitor and track the water use associated with the company's global operations. Primary water consumption is tracked at our Arbedo-Castione site, where water is used for standard research & development operations. Additional water use at our other office locations is estimated using CBECS water consumption intensity figures for office spaces. Water withdrawal and consumption is entirely third-party freshwater from municipal water utilities—there was zero water consumption in 2023 from other sources.

	2020	2021	2022	2023
Total Third-Party Water Consumption (m³)	696	741	1191	1671
Americas	429	429	718	1018
EMEA	267	312	473	521
APAC	0	0	0	132

Material Use

Energy Vault began tracking material use by weight at the R&D facility in Arbedo-Castione. Material use includes raw materials, associated process materials, and semi-manufactured goods; total material use was limited in 2023 as there were no major design changes to the gravity energy storage R&D structure.

	2023
Total Material Use (kg)	3067



- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
 - Resource Consumption ●●
 - Greenhouse Gas Emissions
 - Waste Management
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- Resource Consumption
- Greenhouse Gas Emissions
- Waste Management
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Greenhouse Gas Emissions

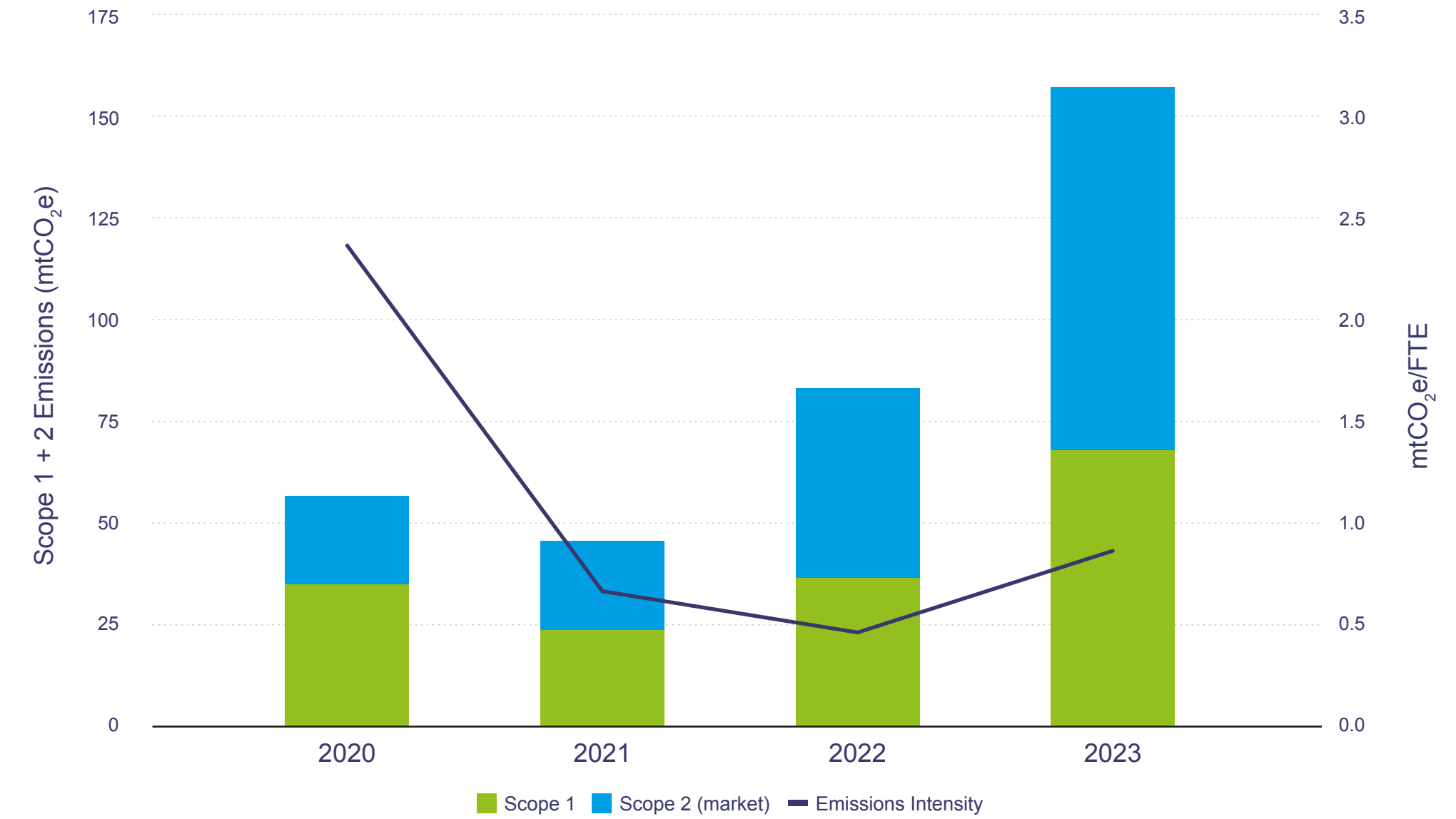
Energy Vault’s emissions increased as expected in 2023, in line with our expanding global footprint and increased headcount.

- Scope 1 emissions are estimated using GHG Protocol emissions factors for diesel consumption at our R&D facility and natural gas consumption at select offices.
- Scope 2 disclosures cover electricity use at our offices worldwide. Energy Vault added the GHG Protocol’s market-based method to environmental disclosures in 2023. Both Energy Vault offices in Switzerland are powered almost entirely by renewables, and hence the market-based figures are lower.
- Emissions Intensity includes Scope 1 + 2 (market-based) and is calculated in units of mtCO₂e per full-time employee.
- Scope 3 categories are reported (categories 1, 2, 4, 5, 6) as we continue to track and manage our reporting.

We acknowledge the uncertainty surrounding spend-based emission factors; we see spend-based analyses as a crucial way to increase transparency and accountability as we work to improve our Scope 3 data collection. This year, we worked to increase the accuracy of Scope 3 estimates and retroactively adjusted previous year’s estimates where necessary. Energy Vault reports on five (5) key Scope 3 categories. Category 5 (waste generated in operations) is estimated with type-specific and waste treatment-specific emission factors. Category 6 (business travel) is estimated with flight class- and haul-specific mileage emission factors for air travel. The remaining Scope 3 categories are estimated with the help of our carbon accounting platform and by using industry standard spend-based emission factors from the EPA and GHG protocol. Our Scope 3 emissions have seen notable increase in line with the delivery of our first few energy storage projects.

All greenhouse gases are included in the above CO₂e emissions disclosures. There were no biogenic emissions in 2023.

Volatile Organic Compound (VOC) emissions were added to Energy Vault’s environmental disclosures in 2023. VOC use is minimal at Energy Vault, and the only notable VOC emissions are generated at our R&D facility in Arbedo-Castione, where various paints and thinners are used in standard R&D operations. Energy Vault calculated VOC emissions in 2023 from purchase order logs. Data for previous years was estimated based on this 2023 number and historic purchasing quantities.



	2020	2021	2022	2023
Scope 1 Emissions (mtCO₂e)	35.2	23.6	37.4	68.5
Scope 2 Market-Based Emissions (mtCO₂e)	21.9	21.9	46.2	89.1
Scope 2 Location-Based Emissions (mtCO₂e)	24.5	29.6	49.5	96.8
Emissions Intensity (mtCO₂e/FTE)	2.4	0.63	0.49	0.88
Total Scope 3 Emissions (mtCO₂e)		619	49,986	127,151
Cat 1 - Purchased Goods and Services			45,301	121,670
Cat 2 - Capital Goods			610	949
Cat 4 - Transportation & Distribution		341	1,961	2,993
Cat 5 - Waste Generated in Operations			176	4.2
Cat 6 - Business Travel		278	1,938	1,535

	2020	2021	2022	2023
VOC Emissions (kg)		90	81	76

Environmental

Waste Generation

Waste is generated on-site at Energy Vault's R&D facility in Arbedo-Castione through various research and development projects associated with our gravity energy storage system and energy management system software.

