

NEWS RELEASE

Long Duration Energy Storage Council Membership More Than Doubles As More Companies Commit To Net-zero Mission

6/23/2022

23 June, 2022 – BRUSSELS – The **Long Duration Energy Storage Council (“The Council”)**, a global executive-led organization focused on replacing the use of fossil fuels to meet energy demand with zero-carbon long duration energy storage, is welcoming an additional six new members. Since the Council’s launch in November 2021 with 24 members, 29 new members have joined within the first two quarters of 2022. Also in 2022, the Council’s **inaugural board of directors** was established and the first **Executive Director** hired.

Joining the LDES Council most recently toward the end of Q2 are six technology members: **Energy Vault, Heatrix, Hydrostor, MGA Thermal, Rye Development, and Storworks.**

These six new members, which represent a mix of LDES technologies targeting decarbonization of both power and heat, continue to build momentum for the LDES Council in developing a membership with diverse perspectives and a broad range of expertise. The organization now has a total of 53 diverse companies in regions across the world representing the full energy value chain – including technology innovators, equipment providers, renewable energy companies, utilities, investors, and end-users.

“Our growing membership is an indication that the Council’s work is moving forward and more important than ever to our goal of a decarbonized world with long duration energy storage at the epicenter,” said LDES Council Executive Director Julia Souder. “As we look at a system wide approach where LDES provides both heat and power flexibility, the broad perspective of our global experts support the acceleration and rapid deployment of long duration energy storage.”

The Council recently launched **two research reports**. One on **24/7 Clean Power Purchase Agreements (PPAs)** and one on **regulatory and policy options**. There is growing demand from power users such as data centers, mining companies, etc. for “24/7 Clean PPAs” which are both a key to driving full grid decarbonization and managing price volatility risks. LDES technologies are a core enabler of cost-efficient round-the-clock clean power, by enabling bulk temporal energy shifting over the course of a day or multi-day period. This report offers a framework for energy consumers, power producers, and technology providers to unlock and accelerate the delivery of 24/7 Clean PPAs.

The regulatory and policy report offers a detailed set of policy and regulatory mechanisms that could be implemented to accelerate commercial maturity of the LDES sector which will be key to delivering a secure, reliable, and ultimately affordable net-zero carbon energy system. To achieve that goal, policy and regulatory support is required to rapidly scale the industry and deliver these imperatives. On the topic of joining the LDES Council, new members made the following comments:

Robert A Piconi, Co-Founder & Chief Executive Officer of Energy Vault, said, “At Energy Vault, our mission is to make carbon free energy a reality through the deployment of sustainable and economical energy storage technologies. Energy Vault is proud to join the Long Duration Energy Storage Council in support of their efforts to raise awareness of the value of energy storage and to advance the deployment of storage technologies that will enable renewable energy to power our economy and accelerate decarbonization.”

Himanshu Tyagi, Co-founder and Managing Partner of Heatrix, stated, “Heatrix is excited to be an active member of LDES council. Decarbonization of our society is a huge challenge that requires collaboration among various stakeholders ranging from regulators, industries, financial institutes and technology solution providers. By bringing the key stakeholders behind a common initiative, LDES council plays a key role to enable Heatrix to closely collaborate with decision makers.”

Curtis VanWalleghem, CEO of Hydrostor, said, “We are pleased to be joining the LDES Council and work towards achieving shared goals with the other members. Hydrostor’s Advanced Compressed Air Energy Storage (or A-CAES) is an important technology addition to the Council as we support long duration energy storage globally to enable an affordable and reliable clean energy transition.”

Dr. Alexander Post, CTO of MGA Thermal, added, “Thermal energy storage is emerging as a key technology in the mix required to achieve stable and reliable power supply from intermittent renewable sources, particularly in applications where storage is required over medium to long durations (days to weeks rather than minutes to hours). The Long Duration Energy Storage Council serves the vital role of benchmarking the various technologies on offer and informing the public. MGA Thermal is thrilled to join the council and look forward to helping support the ecosystem.”

Paul Jacob, CEO of Rye Development, noted, “Rye is at the forefront of a new era of sustainable energy. Core to our work is the responsible development of low-impact, closed loop pumped storage projects to meet the near term demands

of the fully decarbonized grid. Closed loop pumped storage continues to be the cornerstone of utility-scale long duration storage and Rye will continue to lead the development of this critical resource. We at Rye are excited and proud to be developing a proven technology that will ensure the reliability and affordability of the electric grid for generations to come.”

