

Energy Dome announces funding commitments from Breakthrough Energy Catalyst and the European Investment Bank to support construction of its first standard commercial-scale CO2 Battery

DUBAI - 1 December 2023 - Today, at COP28, Energy Dome has announced funding commitments for its first CO₂-based and innovative thermo-mechanical energy storage system to be located in Sardinia, Italy. Funding will be in the form of a project-level grant commitment of up to €35,000,000 from Breakthrough Energy Catalyst and €25,000,000 Venture Debt financing commitment from the European Investment Bank, both subject to the satisfaction of funding conditions. The funds are being made available through the EU-Breakthrough Energy Catalyst partnership.

Breakthrough Energy Catalyst funds and invests in first-of-a-kind commercial projects for emerging climate technologies. By investing in these opportunities, Catalyst seeks to accelerate the adoption of these technologies worldwide and reduce their costs.

The European Investment Bank, also recognizing the transformative potential of Energy Dome's CO₂ Battery to combat climate change and be a clean technology champion in Europe, is expected to provide €25,000,000 of Venture Debt financing, backed by InvestEU, to the project. The EU aligns capital with Catalyst using funds available from Horizon Europe & Innovation Fund through the InvestEU Program with the European Investment Bank, as implementing partner of the European Commission.

This combined investment is an endorsement of Energy Dome's ready-to-be-deployed, long-duration energy storage proposition. Energy Dome's robust performance (high round-trip efficiency) and capital expenditure requirements are significantly more competitive than the Lithium-Ion benchmark, providing a solution to the critical problem of utility-scale long-duration energy storage, which is at the core of the renewable energy transition.

The project will use a standard frame 20MW/200MWh CO₂ Battery, which can supply energy to the grid for ten consecutive hours. It will be the first of a series of identical units using the same technology design, allowing Energy Dome to unlock cost reductions and accelerate the bankability of future units of the modular, standardized CO₂ Battery frames. The CO₂ Battery does not use materials from rare metals and its main components are based on already existing and known supply chains enabling job creation within Europe.

The Commercial Operation Date of the storage facility is expected to take place in the third quarter of 2024.

Claudio Spadacini, Founder and CEO of Energy Dome, said: "What better time than during COP28 to announce the collaboration with the EU-Breakthrough Energy Catalyst partnership, which is a true catalyst for our company. The collaboration will accelerate the commercialization of our market-ready technology and will be the first of many identical full-scale CO₂ Batteries. We have already started to be at the core of the energy transition. Remember, our world can't wait."

Gelsomina Vigliotti, EIB Vice-President, said: "As the EU climate bank, the EIB is committed to building public and private partnerships to support the development of disruptive green energy technologies and to enable these to grow to scale in the short-term. I am delighted to announce

the EIB's intention to support Energy Dome with a EUR 25 million Venture Debt financing. It is an inspiring example of game-changing technology that we need more of in Europe and worldwide. At the same time, the project will promote job creation and economic growth in Sardinia."

Mario Fernandez, Head of Catalyst at Breakthrough Energy, said: "Long-duration energy storage is a critical enabler of the clean energy transition and this partnership with Energy Dome, the European Commission and European Investment Bank will help scale the technology so it can be commercialized sooner. This announcement demonstrates the tangible impact of Breakthrough Energy Catalyst's approach to fund impactful projects that can move us closer to an emissions-free future."

About Energy Dome

Energy Dome is revolutionizing energy storage and enabling grid decarbonization by making solar and wind power dispatchable 24/7. The company invented and developed the CO₂ Battery, a long-duration energy storage system that makes long-duration energy storage viable globally today. The properties of carbon dioxide allow the system to store energy efficiently and cost-effectively, with a modular and site-independent footprint. CO₂ Batteries use readily available, off-the-shelf components from reliable, existing supply chains, providing a scalable pathway to store massive amounts of intermittent renewable energy and accelerate the energy transition. For more information, please visit energydome.com.

About Breakthrough Energy

Breakthrough Energy is committed to accelerating the world's journey to a clean energy future. The organization funds breakthrough technologies, advocates for climate-smart policies, and mobilizes partners around the world to take effective action, accelerating progress at every stage.

Breakthrough Energy Catalyst is a novel platform that funds and invests in first-of-a-kind commercial projects for emerging climate technologies. By investing in these opportunities, Catalyst seeks to accelerate the adoption of these technologies worldwide and reduce their costs.

Catalyst currently focuses on five technology areas: clean hydrogen, sustainable aviation fuel, direct air capture, long-duration energy storage, and manufacturing decarbonization. In addition to capital, Catalyst leverages the team's energy-infrastructure-investing and project-development expertise to work with innovators on advancing their projects from the development stage to funding and ultimately, to construction. Learn more about Breakthrough Energy and Catalyst at breakthroughenergy.org.

About the European Investment Bank

The EIB is the lending institution of the EU, owned by its Member States and makes long-term finance available for sound investment to advance the EU's policy goals. Between 2019 and 2022, the EIB Group provided more than €45 billion in financing for projects in Italy.

In 2019, the EIB's Energy Lending Policy was adopted to end financing to any unabated fossil fuels energy projects, including natural gas, the first Multilateral Development Bank (MDB) to do so. In 2021, the EIB became the first MDB to align our financial activities with the Paris

Agreement. Through its [Climate Bank Roadmap](#), the EIB Group aims to support €1 trillion of investment in climate action and environmental sustainability through the critical decade, 2021-2030. The EIB committed to increasing investment in climate action and environmental sustainability to more than 50 % of the EIB's annual lending by 2025 – last year, that was exceeded with 58%.

About the European Commission

The European Commission is part of the executive of the European Union. The Commission has a range of policies and programmes to deliver on its climate ambitions. Under the European Green Deal, the 'Fit for 55' package was adopted in July 2021 with the aim of cutting greenhouse gas emissions by at least 55% by 2030. The EU-Catalyst partnership is one of the key actions through, which the European Commission seeks achieve this goal through mobilizing private funding through public support.

[Horizon Europe](#) is the EU's research and innovation framework programme worth €95.5 billion (2021-2027). It dedicates 35% of its budget to climate action. At the same time, the programme also supports a range of partnerships which mobilise private funding to deliver on pressing global challenges and modernise industry through research and innovation. The programme also includes the [European Innovation Council](#) (EIC) that supports start-ups and companies in the whole innovation chain, from research to validation, acceleration and commercialization.

The [Innovation Fund](#) is one of the world's largest funding programmes for the demonstration of low- and zero-carbon innovative solutions and technologies funded entirely from [EU Emissions Trading System \(EU ETS\)](#) revenues and estimated at €40 billion until 2030. The Fund has so far provided almost €7 billion in grants for over 100 projects through calls for proposals. On 23 November 2023, the Innovation Fund opened its 7th call for proposals and its first auction.

The InvestEU programme provides the European Union with crucial long-term funding by leveraging substantial private and public funds in support of a sustainable recovery. It also helps mobilise private investments for the European Union's policy priorities, such as the European Green Deal and the digital transition. The InvestEU programme brings together under one roof the multitude of EU financial instruments currently available to support investment in the European Union, making funding for investment projects in Europe simpler, more efficient and more flexible. The programme consists of three components: the InvestEU Fund, the InvestEU Advisory Hub and the InvestEU Portal. The InvestEU Fund is implemented through financial partners that will invest in projects using the EU budget guarantee of €26.2 billion. The entire budget guarantee will back the investment projects of the implementing partners, increase their risk-bearing capacity and thus mobilise at least €372 billion in additional investment.

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