Waste Hauling & Tracking

Energy Vault implements site separation of waste at the R&D facility in Switzerland. We have a commercial agreement with a third-party waste hauler to re-use/recycle/dispose of waste in accordance with Swiss Law. Our waste hauler removes all waste and diverts or disposes of it offsite. Waste data is tracked monthly and is archived in the forms of bulletins and invoices.

Waste Reduction

Material science and brick design innovation is focused on waste re-use and virgin material in our mobile masses. On-site, Energy Vault also uses waste collection and sorting buckets help reduce and properly sort generated waste.

	2021	2022	2023
Waste Diverted (mt)	5.3	3108	9
Recycled	5.3	588	9
Reused	0	2520	0
Waste Disposed (mt)	0.5	1	7.9
Landfilled	0	0	0.4
Incinerated*	0.5	1	7.5

*waste incineration w/ energy recovery

	2021	2022	2023
Total Waste Generated (mt)	6	3109*	16.9
Waste Type Breakdown (mt)			
Mixed	0.5	0.1	7.5
Paper	0.5	0.8	1.2
Wood	1.5	5	4.2
Glass	0.1	0	0
Iron	1	571*	2.1
Hazardous	0.1	0	1.2
Organic	0	1	0.3
Concrete	0	2520*	0.4
Copper	0	11.5*	0

*large waste figures in '22 are attributed to EV1 decommissioning



- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- Resource Consumption
- Greenhouse Gas Emissions
- Waste Management
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Culture

Energy Vault places high importance on Company culture, and our focus on diversity and inclusion is reflected across employment and operations. We strive for excellence; and by bringing in a wide variety of people with new ideas, we have built a high-performing, innovative, and enduring organization. We strive to perform our work collaboratively, leading to innovative decision-making and problem-solving. Through several projects and initiatives undertaken in the organization, the foundation of our culture is now clearly articulated in two major components:

Operating on a globally recognized Human Resources Information System, we have established our employee data tracking, performance management as well as compensation processes. We use candidate tracking software to ensure diligent communication as well as tracking and surveying candidate experience. Our virtual onboarding platform “Hello!” is set up to provide a smooth transition for all new employees. We also use employee recognition software “Spark”, to increase collaboration and engagement within team members.

Talent Attraction & Retention

Energy Vault is dedicated to a harmonious work environment where diversity of perspective fosters innovative excellence. We are building a diverse team of industry experts that have a shared passion to combat climate change through innovation in energy storage technologies. Our people have significant industry experience in their respective areas of focus and bring unique talents, skills, and experiences to create cutting-edge solutions and transformative technologies.

	Total	Management
Full Time Employees (2023)	180	85
Gender Breakdown		
% Male	79.4%	80%
% Female	20.6%	20%
Race and Ethnicity Breakdown*		
% Asian	16.1%	18.8%
% Black or African American	3.9%	2.4%
% Hispanic or Latino	6.1%	4.7%
% White	51.7%	52.9%
% Native Hawaiian or Other Pacific Islander	0.6%	0%
% 2 or more	2.2%	0%
% Not Disclosed	19.4%	21.2%
Age Breakdown		
% Under 30	11.7%	2.4%
% 30 - 50	62.2%	64.7%
% 50+	26.1%	32.9%

*Breakdown is based on EEO-1 reporting

	Full Time	Part Time
Total Employees (2023)	180	3
Gender Breakdown		
Male	143	0
Female	37	3
Regional Breakdown		
Americas	145	0
APAC	5	0
EMEA	30	3

	Jr. Mgmt	Mid Mgmt	Top Mgmt	Sales	STEM
Additional Workforce Breakdown (2023)	3	54	29	6	83
Gender Breakdown					
% Male	33.3%	75.9%	89.7%	100%	89.2%
% Female	66.7%	24.1%	10.3%	0%	10.8%
Age Breakdown					
% Under 30 Years Old	0%	3.7%	0%	0%	16.9%
% 30-50 Years Old	100%	74.1%	44.8%	66.7%	62.6%
% 50+ Years Old	0%	22.2%	55.2%	33.3%	20.5%

	2021	2022	2023
Total New Hires	53*	120*	74*
Gender Breakdown			
Male	41	96	58
Female	12	24	16
Global Breakdown			
United States	48	108	58
United Kingdom	1	1	5
Switzerland	4	9	3
Australia	0	0	5
Other	0	2	3
Age Breakdown			
Under 30 Years Old	8	18	11
30-50 Years Old	28	72	47
50+ Years Old	14	30	16
Unknown	3	0	0

*2.6% internal hires in '23 and 0% internal hires in '22 + '21

	2021	2022	2023
Total Turnover Rate	8.2%	18.9%	34.6%
Total Voluntary Turnover	8.2%	15.6%	15.9%
Gender Breakdown			
Male	n/a	15.6%	27.2%
Female	n/a	3.3%	7.4%
Global Breakdown			
United States	n/a	16.46%	31.7%
United Kingdom	n/a	0%	0.6%
Switzerland	n/a	2.47%	1.1%
Germany	n/a	0%	0.6%
Other	n/a	0%	0.6%
Age Breakdown			
Under 30 Years Old	n/a	2.47%	6.8%
30-50 Years Old	n/a	9.88%	19.3%
50 + Years Old	n/a	6.58%	8.5%
Unknown	n/a	0%	0%

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL**
- Workforce
- Health & Safety
- Supply Chain
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Workforce

Benefits

We offer employees a range of benefits and support programs including:

- Paid Parental Leave for Primary & Non-primary Caregivers (8-weeks)
- Health & Life Insurance
- Short & Long-term Disability
- 401(k) Match
- Stock Ownership
- Employee Assistance Programs for Workplace Stress Management
- Flexible Working Hours
- Work-from-Home Arrangements
- Part-Time Working Options

Performance

In 2023, Energy Vault implemented an ongoing performance review process to encourage employees and managers to set individual and team priorities. The intention of goal setting is to help coordinate goals with the team and company priorities. The performance review process is structured around continuous feedback on individual and team goals throughout the year, with frequent performance check-ins and feedback incorporated from managers and peers. The performance appraisal process is also structured around compliance with our Codes of Conduct and other key governing documents. Energy Vault intends for 100% of employees to go through this process annually.

Development Programs

The Sustainability Task Force (STF) is focused on upskilling employees and fostering cross-departmental collaboration. The STF meets on a monthly/quarterly cadence with the objective to embed sustainability across departments. The STF currently has 34 members (~16% of FTEs)—more information can be found on page 20.

The Strategic Commercial Insights Fireside is a weekly series focused on industry, customer, and competitive insights. This fireside chat (which sees ~15% FTE participation) brings in Energy Vault employees with specific industry experience to share their expertise with a diverse and cross-departmental audience. Its ultimate objective is to help inform commercial strategy and decision-making in the evolving energy storage and management space.

Compensation

Compensation data was added to our disclosures in 2023 as we work to increase pay transparency at Energy Vault. The following metrics include all 2023 salaries and will be updated on an annual basis.

