

webinarseries heat storage

23 november - 14 december

weekly on thursdays 15.00 -16.00

webinarreeks warmteopslag



Webinar series Large Thermal Heat Storage

Session 4: TTES
14 December 2023

Webinar series: Large Thermal Heat Storage

- Welcome by the host: Bas Godschalk of IF Technology
- Webinars supported by:



Rijksdienst voor Ondernemend Nederland



tki urban energy
topsector energie

- Program IEA – Energy Storage (ES) – Task39

IEA-ES is the Technology Collaboration Program (TCP) from the International Energy Agency focused on Energy Storage

IEA-ES Task 39 is the group of experts working on LTES for DH within IEA-ES TCP

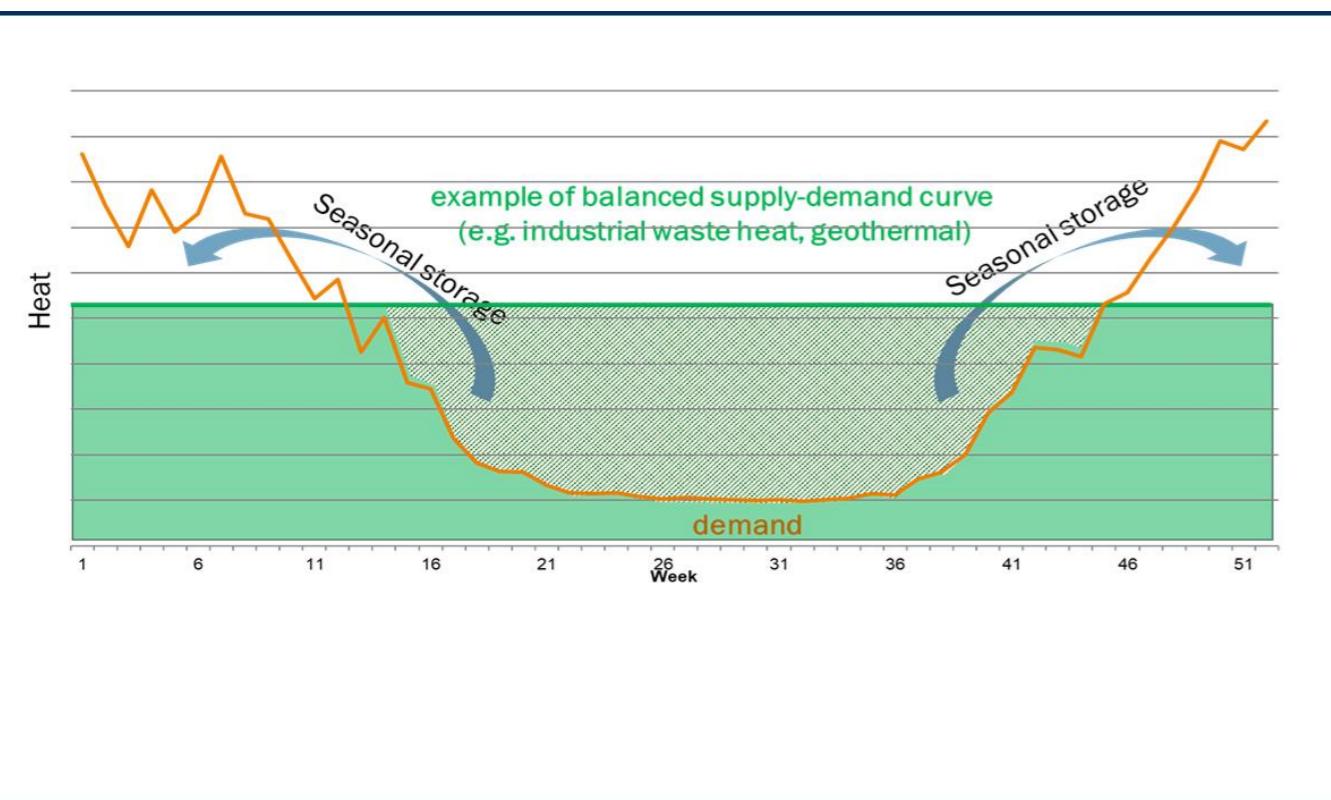
Webinar series: Large Thermal Heat Storage

Guidelines for the webinar:

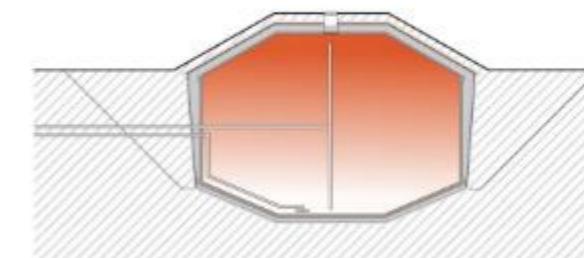
- We have disabled the cameras and mics.
- You can drop your questions in the Q&A box at the bottom of your screen. The chat function is not working.
- We will not respond on a digital raised hand.
- The webinars will be recorded and become available afterwards.
- Factsheets of the four technologies will become available after the final session.
- Enjoy!

