

SolarInvert Energy Solutions

Malta Energy Storage Project



Overview

Whether integrated with energy-intensive industries, generation assets, or deployed as a standalone system, Malta's Steam Energy Management and Storage (SEMS) fully replaces the attributes of fossil-fired energy, delivering identical synchronous generation for grid reliability without emissions. How does energy storage work in Malta?

Using common, cost-effective materials like molten salt, steel, anti-freeze, and air—they designed a system that can store energy and release it on demand, even days or weeks later. Renewable energy is gathered from wind or solar farms on the grid as electrical energy and sent to Malta's energy storage system.

Does Malta have a long-duration energy storage solution?

Malta has developed a long-duration energy storage solution leveraging steam-based heat pump technology that offers a cost- and energy-efficient, flexible, and integration-ready solution to utility and industrial clients.

Why is Malta a good place to store electricity?

By efficiently storing electricity for long durations, Malta's system can enable increased penetration of renewable energy from intermittent sources, maintain grid reliability, and accelerate the decarbonization of the energy sector.

What is the Malta PHES energy storage system?

The Malta PHES energy storage system is built upon well-established principles in thermodynamics and uses conventional components that have been present in power plants for hundreds of years. Electricity from the grid is used to heat molten salt and cool a chilled liquid. In these forms, energy can be efficiently stored for long durations.

What is Malta's electro-thermal energy storage system?

Malta's electro-thermal energy storage system is built upon well-established principles in thermodynamics. Malta's electro-thermal energy storage system is built with abundant, field-proven components that are fully recyclable and reclaimable. Molten salt is the most mature technology used in thermal storage.

What makes Malta a good energy solution?

Zero Waste, Circular Solution: Malta's solution uses non-hazardous materials, has no waste by-products, poses no long-term disposal challenges, and is 100% recyclable. Long-Duration, Longer Lifespan: Malta's solution can discharge stored energy in the form of power and/or heat from 8 hours to multiday periods.

Malta Energy Storage Project



THE NEED FOR ENERGY STORAGE

Jul 25, 2025 · THE NEED FOR ENERGY STORAGE Renewable energy is often the least expensive form of electricity available, but solar and wind power aren't reliably available. To ...

[Get Started](#)

Tender launched for the development of Malta's first large ...

Nov 29, 2024 · This pioneering project, the first of its kind in Malta, will not only provide essential electricity storage but also play a crucial role in responding swiftly to balance the grid during ...



[Get Started](#)



Offshore Renewables, Energy Storage and Green ...

Apr 30, 2024 · The University of Malta has developed and patented a Hydro-Pneumatic Energy Storage (HPES) solution, known as the Floating Liquid ...

[Get Started](#)

Offshore Renewables, Energy Storage and Green ...

Apr 30, 2024 · Project "Hydro Pneumatic Energy Storage for Offshore Green Hydrogen Generation - HydroGenEration, Grant Agreement Ref.: EWA ...

[Get Started](#)



Tender launched for the development of Malta's first large ...

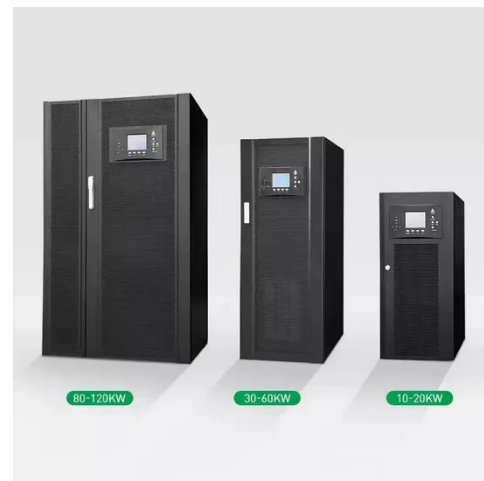
Nov 29, 2024 · As part of Malta's long-term climate and energy goals to reduce carbon emissions from the energy sector, enhance the integration of renewable energy sources (RES), and ...

[Get Started](#)

Diptico_MALTA_V3

Jul 25, 2025 · THE FUTURE OF ENERGY STORAGE Malta SEMS Storage, Power and Heat at unmatched scale Malta has developed a long-duration energy storage solution leveraging ...

[Get Started](#)



Malta energy storage project

Concurrently, Schmid Pekintas and Malta will evaluate deploying energy storage



solutions into 200-500 MW of existing and new solar projects across various South European countries and ...

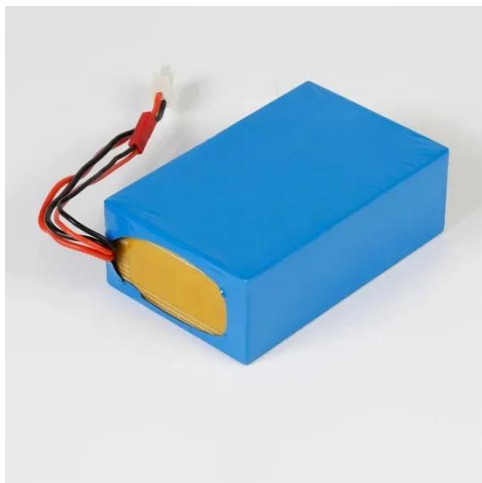
[Get Started](#)

Diptico_MALTA_V3

Jul 25, 2025 · Malta SEMS (Steam Energy Management and Storage) seamlessly integrates with existing energy infrastructure or operates as a stand-alone system, delivering clean, reliable

...