	Median	Mean
Avg. Employee Compensation (w/o CEO)	\$186,000	\$210,633
Pay Ratio: CEO to Workforce	8.7 : 1	7.7 : 1

	2021	2022	2023
Human Capital ROI ((A - (B - C)) / C)	\$(1.47)	\$1.32	\$3.56
(A) Total Revenue	\$0	\$145,877,000	\$341,543,000
(B) Total Opex	\$29,537,000	\$122,300,000	\$124,300,000
(C) Employee Related Expenses	\$11,950,000	\$72,694,000	\$84,955,000

	2022	2023
Workforce Development - Training Hrs/FTE	0.82	19
Workforce Development - \$ Spend/FTE	\$152	\$1609
Gender Breakdown		
Hours / Male FTE	0.81	19.46
Hours / Female FTE	0.87	19.51
Employee Level Breakdown		
Hours / FTE (manager and above)	1	19.9
Hours / FTE (below manager)	0.79	14.9

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- Workforce
- Health & Safety
- Supply Chain
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Occupational Health & Safety Management

Energy Vault recognizes that the safety and health of our employees, including contractors and other individuals working under our supervision, is one of our most important business considerations. Energy Vault believes that no task is so urgent that it must be performed in a dangerous manner. No Energy Vault employee will be required to do a job that they consider unsafe. The company takes steps to comply with all statutory, regulatory, and industry workplace safety and health requirements, and it maintains occupational safety and health standards that equal or exceed the best practices in the industry. A safety committee, consisting of management and employee representatives, will be established to identify hazards and unsafe work practices, remove obstacles to accident prevention, and help evaluate the company’s effort to achieve an accident-and-injury-free workplace. Energy Vault is committed to the continuous improvement of our OHS management.

In 2023, Energy Vault implemented occupational health and safety [OHS] management system at the R&D site in Arbedo-Castione to cover all on-site workers (internal and external) and R&D activities. This system was implemented by the SUVA method and is focused on danger identification and risk assessment. The directives of the Swiss Federal Commission CFSL are followed. We are currently working on the implementation of an OHS management system certified under ISO 45001 to cover 100% of Energy Vault employees, as well as office and site locations. Contractors are expected to have their own OHS management systems and safety plans that align with Energy Vault and client requirements.

	2021		2022		2023	
	Rate*	Number	Rate*	Number	Rate*	Number
Employee OHS Metrics						
Work-Related Ill Health	n/a	0	n/a	0	n/a	0
Work-Related Injury	0	0	0	0	0	0
High Consequence Work-Related Injury	0	0	0	0	0	0
Fatalities	0	0	0	0	0	0
Contractor OHS Metrics						
Work-Related Ill Health	n/a	0	n/a	0	n/a	0
Work-Related Injury	0	0	12.09	1	0	0
High Consequence Work-Related Injury	0	0	0	0	0	0
Fatalities	0	0	0	0	0	0

*rates are calculated on 200,000 hours worked

Site Safety

At project sites, risk identification is done through a job safety analysis (JSA) by the general contractor. This JSA is documented in related reports and worksheets. Daily site toolbox talks are held to identify hazards and discuss mitigation plans. All incidents go through an investigation process with root cause analysis (RCA). Every project has a Safety Manager or Supervisor with the necessary OSHA 10 or 30 training. Every project has a unique risk mitigation plan, which is communicated to onsite workers directly to highlight residual safety risks uncovered in the site location risk assessment and to clearly outline how to manage site specific risk scenarios. Identified risks are covered with specific safety measures and procedures, mandatory trainings, proper equipment/ PPE, or supervision by safety manager.

Site safety orientations are held for everyone on site: employees, contractors, and visitors. All workers are invited and urged to contribute to improving safety conditions at work, reporting any anomalies found, stopping work in case of danger, notifying their superior if they are unable to eliminate the danger independently, and resuming work only when the danger has been eliminated. At the R&D site, specific training courses include (but are not limited to) forklift/crane driving licenses, work at height training, correct use of anti-fall PP, first aid, and general health and safety training.

Energy Vault supports location-based health programs for employees/workers that include vaccination, PPE support, and yearly medical check-ups.

Supply Chain

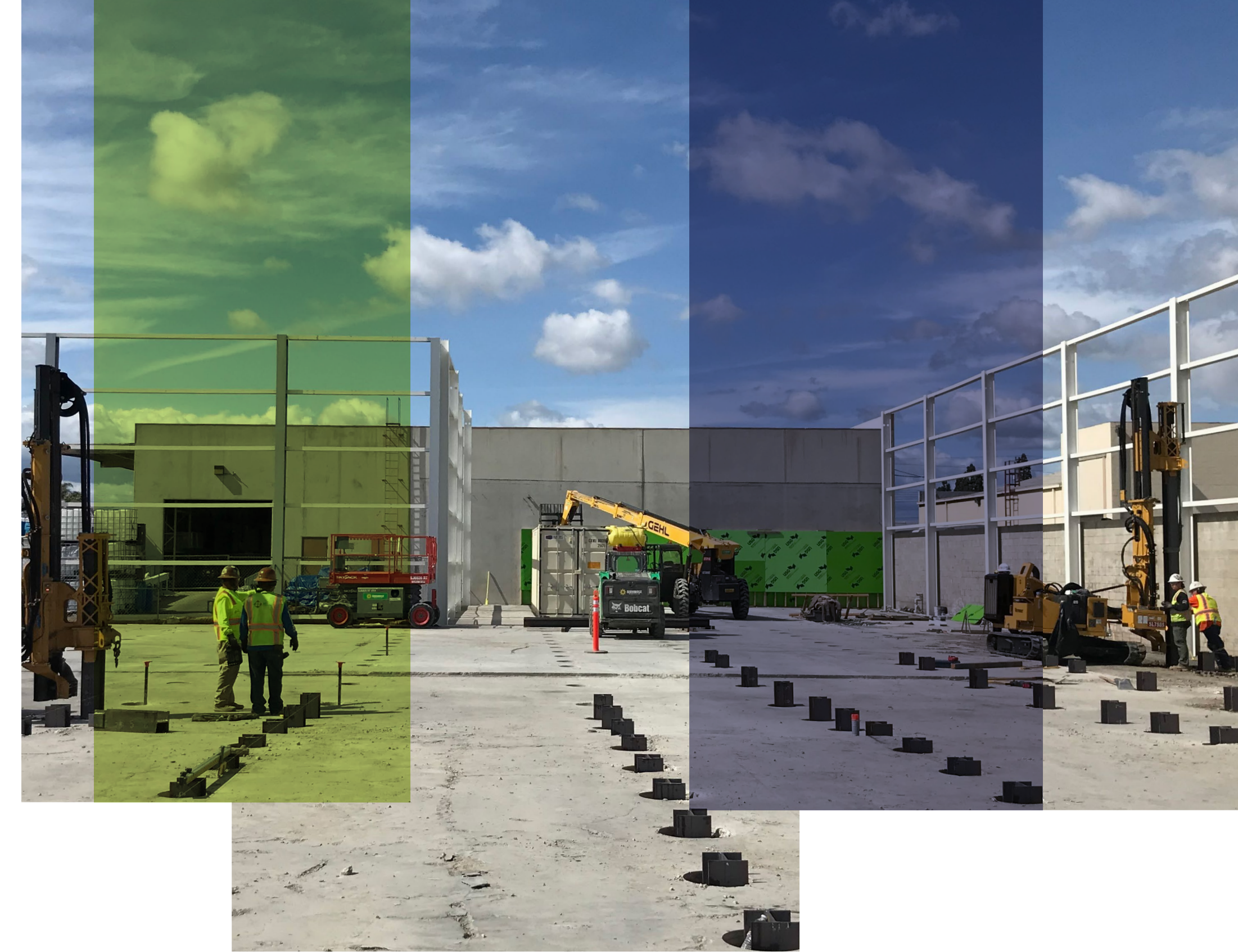
Supply Chain Strategy

Energy Vault enhanced supply chain management practices and transparency in 2023 by successfully implementing GEP smart e-sourcing and contract modules. This software helps to improve data visibility/control and streamlines the data collection process. We published our Supplier Code and launched our supplier pre-qualification questionnaire. These cover various ESG and business relevance issues as well as risks relevant to specific commodities, sectors, and countries. Energy Vault expects all partners to adhere to the guidelines included in the Supplier Code of Conduct and reserves the right to audit compliance.