Scott Frazier, CEO of Storworks, said, "storworks is excited to join LDES Council in enhancing the performance and driving down the cost of integrated thermal energy storage solutions, with transformative results compared to traditional fossil fuel alternatives. Long duration energy storage is critical for the integration of renewable energy and the decarbonization of industry, and we welcome the opportunity to showcase the cost-effective performance of Storworks BolderBlocs thermal energy storage technology. We look forward to working with utility and industry partners to integrate our advance and flexible thermal energy storage solution and lead the transition to a low-carbon future."

About the LDES Council

The LDES Council is a global, executive-led non-profit membership organization, comprising technology providers, equipment providers, renewable energy companies, utilities, grid operators, investors, and end-consumers. It strives to accelerate decarbonization of the energy system at lowest cost to society by driving innovation, commercialization and deployment of long duration energy storage. The LDES Council provides fact-based guidance and information to governments, industry and broader society, drawing from the experience of its members which include leading energy companies, technology providers, investors and end-users. To learn more: www.ldescouncil.com.

About Our New Members:

Energy Vault develops and deploys sustainable energy storage solutions designed to transform the world’s approach to utility-scale energy storage in realizing decarbonization while maintaining grid resiliency. The company’s proprietary gravity-based energy storage technology and energy storage management and integration platform are intended to help utilities, independent power producers and large industrial energy users significantly reduce their levelized cost of energy while maintaining power reliability. Utilizing eco-friendly materials with the ability to integrate waste materials for beneficial re-use, Energy Vault is facilitating the shift to a circular economy while accelerating the clean energy transition for its customers. For additional information, please visit: www.energyvault.com.

Heatrix’s mission is to decarbonize industrial heat. Heatrix technology converts intermittent renewable electricity to process heat up to 1500 °C, thereby eliminating the need for fossil fuels. The system combines scalable, modular and easy to integrate electric heater and thermal storage units to enable 24x7 operations. Visit: <https://heatrix.de/>

Hydrostor is a long-duration energy storage solutions provider that provides reliable and affordable utility integration of long-duration energy storage, enabling grid operators to scale renewable energy and secure grid capacity. Hydrostor supports the green economic transition, employing the people, suppliers, and technologies from the traditional energy

sector to design, build, and operate emissions-free energy storage facilities. Hydrostor has developed, deployed, tested, and demonstrated that its patented Advanced Compressed Air Energy Storage (“A-CAES”) technology can provide long-duration energy storage and enable the renewable energy transition. A-CAES uses proven components from mining and gas operations to create a scalable energy storage system that is low-impact, cost-effective, 50+ year lifetime, and can store energy from 5 hours up to multi-day storage where needed. Hydrostor has projects worldwide in various development stages for providing capacity of over 200 MW each. Follow us on **LinkedIn**.

MGA Thermal specialises in the development and production of next generation, purpose engineered thermal energy storage materials. Our patented materials use a composite microstructure to achieve the high energy density of phase change materials, with the safety, low infrastructure cost and ease of use of a continuously solid and modular storage material. We use recycled and sustainable feedstock materials to achieve the minimal possible carbon footprint for our product. MGA also specialises in the use of these materials, providing total TES system design or consultation on integration into pre-existing TES systems as required. Visit: **<https://www.mgathermalstorage.com/>**

Rye Development is a leading U.S. hydropower developer with a current pipeline of over 25 projects in 10 states. Rye’s development of new hydropower on existing dams, in conjunction with financing partner, the Climate Adaptive Infrastructure Fund, and Rye’s development of new closed loop pumped storage, demonstrate Rye’s commitment to the responsible development of untapped hydropower resources while maintaining rivers’ balance of environmental and commercial requirements. Rye brings communities around the country substantial infrastructure, job creation, and a local source of renewable, non-consumptive energy. To learn more, please visit **www.ryedevelopment.com**.

Storworks Power is developing low cost long-duration thermal energy storage in the form of hot concrete for electricity generation and industrial heat & steam applications. Storworks transforms legacy fossil facilities into state-of-the-art renewable energy storage assets at a fraction of the most aggressive future-cost projections for batteries. Storworks BolderBlocs scale to any duration reliably and affordably, integrating with hydrogen or natural gas operations to provide unlimited capacity. Having already deployed award-winning pilot-scale LDES projects in partnership with EPRI in the USA, Storworks is well-positioned to scale to hundreds of megawatts in legacy power plants and industrial heating applications. Founded in 2010, Storworks is headquartered in Denver, Colorado with an additional office in Australia. Visit: **<https://storworks.com/>**

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