IEA-ES-Task 39

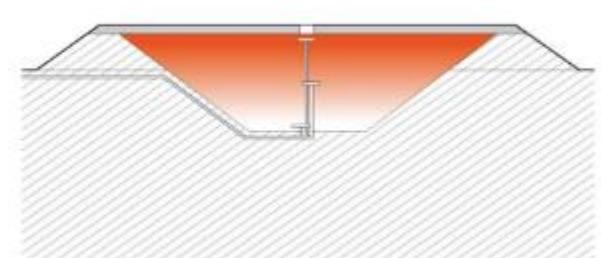
- Heat transition
- Thermal Energy Storage (TES)
- District Heating (DH)



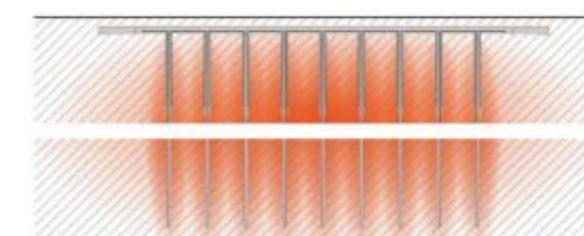
Tank thermal energy storage (TTES)



Pit thermal energy storage (PTES) Solitus®



Borehole thermal energy storage (BTES)



Aquifer thermal energy storage (ATES)



IEA-ES-Task 39

The **key objectives** of the Task are:

- Definition of a number of representative application scenarios, the connected boundary conditions and Key Performance Indicators
- Improve LTES materials and materials performance measurement methods
- Prepare guidelines for obtaining proper water quality
- Compare the performance and accuracy of simulation models for LTES
- Derive validation tests for LTES simulation models
- Generate information packages for decision makers and actively disseminate the information

For these purposes, **four subtasks** work on the content subjects:

- Subtask A: Application Scenarios, Assessment of Concepts, Integration Aspects
- Subtask B: Components and Materials Database
- Subtask C: Round robin simulation
- Subtask D: Knowledge base for decision makers

The experts of IEA-ES Task 39



PlanEnergi

newheat
renewable heat supplier

MuoviTech®
BEST IN EARTH.

solites



Technical University
of Denmark

if
IF Technology Creating energy

CHALMERS

SOLMAX

VATTENFALL



Natural Resources
Canada

SOLID
solar energy systems



BobSol
Bobach Solutions
- Engineering for a sustainable future -

TESS
Experts in Energy Modeling & Analysis

JKU
JOHANNES KEPLER
UNIVERSITY LINZ

AIT
AUSTRIAN INSTITUTE
OF TECHNOLOGY

THU
Technische
Hochschule
Ulm

universität
innsbruck

AALBORG CSP
- Changing Energy

UNIVERSITÀ
DEGLI STUDI
FIRENZE

agru
The Plastics Experts.

RAMBOLL

G quadrat
Ihr Projekt, unsere Lösung.

energy
storage

IEA Technology Collaboration Programme

Agenda for today

Time	Topic
15h00 – 15h05	Welcome and introduction by host Bas Godschalk – IF Technology
15h05 – 15h25	TTES Geoffroy Gauthier - PlanEnergi Introduction – overview - use case Berlin - legal part (visualization)
15h25 – 15h30	Q&A session
15h30 – 15h50	TTES Ruud van den Bosch - Groenewarmte Technical – construction – integration - legal.
15h50 – 15h55	Q&A session
15h55 – 16h00	Closing and agenda next sessions

TTES – Geoffroy Gauthier

Introduction – overview - use case Berlin - legal part (visualization)
on TTES

Q&A on TTES

- TTES – Geoffroy Gauthier



TTES – Ruud van den Bosch

TTES – Technical – construction – integration - legal



Rijksdienst voor Ondernemend Nederland



Q&A TTES

- TTES – Ruud van den Bosch



Closing

- Recorded session will become available after the series
- Factsheets are available on the website

Date	Topic	Speaker
Wed 28 February 2024	UTES	http://www.geothermica.eu/events/utes-symposium-2024/
Thu 28 March 2024	HT-ATES	Dutch symposium, see https://iftechnology.nl/evenementen/



IEA **Geothermal**



Underground Thermal Energy Storage (UTES) Symposium
Free 1 day event / 9:00-17:30 / with networking after the event

Project and expert presentations on
ATES / BTES / PTES / MTES in Europe
Aquifer / Borehole / Pit / Mine – Thermal Energy Storage

28.02.2024
Messe Offenburg, Germany
GeoTHERM side event

<http://www.geothermica.eu/events/utes-symposium-2024/>

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*Dutch organisations in need of more information on the
IEA Energy Storage TCP: reach out to
stan.vandenbroek@rvo.nl*

Thank you very much for your attention and this brings us
the end of our webinar sessions!