We continue to track compliance with our Supplier Code of Conduct and completion of our Supplier Screening through GEP and expect to see our data covering total suppliers screened via assessment to increase into 2024. We continue to build out our standard operating procedures and policies to improve efficiency, increase compliance, and reduce manual work. We plan to further develop our supplier screening process in 2024 and will outline specific thresholds for ESG requirements. Oversight of the implementation of our supplier ESG program is the ultimate responsibility of executive management.

	2023
Total Tier 1 Suppliers	1405
Total significant suppliers in Tier 1	22
% spend on significant suppliers in Tier 1	51%
Total suppliers screened via assessment*	6
% of significant suppliers assessed	27%
Suppliers assessed with substantial actual/potential negative impacts	0

*supplier assessment includes environmental, social, and governance criteria



- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- Workforce
- Health & Safety
- Supply Chain
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES

Leadership Team

Executive Leadership

Energy Vault's business is conducted by the company's employees, managers, and officers, under the direction of the Company's CEO and the oversight of the Board, to enhance the long-term value of the Company and seek the best interests of the Company's stockholders. Energy Vault stakeholders, including employees, share a passion to combat climate change through innovation in energy storage technologies. With our vast global network in leadership, management, and contribution, we believe Energy Vault is well-

positioned to meet the large and currently unmet demand for sustainable and economical energy storage for renewable energy generation worldwide. We are honored to have established strong governance that allows us to serve customer needs while accelerating adoption and deployment of the technology. Our global management team is focused on accelerating the adoption and implementation of our technology to provide flexibility to deploy, at scale, customized solutions for our identified target customers.



Robert Piconi
Chairman, Co-Founder
& Chief Executive Officer



Laurence Alexander
Chief Marketing
Officer



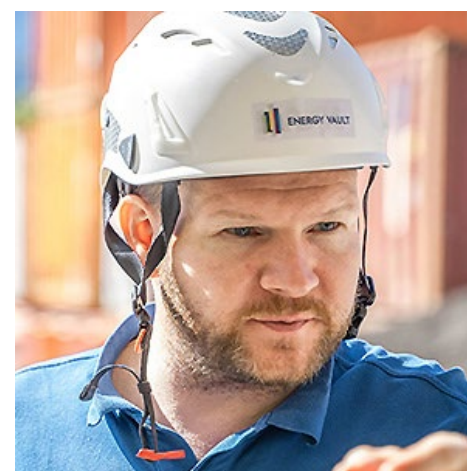
Gonca Icoren
Chief People
Officer



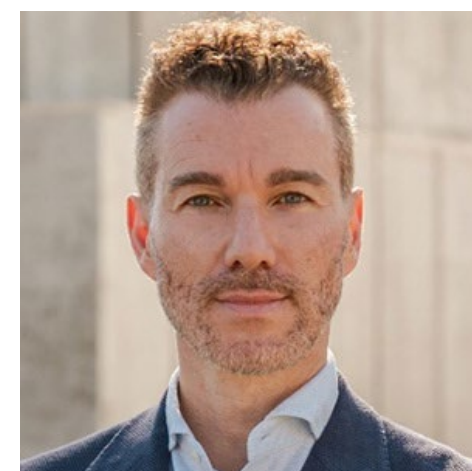
Chris Wiese
Chief Operations
Officer



Jan Kees van Gaalen
Chief Financial
Officer



Andrea Pedretti
Co-Founder &
Chief Technology Officer



Marco Terruzzin
Chief Product &
Commercial Officer



Akshay Ladwa
Chief Engineering
Officer EVS™



Josh McMorrow
Chief Legal
Officer



Kevin Keough
Senior Vice President
Corporate Development

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
 - Leadership Team
 - Business Ethics
 - Risk Management
 - Policies & Commitments
- CONCLUSION
- APPENDIX
- DISCLOSURES

Leadership Team

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
 - Leadership Team ●●
 - Business Ethics
 - Risk Management
 - Policies & Commitments
- CONCLUSION
- APPENDIX
- DISCLOSURES

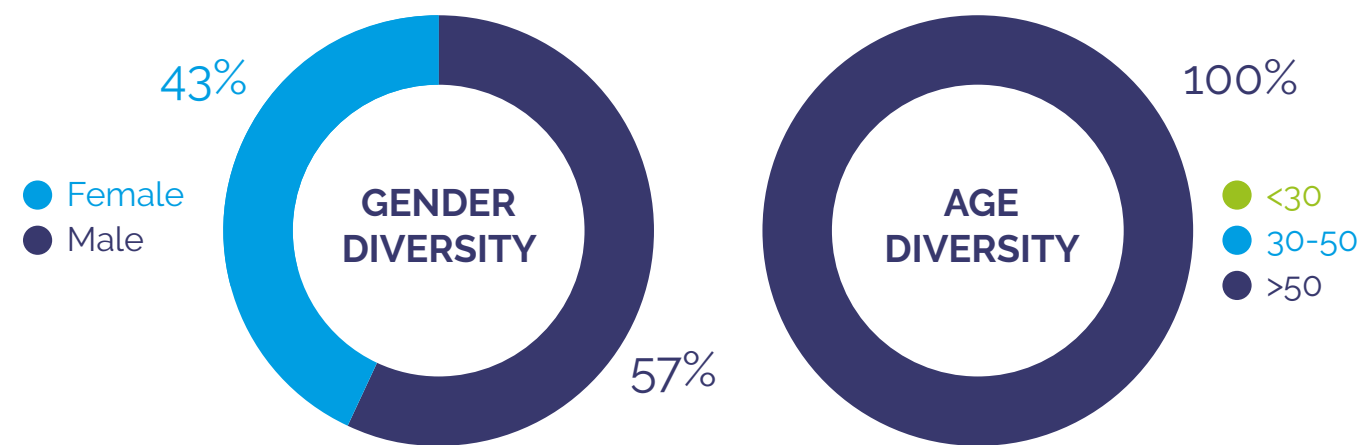
Board of Directors

The Energy Vault Board of Directors is elected by the stockholders to oversee management duties and responsibilities. In fulfilling their responsibilities, both management and the Board are bound by their fiduciary duties under applicable law. Both the Board and management recognize that the long-term interests of stockholders are advanced by responsibly addressing the concerns of other stakeholders and interested parties, including employees, recruits, customers, suppliers, communities, government officials, and the public at large. The Board also takes responsibility for providing oversight on sustainability initiatives, including climate-related issues at least annually.

- [> Corporate Governance Guidelines](#)
- [> Charter of the Audit Committee of the Board of Directors](#)
- [> Charter of the Nominating and Corporate Governance Committee of the Board of Directors](#)
- [> Compensation Committee Charter](#)

Compensation Committee

The purpose of the Compensation Committee of the Board of Directors of Energy Vault Holdings, Inc. is to assist Board oversight of the forms and amount of compensation for the Company's executive officers, to administer the Company's incentive plans for employees and other service providers, including the Company's equity incentive plans. The published Charter sets forth the composition, authority, and responsibilities of the Committee.



