

 Early Warning System

EIB-20230127

ENERGY DOME - CATALYST (IEU GT)



Quick Facts

Countries	Italy
Specific Location	Ottana, Sardinia
Financial Institutions	European Investment Bank (EIB)
Status	Approved
Bank Risk Rating	U
Voting Date	2023-11-17
Borrower	Energy Dome SpA
Sectors	Construction, Energy
Investment Type(s)	Loan
Investment Amount (USD)	\$ 27.29 million
Loan Amount (USD)	\$ 27.29 million
Project Cost (USD)	\$ 63.32 million



Project Description

As stated by the EIB, the project involves the construction of a first-of-a-kind utility-scale long duration energy storage (LDES) facility - 20MW-200MWh CO₂ battery installation - in Sardinia, Italy. The patented solution is based on a CO₂ thermodynamic cycle. In charge mode, the carbon dioxide (CO₂) is taken from an atmospheric gasholder and is liquified using a compressor/condenser, then stored under pressure inside liquid CO₂ tanks. In discharge mode, normally during high-price electricity hours or when required, the liquid CO₂ is turned into high-pressure gas that powers a turbine, generating electricity that is dispatched to the grid.

The aim is to provide energy storage capacity and improve grid flexibility for the integration of renewables. The project will also contribute to the security of supply of the system.



Investment Description

- European Investment Bank (EIB)



Private Actors Description

As stated on the company's website, Energy Dome was founded in Milan in February 2020 by Claudio Spadacini, Dario Rizzi, and Francesco Oppici.

Today, Energy Dome is the only viable alternative in Energy Storage that's making solar and wind power dispatchable using the proprietary CO2 Battery.

As stated on the companies' LinkedIn profiles:

Tholos is a UNI CEI 11352-certified ESCo that specializes in supporting and sustaining companies that adopt energy-saving technology solutions in the management of their facilities.

Since December 2016, Tholos has been part of the holding company Elettra Investimenti Spa.

Elettra Investimenti S.p.A., listed on the AIM Italy market since 2015, is active in the fields of power and heat generation, energy efficiency, trading, and energy IoT.



Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	Energy Dome SpA	Client	Energy
Elettra Investimenti S.p.A.	Parent Company	Energy	owns	Tholos PHP	Contractor	Energy



Contact Information

No project contacts provided at the time of disclosure.

Client - Energy Dome SpA:

Address: Via Privata Simone Schiaffino 11, 20158 – Milano (MI), Italia

Email: info@energydome.com

Website: <https://energydome.com/>

ACCESS TO INFORMATION

You can submit an information request for project information at: <https://www.eib.org/en/infocentre/registers/request-form/request-form-default.htm>

ACCOUNTABILITY MECHANISM OF EIB

The EIB Complaints Mechanism is designed to facilitate and handle complaints against the EIB by individuals, organizations or corporations affected by EIB activities. When exercising the right to lodge a complaint against the EIB, any member of the public has access to a two-tier procedure, one internal - the Complaints Mechanism Office - and one external - the European Ombudsman. A complaint can be lodged via a written communication addressed to the Secretary General of the EIB, via email to the dedicated email address: complaints@eib.org, by completing the online complaint form available at the following address: <http://www.eib.org/complaints/form> via fax or delivered directly to the EIB Complaints Mechanism Division, any EIB local representation office or any EIB staff. For further details, check: http://www.eib.org/attachments/strategies/complaints_mechanism_policy_en.pdf

When dissatisfied with a complaint to the EIB Complaints Mechanism, citizens can then turn towards the European Ombudsman. A memorandum of Understanding has been signed between the EIB and the European Ombudsman establishes that citizens (even outside of the EU if the Ombudsman finds their complaint justified) can turn towards the Ombudsman on issues related to 'maladministration' by the EIB. Note that before going to the Ombudsman, an attempt must be made to resolve the case by contacting the EIB. In addition, the complaint must be made within two years of the date when the facts on which your complaint is based became known to you. You can write to the Ombudsman in any of the languages of the European Union. Additional details, including filing requirements and complaint forms, are available at: <http://www.ombudsman.europa.eu/atyourservice/interactiveguide.faces>



Bank Documents

- [Environmental and Social Data Sheet](#)

Government Documents

- “Realizzazione di un impianto per l’accumulo di energia elettrica tramite una batteria a CO2”. Comun



Other Related Projects

- EIB-20220305 THEMATIC GREEN TRANSITION (INVESTEU VD) &DEBT PL