[Get Started](#)



Applications , Malta

Jul 25, 2025 · Applications Malta's breakthrough Thermo-Electric Energy Storage technology is flexible, capable of being built anywhere, and can be configured to maximize the economic ...

[Get Started](#)

BBVA supports Malta Inc.'s long-duration thermal energy storage ...

Jun 19, 2025 · Announced on Monday (16 June), the agreement establishes a revenue structure for the 14MW long-duration energy storage (LDES) project. It will be based on a technology ...

[Get Started](#)



How to store renewable energy

Nov 28, 2023 · The Malta energy storage system takes electricity, converts and stores that electricity as heat, and then converts it back to electricity to be ...

[Get Started](#)

EUR47m project to develop massive PV power batteries opened ...

Nov 29, 2024 · A project to build two massive battery storage systems that can capture electricity generated from renewable energy sources is now open to bidders. The battery energy storage ...

[Get Started](#)



Malta Pumped Heat Energy Storage

Aug 29, 2021 · Malta is Long-Duration



Energy Storage Malta's grid-scale pumped heat energy storage system (PHES) is a low-cost, long-duration solution which will enable the global ...

[Get Started](#)

Malta

Using common, cost-effective materials like molten salt, steel, anti-freeze, and air--they designed a system that can store energy and release it on demand, even days or weeks later. ...

[Get Started](#)



Google X Spins Off Malta Molten Salt Energy ...

Dec 21, 2018 · The Role Of Robert Laughlin As reported by Renewable Energy News, the Malta energy storage project is based on research done by Robert ...

[Get Started](#)

16 offers made for development of Malta's first ...

Apr 21, 2025 · The government has received 16 offers for the development

of Malta's first large-scale utility battery energy storage systems, Minister for the

...

[Get Started](#)



Battery Energy Storage Systems

InterConnect Malta has been entrusted the responsibility to implement Battery Energy Storage Systems (BESS) to be connected to the Maltese National electric grid network.

[Get Started](#)

Malta Inc: "Our technology provides long ...

Mar 31, 2025 · QUESTION: Energy storage is key to our path to a successful low-carbon emission future. In the last few years, we've advanced installing short ...

[Get Started](#)



News , Malta

Jun 13, 2022 · Based in Cambridge Massachusetts, Malta, Inc. has developed a Pumped Heat Energy



Storage (PHEs) system to provide long-duration, large-scale, cost-effective, and safe ...

[Get Started](#)

BBVA and Malta Iberia Sign an Agreement

Jun 16, 2025 · BBVA and Malta Iberia PHES SL, the Spanish subsidiary of climate tech company Malta Inc. ("Malta"), have signed a key agreement for the development of a commercial ...



[Get Started](#)



Introducing Malta

Dec 19, 2018 · For the last few years, we've been incubating Project Malta, a new approach to grid-scale energy storage that relies on molten salt. After ...

[Get Started](#)

Malta Inc and BBVA link for long-duration ...

Jun 27, 2024 · Malta Inc, a provider of electro-thermal long-duration energy

storage solutions, has signed a memorandum of understanding (MoU) with ...

[Get Started](#)



Malta, Siemens partner to develop heat pump ...

Jul 13, 2021 · The partnership will focus on pumped heat storage technology to support a 100 MW thermal energy storage system for up to 200 hours of storage.

[Get Started](#)

EUR47m project to develop massive PV power batteries opened ...

Nov 29, 2024 · First announced in June 2023, the project is being led by Interconnect Malta, an Energy Ministry agency responsible for energy infrastructure projects. Batteries will be charged

[Get Started](#)



Malta Closes Funding to Deploy Its Long ...



Nov 29, 2023 · Malta Inc., a leader in long-duration energy storage, today announced that it has closed on a round of financing provided by a group of ...

[Get Started](#)

Malta's energy storage tech to stabilize ...

Feb 24, 2021 · Malta spun out from the special projects group at Google's parent company Alphabet and relies on some very old technologies combined in a ...

[Get Started](#)



Home , Malta

Jul 25, 2025 · BBVA and Malta Iberia sign an agreement to promote long-duration energy storage in Spain The agreement contributes to the development of climate technologies, or cleantech, ...

[Get Started](#)

Malta Inc. Store2REPower Project Breaks Ground for Full

Jul 19, 2024 · Malta Inc. announced the groundbreaking of the expansion of

DLR's world-leading test facility for thermal energy storage in molten salts (TESIS) for the full-scale qualification of ...

[Get Started](#)



InterConnect Malta announces launch of tenders for the ...

Nov 29, 2024 · InterConnect Malta has announced the launch of tenders for the design and construction of two large-scale Battery Energy Storage Systems (BESS). This initiative ...

[Get Started](#)

Utility Scale Battery Energy Storage Systems

Jul 17, 2024 · "Utility-scale battery storage is a game changer for the electric grid. It provides the flexibility and resilience needed to accommodate increasing amounts of renewable energy, ...

[Get Started](#)



Contact Us

For catalog requests, pricing, or partnerships, please visit:

<https://www.persianasaranda.es>