Audit Committee

The Energy Vault Board of Directors Audit Committee oversees the management of risks associated with the Company's financial reporting, accounting, and auditing matters, including the Company's guidelines and policies with respect to risk assessment and risk management. Such oversight includes reviewing the Company's cybersecurity and other information technology risks, controls, and procedures, including the Company's plans to mitigate cybersecurity risks and to respond to data breaches. The Committee also reviews with management any specific cybersecurity issues that could affect the adequacy of the Company's internal controls. In 2023, ESG was added to the Audit Committee's oversight and management responsibilities. The committee is responsible for assessing risks across the organization, including sustainability and climate related risks.



Robert Piconi
Chairman,
Co-Founder & CEO



Bill Gross
Co-Founder
& Director



Mary Beth Mandanas
Director



Thomas Ertel
Director



Stephanie Unwin
Director



Theresa Fariello
Director



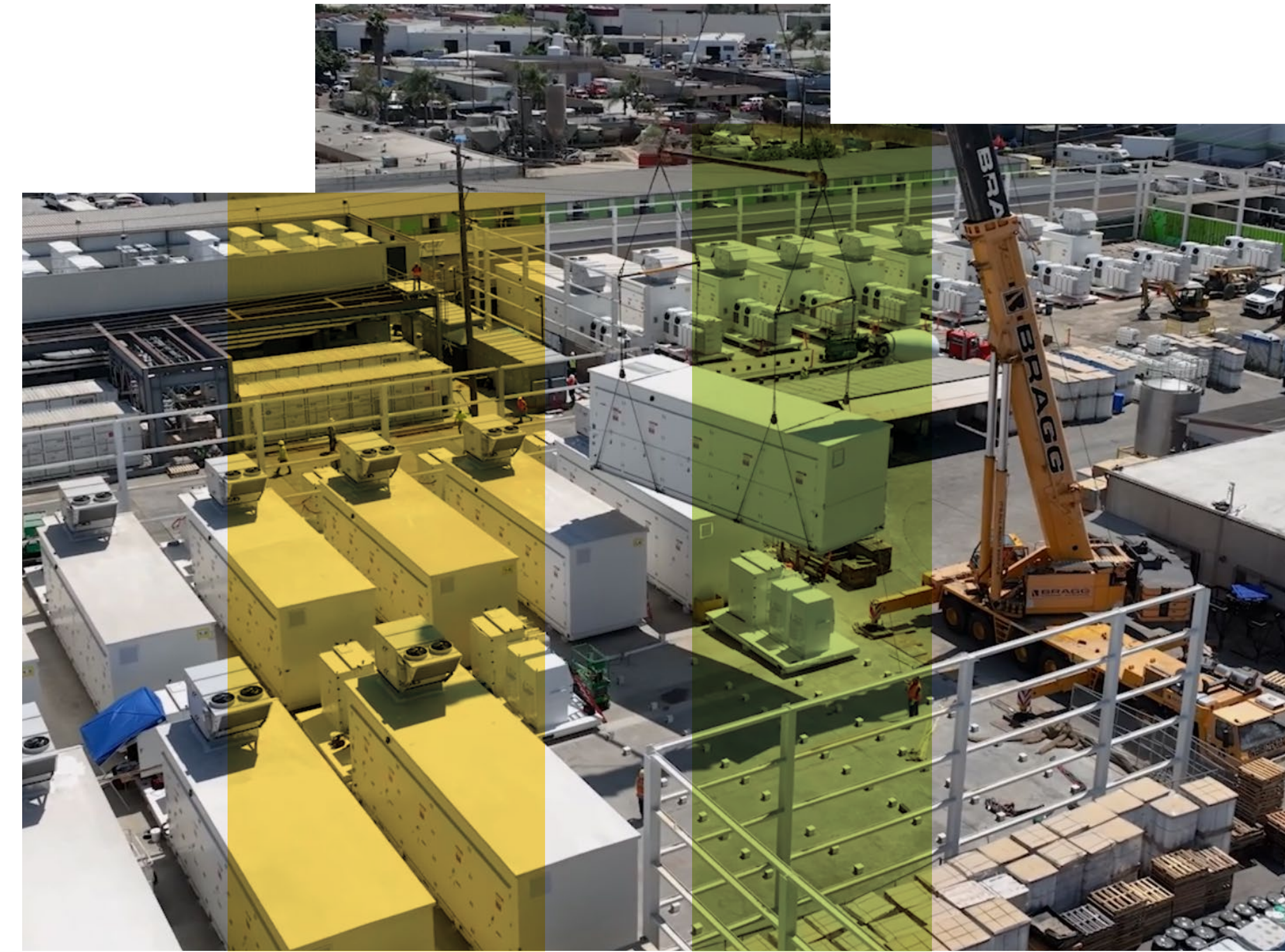
Larry Paulson
Director

Policy Influence and Contributions

In an effort to increase transparency, Energy Vault added policy influence contributions to its public disclosures in 2023. We believe that our ongoing support of trade associations/political campaigns and our use of lobbying firms further our mission to be a champion of sustainable energy. Our intent is for Energy Vault’s position on public policies relating to climate change to be aligned with the Paris Agreement. We are developing the proper steps to track the climate alignment of our policy influence across jurisdictions and utilize ongoing monitoring in an effort to confirm our trade associations and direct lobbying are aligned with the Paris Agreement.

Energy Vault’s largest expenditure in 2023 was for lobbying efforts related to the Inflation Reduction Act (IRA). Energy Vault is strongly in support of the IRA and the expenditure to Bracewell LLP (\$340,000 in ‘23) was to ensure that Energy Vault’s unique energy storage solutions were covered under the policies and incentives of the IRA. Energy Vault also supports trade associations that advance our corporate mission. The California Energy Storage Alliance [CESA] supports and advances all forms of energy storage in California. Our participation in CESA (\$40,000 in ‘23) shows our commitment to advancing the role of energy storage in the electric power sector through policies, programs, and innovation. The Long Duration Energy Storage [LDES] Council looks to accelerate global decarbonization through the advancement of long duration energy storage. Our participation in the LDES Council (€65,000 in ‘23) shows our commitment to accelerating the development and deployment of long duration energy storage solutions.

	2021	2022	2023
Total Policy Contributions (\$USD)	16,500	196,500	528,473
Lobbying	n/a	170,000	340,000
Political Campaigns	n/a	10,000	12,500
Trade Associations	16,500	16,500	175,973
Other	0	0	0



Risk Management

INTRODUCTION

COMPANY

CEO MESSAGE

IN THE VAULT

CLIMATE ACTION

ENERGY MARKET

SOLUTIONS

SUSTAINABILITY

RESPONSIBLE BUSINESS

STRATEGY

INNOVATION

GLOBAL ALIGNMENT

ACCOUNTABILITY

TRANSPARENCY

ENVIRONMENTAL

SOCIAL

GOVERNANCE

Leadership Team

Business Ethics

Risk Management

Policies & Commitments

CONCLUSION

APPENDIX

DISCLOSURES

Risk Management

Energy Vault's risk management processes are covered in our annual 10-K and proxy filings. Our Board of Directors has an active role, as a whole and also at the committee level, in overseeing the management of our risks. We believe that our Board's leadership structure supports effective risk management because it allows independent directors at the board level and on our committees to exercise oversight over management. At an operational level, Josh McMorrow (Chief Legal Officer) is the highest ranking Energy Vault employee with dedicated risk management responsibility. Josh reports up to Energy Vault's CEO and Board of Directors.

Energy Vault conducted an in-depth quality risk assessment in line with ISO 9001. Risks were assessed in many key areas, including project management, HR management, supply chain, product development, and environmental impact. Risks are broken down into their danger, trigger, and impact. Risks are then plotted on a matrix (Risk versus Probability) and the necessary measures and mitigation plans are developed. Specific physical risk assessments are conducted for products and technologies tested by Energy Vault; results are communicated to necessary employees and workers. Energy Vault also leverages a Learning Management System to distribute and track courses meant to educate employees on risk management. Courses cover important topics like security awareness and legal trainings in line with conducting business according to the highest standards of ethical conduct.

