

Press release
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Energy Dome and ENGIE Sign Pioneering Storage Offtake Agreement

This agreement highlights the shared commitment of ENGIE and Energy Dome to advancing long-duration energy storage solutions, marking a significant milestone in the commercial deployment of innovative clean technologies



Rendering of Energy Dome's CO2 Battery plant in Ottana, Sardinia, Italy.

As part of the global transition from research to commercial deployment of cleantech technologies, Energy Dome, a visionary long-duration energy storage (LDES) technology company, and ENGIE a global reference in low-carbon energy and services, have signed an offtake agreement for the first full-scale CO2 Battery developed by Energy Dome in Ottana, Sardinia, Italy.

At the time of commissioning in the first quarter of 2025, the CO2 Battery will be one of the few operational energy storage assets in the global market with a 10-hour discharge duration supported by a commercial offtake agreement. Under the agreement, Energy Dome will own and operate the CO2 Battery facility, while ENGIE will leverage its market expertise to optimize and dispatch the stored energy in the Italian power markets.

The agreement underscores the importance of long-duration energy storage in enhancing grid resilience and reliability, demonstrating the value of the CO2 Battery technology for industry leaders and markets alike. ENGIE's involvement in the project aligns with its strategy to strengthen its position in energy storage,



leveraging flexible and dispatchable solutions such as the CO2 Battery to meet growing renewable energy needs. In Italy ENGIE has been pioneering the dispatching and the optimization of BESS (battery energy storage systems) since 2023; with an existing portfolio of 43 MW/48 MWh, the agreement with Energy Dome will consolidate ENGIE's know-how in storage optimization.

Energy Dome's Ottana Project was the first European initiative to receive funding from EU-Catalyst, a program designed to mobilize public and private resources to accelerate the deployment of emerging climate technologies. This funding partnership, supported by Breakthrough Energy Catalyst, the European Commission and the European Investment Bank, was announced at COP28 in Dubai last December. At the recent COP29, global stakeholders highlighted the importance of technologies like long-duration energy storage (LDES) in meeting the Global Energy Storage and Grids Pledge, which aims to achieve 1,500 gigawatts of energy storage capacity worldwide.

Edouard Neviaski, CEO of ENGIE's business entity 'Global Energy Management & Sales', said: *"ENGIE is thrilled to partner with Energy Dome on this groundbreaking energy storage project. This collaboration highlights our unwavering commitment to developing sustainable and flexible solutions that drive the energy transition. By strengthening our expertise in energy storage, we are advancing our mission to provide reliable, low-carbon energy solutions that meet the increasing demand for renewables and support our customers on their decarbonization journey."*

Mario Fernandez, Head of Catalyst, Breakthrough Energy, said: *"Scaling first-of-a-kind projects is immensely complex and requires not just technological innovation but new commercial and market approaches. This partnership is a tangible example of a replicable commercial innovation and confirms the Ottana CO2 Battery is not just a demonstration but a viable facility, which will unlock Nth-of-a-kind opportunities that can lead to true global scale."*

Claudio Spadacini, CEO of Energy Dome, commented on the milestone: *"Our agreement with ENGIE confirms our deployment readiness, validates our business model, and underlines the market-leading value proposition of our technology. The era of deployment has arrived, and this collaboration will undoubtedly accelerate our mission to decarbonise the world by providing sustainable, utility-scale energy storage."*

Gelsomina Vigliotti, Vice-President of European Investment Bank said: *"The European Investment Bank plays a key role in accelerating the green transition by financing breakthrough technologies like Energy Dome's CO2 Battery. We congratulate Energy Dome and ENGIE on the milestone achieved today, which will contribute to Italy's national climate and energy goals. This announcement*



demonstrates the important and tangible impact of the EU-Catalyst partnership in supporting green technologies that will decarbonise our economies while strengthening competitiveness.”

The partnership represents Energy Dome's first offtake deal under its "Energy Storage as a Service" model. This commercial arrangement with ENGIE, along with a recent equipment supply contract for a project with Alliant Energy in the US, demonstrates Energy Dome's market readiness to scale its energy storage solutions at a commercial level, which was made possible also through public support mechanisms dedicated to accelerating emerging clean technologies.

The Ottana project, nearing completion, features a 20MW/200MWh CO₂ Battery unit, capable of providing electricity for approximately 14,000 households over a continuous 10-hour period. This design is consistent with the unit deployed for Alliant Energy in Wisconsin, highlighting the scalability of Energy Dome's technology for future projects.

For more information on Energy Dome's projects, please visit energydome.com.

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About Energy Dome

Energy Dome is at the forefront of redefining long-duration energy storage with its CO₂ Battery. The properties of carbon dioxide allow the system to store energy efficiently and cost-effectively through a patented thermodynamic process, hence representing the most valid alternative to lithium-ion batteries or pumped-hydro solutions. The CO₂ Battery is already a fully validated and cost-effective system that uses no lithium or rare-earth elements to store electricity, boasting superior round-trip efficiency. With a modular approach 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; it's the only technology available today offering the right combination of efficiency, cost, scalability and that's viable globally. For more information, please visit energydome.com.

About ENGIE

ENGIE is a global reference in low-carbon energy and services. With its 97,000 employees, clients, partners and stakeholders, the Group strives every day to accelerate the transition towards a carbon-neutral economy, through reduced energy consumption and more environmentally friendly solutions. Inspired by its



purpose statement, ENGIE reconciles economic performance with a positive impact on people and the planet, building on its key businesses (gas, renewable energy, services) to offer competitive solutions to its clients.

About Breakthrough Energy

Breakthrough Energy is a global network of climate leaders 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.