

## Did you know?



**Recovery of urban waste heat alone could meet 14% of Europe's heat demand for buildings, 23% of which comes from data centres.**

## Follow our progress!



The THUNDER project is running from January 2024 until January 2028

#THUNDER



# THUNDER

The THUNDER project aims to overcome existing barriers hampering a wide adoption of Data Centers waste heat recovery strategies, providing an innovative, efficient and cost attractive Seasonal Thermal storage based on Thermochemical Materials.

THUNDER solutions stretch across the value chain (data center innovative storage providers, heat pump manufacturers and district energy company operators). The THUNDER solutions will be validated in field conditions at the Demosite in Bulgaria, as well as in 10 further Demosites across all over Europe. Co-design and training workshops will be organized at the replicability identified sites to promote stakeholders engagement and social awareness thus unlocking barriers and make it real THUNDER replication.



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**Thermochemical storage  
Utilization eNabling Data  
centre seasonal Energy  
Recovery**

[www.thunderproject.eu](http://www.thunderproject.eu)



## Demosite in Bulgaria

Abilix Softs data centre in Varna is located near the district heating network. It was commissioned in 2018 and since then new solutions have been developed through innovative projects aiming to reduce the environmental impacts of the data centre. Waste heat recovery has been evaluated in 2022 and the collaboration with VEOLIA BULGARIA district heating opened up new perspectives.

Varna district heating network was commissioned in 2008 and has been devoted to innovations since its start with the goal of reducing input energy consumption, as the installation of innovative monitoring and management software, which allowed a reduction of water consumption of three times and heat losses of the half, demonstrates. Veolia Energy Varna has the commitment to preserve the resources and optimize them, with this aim want to explore DC heat recovery and their use within current district heating network.



## THUNDER objectives

- 1 A full value chain integration validating the THUNDER concepts and to foster THUNDER replication
- 2 To deploy a sound strategy towards the exploitation, market uptake and replicability of THUNDER results
- 3 THUNDER Efficient business model for thermochemical storage integration in district heating networks
- 4 To effectively disseminate and communicate the project results, its outcomes and wider impact to all interested stakeholders and the general public to enable their commercial exploitation and market replication

## Project partners