Cybersecurity

Information Technology / Cybersecurity management is also built into these risk management structures. Energy Vault's CIO, Rich Espy, has overall responsibility for the effective implementation of Information Operations policies, while the Audit Committee is ultimately responsible for overseeing the management of risks relating to privacy and cybersecurity.

	2021	2022	2023
Total Breaches of Company Policies	0	0	0
Breakdown by Type			
Corruption or Bribery	0	0	0
Discrimination or Harassment	0	0	0
Customer Privacy Data	0	0	0
Conflicts of Interest	0	0	0
Money Laundering or Insider Trading	0	0	0



Policies & Commitments

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- Leadership Team
- Business Ethics
- Risk Management
- Policies & Commitments
- CONCLUSION
- APPENDIX
- DISCLOSURES

Policy Development

Sustainability at Energy Vault has been standardized and managed through specific policies/commitments, management processes and practices that are reinforced throughout the company and by the Sustainability Task Force. Energy Vault policies are continually published and updated as we strive to comply with local laws/regulations. Our goal is to align our policies with global and industry leaders. Energy Vault developed some key policies in 2023 (outlined below), and the table displays the current status and location of our ESG policies.

Key Policy Development in 2023:

- Human Rights Policy & Modern Slavery Statement – Energy Vault is committed to upholding human rights throughout operation and value chain. Energy Vault’s Human Rights Policy & Modern Slavery Statement is in alignment with the United Nations Universal Declaration of Human Rights, and the Company strives to promote human rights in all areas where we operate.
- Biodiversity Policy – We recognize the importance of considering biodiversity in Energy Vault’s daily decision-making process along the entire value chain. We strive to fulfill the responsibility of preserving the biodiversity of the territories in which we conduct business and have set the goal to achieve net positive impact on biodiversity by 2050.
- Supplier Code of Conduct [CoC] & Procurement and Supply Chain ESG Practices Statement – The Supplier CoC outlines the basic requirements for all suppliers, subcontractors, and partners of Energy Vault. We began tracking compliance with this document in 2023 and published the Procurement and Supply Chain ESG Practices Statement.

Policy Type	Status
Environmental	
Quality & Environmental Policy	Public
Environmental Management Plan (ISO 14001)	Public Certificate
Biodiversity Commitment	Public
No Deforestation Commitment	Public
Net-Zero Commitment	Public
Construction Management Plan	Private
Waste Management Plan	2024
Product End-of-Life Management Plan	2024
Social	
Discrimination & Harassment Policy	Code of Conduct
Human Rights Policy	Public
Modern Slavery Statement	Public
OHS Statement	Public
OHS Management Plan	Private
Governance	
Board Diversity Policy	2024
JEDI Commitment	2024
Code of Conduct	Public
Anti-Corruption & Bribery Policy	Q1 '24
Insider Trading Policy	Private
Supplier Code of Conduct	Public
Procurement and Supply Chain ESG Practices Statement	Public
Conflict Minerals Commitment	Public
Quality Management Plan (ISO 9001)	Public Certificate
Quality Assurance Program Manual	Private

Looking Forward

Closing Statement

This year, Energy Vault invested significant effort in building upon our outlined sustainability strategy. Our team took full advantage of the infrastructure that was built in the previous year. Our teams pushed towards our goals, capitalized on engagements, and produced results. Our efforts were validated by S&P Global's Corporate Sustainability Assessment, which resulted in a 200% increase in our ESG score over the previous year. Although we are very proud of the steps we've made to increase our ESG score, we know there is a lot more to do. Action is needed now to improve the health of the planet, the people, plants, and animals that call Earth home. Energy Vault is focused on the one category that has the most impact on climate change, the energy transition. However, to the extent possible, our champions will keep all Sustainable Development Goals in mind in a global effort to improve life for future generations. Our team will strive to address inequalities when we are made aware of them. The Energy Vault team is built by innovators and doers passionate about the work that lies ahead. The time for action has never been more pressing, and every hour the need is greater.

At COP28, world leaders agreed to transition away from fossil fuels in energy systems in a just, orderly, and equitable manner. COP28 reinforced renewed enthusiasm for clean energy finance and inked a unifying goal, signed by more than 120 nations, to triple renewable energy and double energy efficiency. We have seen the initial advantages that proven and cost competitive technologies for renewable, efficient, clean energy can support economic development and employment, while contributing to energy independence and security. These advantages bolster Energy Vault's mission in our pursuit to enable a sustainably energized world.

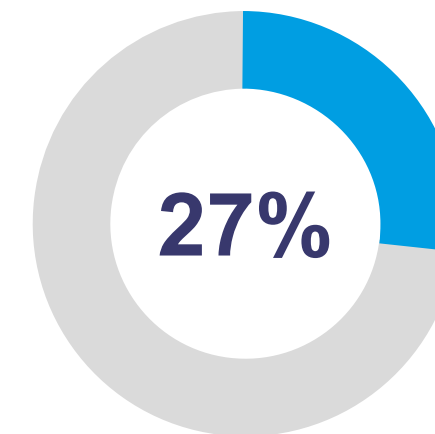
In our 2023 Corporate Sustainability Report, you will have noticed the goals we have set for 2024 and beyond. One of those includes our approved Science Based Targets in line with the Paris Agreement to reduce our Scope 1 + 2 emissions by 42% by 2030. Moving into 2024, we plan to partner with our stakeholders to collectively work to have a greater impact on the energy transition, climate change, and society. Our teams will engage with the UN Global Compact on topics like Human Rights, SDGs, and submit our first Communication On Progress. We will work with our supply chain to understand, track, and improve Scope 3 emissions with our partners. At Energy Vault, circular economy and resource conservation are not just buzz words, they are strategic priorities and material topics. As we move forward with our strategy and meet our goals to become a global leader in sustainability, we are committed to sharing our journey with our stakeholders.



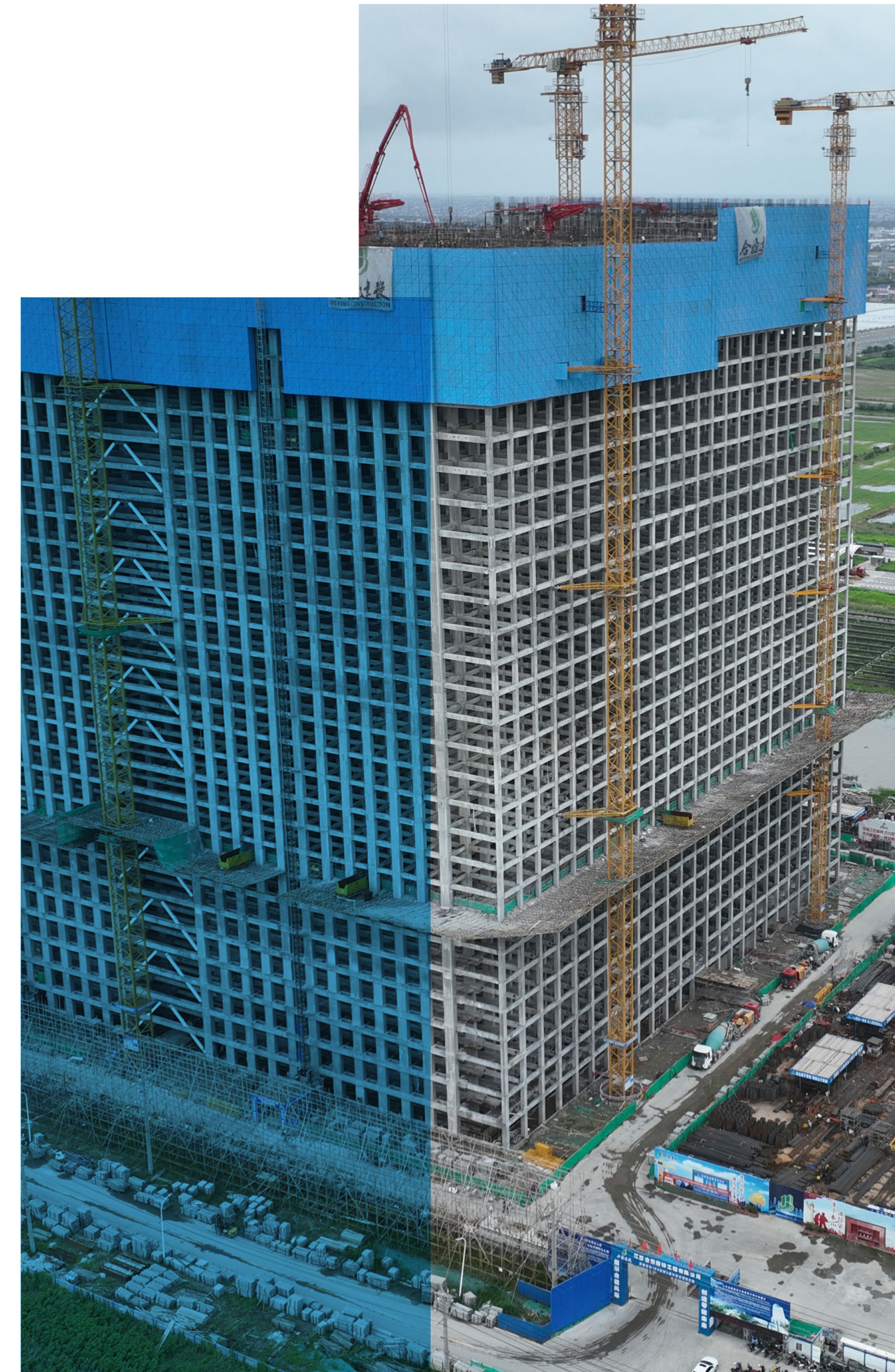
Michael Van Parys
Michael Van Parys, AIA, LEED AP
Director of Sustainability
mvp@energyvault.com



100% of Energy Vault Executive Leadership participated in this report



27% of Energy Vault staff participated in this report



Appendix – GRI Content Index

Energy Vault Holdings, Inc. has reported in accordance with the GRI Standards for the period January 1, 2023 through December 31, 2023.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
 - GRI Content Index ● ● ●
 - References
 - DISCLOSURES

GRI Standard/Disclosure	Content	Omissions/Remarks	Material Topics
GRI 1 used			
GRI 1: Foundation 2021			
GRI 2: General Disclosures 2021			
2-1 Organizational details	A) Energy Vault Holdings, Inc. B) Publicly traded company & incorporated entity C) Westlake Village, California, USA D) See 10K		
2-2 Entities included in the organization's sustainability reporting	A) Energy Vault Holdings, Inc. and all subsidiaries B) Indicators cover all activities consolidated for financial reporting purposes C) See 10K		
2-3 Reporting period, frequency and contact point	A) 1 January 2023 to 31 December 2023, published annually B) Aligned with financial reporting C) Published on March 15, 2024 D) Michael Van Parys, Director of Sustainability, mvp@energyvault.com		
2-4 Restatements of information	We identified a conversion error in our carbon accounting & a calculation error for Scope 3 emissions during a QA check in '23. These errors affected energy consumption & scope 3 disclosures and have been corrected for this reporting period.		
2-5 External assurance	Energy Vault plans to seek assurance on this report in mid-2024.		
2-6 Activities, value chain and other business relationships	See 10K		
2-7 Employees	See Workforce		
2-8 Workers who are not employees	Energy Vault uses contractors across operations for project construction.	Information incomplete: only reported as total hours worked for OHS disclosures.	
2-9 Governance structure and composition	See Proxy / 10K		
2-10 Nomination and selection of the highest governance body	See Proxy / 10K		
2-11 Chair of the highest governance body	See Proxy / 10K		
2-12 Role of the highest governance body in overseeing the management of impacts	See Proxy / 10K		
2-13 Delegation of responsibility for managing impacts	See Proxy / 10K		
2-14 Role of the highest governance body in sustainability reporting	Internal review of CSR progresses through review with subject matter experts, the legal team, and the executive committee, with final sign off from the board of directors.		
2-15 Conflicts of interest	See Proxy / 10K		
2-16 Communication of critical concerns	See Proxy / 10K		
2-17 Collective knowledge of the highest governance body	See Proxy / 10K		
2-18 Evaluation of the performance of the highest governance body	See Proxy / 10K		
2-19 Remuneration policies	See Proxy / 10K		
2-20 Process to determine remuneration	See Proxy / 10K		
2-21 Annual total compensation ratio	See Workforce		

GRI Standard/Disclosure	Content	Omissions/Remarks	Material Topics
2-22 Statement on sustainable development strategy	See CEO Message		
2-23 Policy commitments	See Code of Conduct / Global Labor & Human Rights / Policies & Commitments		
2-24 Embedding policy commitments	See Policies & Commitments		
2-25 Processes to remediate negative impacts	See Policies & Commitments		
2-26 Mechanisms for seeking advice and raising concerns	See Code of Conduct		
2-27 Compliance with laws and regulations	Energy Vault had no instances of non-compliance with laws and regulations in 2023. See Risk Management		
2-28 Membership associations	See Business Ethics		
2-29 Approach to stakeholder engagement	See Proxy / 10K		
2-30 Collective bargaining agreements	A) 0.6% of employees covered by collective bargaining, see 10K B) All other employees are hired at-will		
GRI 3: Material Topics 2021			
3-1 Process to determine material topics	See Materiality Assessment		
3-2 List of material topics	See Materiality Assessment		
GRI 201: Economic Performance 2016			
201-1 Direct economic value generated and distributed	See 10K		
201-2 Financial implications and other risks and opportunities due to climate change	See TCFD Report		
GRI 205: Anti-Corruption 2016			
3-3 Management of material topics	See Governance / 10K / Code of Conduct / Sustainability Strategy / TCFD Report		☑
205-1 Operations assessed for risks related to corruption	Energy Vault's risk management process covers 100% of operations		☑
205-2 Communication and training about anti-corruption policies and practices	Information unavailable: Energy Vault has policies and trainings specific to anti-corruption, but is unable to track completion by employee and region		☑
205-3 Confirmed incidents of corruption and actions taken	See Risk Management		☑
GRI 301: Materials 2016			
3-3 Management of material topics	See Environmental / Quality & Environmental Management / Sustainability Strategy / TCFD Report		☑
301-1 Materials used by weight or volume	See Resource Consumption	Information incomplete: Energy Vault does not currently track material use by renewable material used.	☑
301-2 Recycled input materials used	Information unavailable: Energy Vault does not currently track recycled input material used in product manufacturing.		☑

Appendix – GRI Content Index

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
 - GRI Content Index ● ● ●
 - References
 - DISCLOSURES

GRI Standard/Disclosure	Content	Omissions/Remarks	Material Topics
301-3 Reclaimed products and their packaging materials		Information unavailable: No Energy Vault products have reached end-of-life	☑
GRI 302: Energy 2016			
3-3 Management of material topics	See Environmental / Quality & Environmental Management / Sustainability Strategy / TCFD Report		☑
302-1 Energy consumption within the organization	See Resource Consumption		☑
302-2 Energy consumption outside of the organization		Information unavailable: Energy Vault is not currently able to fully track energy consumption outside of the organization.	☑
302-3 Energy intensity	See Resource Consumption		☑
302-4 Reduction of energy consumption		Information unavailable: Energy Vault has not yet directly reduced consumption through conservation and efficiency initiatives.	☑
302-5 Reductions in energy requirements of products and services		Information unavailable: Energy Vault tracks product energy requirements via LCA software; delivered first products in '23 - no base year with which to compare.	☑
GRI 303: Water and Effluents 2018			
303-1 Interactions with water as a shared resource	See Resource Consumption		
303-5 Water consumption	See Resource Consumption	Information incomplete: Energy Vault does not currently track consumption in water-stress areas.	
GRI 304: Biodiversity 2016			
304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Energy Vault does not currently have any operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		
GRI 305: Emissions 2016			
3-3 Management of material topics	See Greenhouse Gas Emissions / Quality & Environmental Management / Sustainability Strategy / TCFD Report		☑
305-1 Direct (Scope 1) GHG emissions	See Greenhouse Gas Emissions		☑
305-2 Energy indirect (Scope 2) GHG emissions	See Greenhouse Gas Emissions		☑
305-3 Other indirect (Scope 3) GHG emissions	See Greenhouse Gas Emissions		☑
305-4 GHG emissions intensity	See Greenhouse Gas Emissions		☑
305-5 Reduction of GHG emissions		Information unavailable: Energy Vault is not currently able to report this information	☑
305-6 Emissions of ozone-depleting substances (ODS)		Information unavailable: Energy Vault is not currently able to report this information	☑
305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		Information unavailable: Energy Vault is not currently able to report this information	☑

GRI Standard/Disclosure	Content	Omissions/Remarks	Material Topics
GRI 306: Waste 2020			
3-3 Management of material topics	See Waste Management / Quality & Environmental Management / Sustainability Strategy / TCFD Report		☑
306-1 Waste generation and significant waste-related impacts	See Waste Management		☑
306-3 Waste generated	See Waste Management		☑
306-4 Waste diverted from disposal	See Waste Management		☑
306-5 Waste directed to disposal	See Waste Management		☑
GRI 308: Supplier Environmental Assessment 2016			
3-3 Management of material topics	See Supply Chain / Supplier Code of Conduct / Sustainability Strategy / TCFD		☑
308-1 New suppliers that were screened using environmental criteria	See Supply Chain		☑
308-2 Negative environmental impacts in the supply chain and actions taken	See Supply Chain		☑
GRI 401: Employment 2016			
3-3 Management of material topics	See Social / Code of Conduct / Sustainability Strategy / TCFD		☑
401-1 New employee hires and employee turnover	See Social		☑
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Full-time and part-time employees are eligible for all EV benefits. The exception is health benefits, where part-time employees, working less than 30 hours per week, are not eligible. See Social		☑
401-3 Parental leave	All employees are entitled to paid parental leave. This benefit was implemented towards the end of 2023 and no employees have used it yet. See Social		☑
GRI 403: Occupational Health and Safety 2018			
3-3 Management of material topics	See Health & Safety / Safety Statement & Goals / Code of Conduct / Sustainability Strategy		☑
403-1 Occupational health and safety management system	See Health & Safety		☑
403-2 Hazard identification, risk assessment, and incident investigation	See Health & Safety		☑
403-3 Occupational health services	See Health & Safety		☑
403-4 Worker participation, consultation, and communication on occupational health and safety	See Health & Safety		☑
403-5 Worker training on occupational health and safety	See Health & Safety		☑
403-6 Promotion of worker health	See Health & Safety		☑
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	See Health & Safety		☑
403-8 Workers covered by an occupational health and safety management system	See Health & Safety		☑
403-9 Work-related injuries	See Health & Safety		☑
403-10 Work-related ill health	See Health & Safety		☑

Appendix – GRI Content Index

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
 - GRI Content Index ● ● ●
 - References
 - DISCLOSURES

GRI Standard/Disclosure	Content	Omissions/Remarks	Material Topics
GRI 404: Training and Education 2016			
404-1 Average hours of training per year per employee	See Social		
404-2 Programs for upgrading employee skills and transition assistance programs	See Social		
404-3 Percentage of employees receiving regular performance and career development reviews	See Social		
GRI 405: Diversity and Equal Opportunity 2016			
405-1 Diversity of governance bodies and employees	See Board of Directors / Social		
GRI 406: Non-Discrimination 2016			
406-1 Incidents of discrimination and corrective actions taken	Energy Vault had no reported instances of discrimination in the reporting period		
GRI 414: Supplier-Social Assessment 2016			
3-3 Management of material topics	See Supply Chain / Supplier Code of Conduct / Sustainability Strategy / TCFD		☑
414-1 New suppliers that were screened using social criteria	See Supply Chain		☑
414-2 Negative social impacts in the supply chain and actions taken	See Supply Chain		☑
GRI 416: Customer Health & Safety 2016			
3-3 Management of material topics	See Risk Management / Code of Conduct / Global Labor & Human Rights / Sustainability Strategy		☑
416-1 Assessment of the health and safety impacts of product and service categories	100% of products. See Risk Management		☑
416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Energy Vault had no such compliance issues in the reporting period		☑
GRI 418: Customer Privacy 2016			
3-3 Management of material topics	See Risk Management / Code of Conduct / Sustainability Strategy		☑
418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Energy Vault did not receive any substantiated complaints or identify any leaks, theft, or losses of customer data in the reporting period. See Risk Management		☑

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
 - GRI Content Index
 - References
 - DISCLOSURES

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Disclosures

Important Notes About This Report

This report contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical facts contained in this report, including statements regarding our future results of operations or financial condition, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties, and other important factors that are in some cases beyond our control and may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will” or “would” or the negative of these words or other similar terms or expressions.

You should not rely on forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this report primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and operating results. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the Risk Factors and elsewhere in our Annual Report on Form 10-K and subsequent filings. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this report. State and federal level regulation may also create certain additional compliance costs and barriers in the future. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

Additionally, our discussions of ESG assessments, goals and relevant issues herein are informed by various ESG standards and frameworks (including standards for the measurement of underlying data), and the interests of various stakeholders. References to “materiality” in the context of such discussions and any related assessment of ESG “materiality” may differ from the definition of “materiality” under the federal securities laws for SEC reporting purposes. Moreover, given the uncertainties, estimates, and assumptions required to make some of the disclosures in this report, and the timelines involved, materiality is inherently difficult to assess far in advance. In addition, given the inherent uncertainty of the estimates, assumptions, and timelines contained in this report, we may not be able to anticipate in advance whether or the degree to which we will or will not be able to meet our plans, targets, or goals. Furthermore, much of this information is subject to assumptions, estimates or third-party information that is still evolving and subject to change. Policy developments with respect to the energy markets are unpredictable. For example, our disclosures based on any standards may change due to revisions in framework requirements, availability of information, changes in our business or applicable government policies, or other factors, some of which may be beyond our control.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based on information available to us as of the date of this report. While we believe that information provides a reasonable basis for these statements, that information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely on these statements.

As a final note, website and document references in this report are provided for convenience and are expressly not incorporated by reference into this report.

- INTRODUCTION
- COMPANY
- CEO MESSAGE
- IN THE VAULT
- CLIMATE ACTION
- ENERGY MARKET
- SOLUTIONS
- SUSTAINABILITY
- RESPONSIBLE BUSINESS
- STRATEGY
- INNOVATION
- GLOBAL ALIGNMENT
- ACCOUNTABILITY
- TRANSPARENCY
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- CONCLUSION
- APPENDIX
- DISCLOSURES