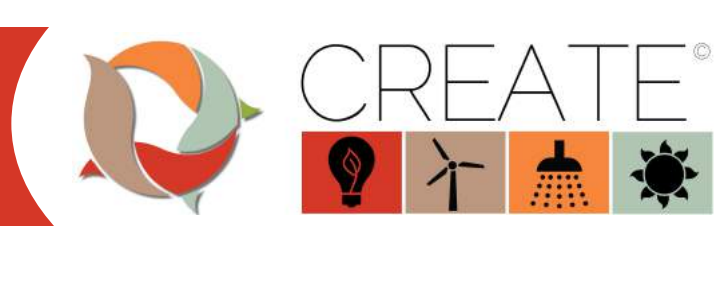


Dear Reader,

We proudly share with you the sixth newsletter of the CREATE project. The aim of this newsletter is to provide you with an overview of the progress achieved so far in the CREATE project as well as elaborate on the plans for the final period of the project.



Compact RETrofit Advanced Thermal Energy storage
An economically affordable, compact and loss-free heat battery for existing buildings

TIMELINE



DEMO SITE PROGRESS

Status system tests in the laboratory of AEE INTEC in Gleisdorf

The demonstrator with 3 storage modules was built up and commissioned in the container to start the lab experiments of the up-scaled system. The container is placed in front of the laboratory and connected to the heating and cooling system of the laboratory to emulate the heat source as well as the heat demand.

The first step was to eliminate all leakages and perform the outgassing of the material. At the moment first dehydration and hydration experiments are performed. The tests have two functions a) to test and assess the performance of the system and to compare the results to previous results of the FSM tests to investigate the improvement of the design and b) preparation and trouble-shooting to guarantee a reliable operation at the test site in Warsaw.



▲ Container in front of the AEE laboratory



▲ Storage modules stored in the container.

Current status of the Warsaw demo site

Works in the demonstration building are systematically being carried out to adapt the building to the needs of the CREATE project. The demo has been already equipped with a ground heat exchanger as a low temperature source of energy. The next steps will concern installation of solar collectors on the roof, addition of new hot water tank and buffer storage in the boiler room. This is about to happen in the very near future. Afterwards, everything will be combined with the CREATE battery.



▲ The demonstration building is located in Warsaw, Poland. It is a detached house designed for a family orphanage, for max 16 people.

Currently, measurements are taking place in the building. The aim of measurements is to investigate the operating parameters of heating medium in the demo house and analyse solutions enabling decreasing temperatures in SH system. The results of measurements will allow for proper design of CREATE battery connection to the building and efficient performance of the modules. Therefore several devices have been installed at the site in order to measure following parameters: **flow and return temperature, flowrate of water**, which is a heating medium in space heating system and **flowrate of DWH**. For all measurements the time step is 10 min. All devices are connected to master controller called *Flowmaster*. They communicate by *Mbus protocol*. The data are collected in *Flowmaster* and then written in text file on the computer.

Additionally, the radiators have been equipped with fans. Fans force the air flow, which leads to the occurrence of forced convection in room. In the result greater amount of heat can be delivered. This allows to slightly decrease flow temperatures while maintaining thermal comfort in the building. The first results of measurements are expected in February.



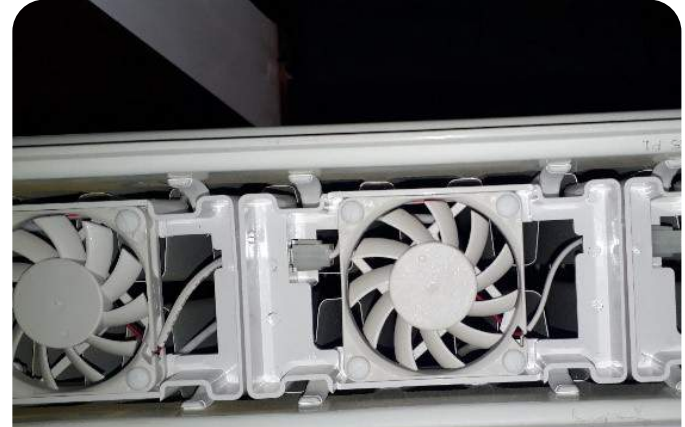
▲ Drilling boreholes for the ground heat exchanger.



▲ Data recording system.



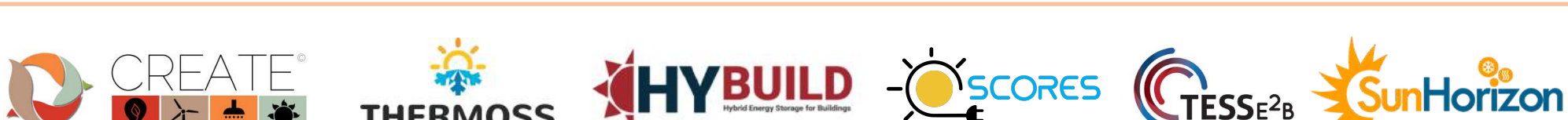
▲ Fan control panel



▲ Fans installed at the bottom of the radiators.

WORKSHOP "SAVE TODAY, USE TOMORROW"

Interested in the topic of thermal energy storage? Don't miss the World Sustainable Energy Days in Austria and workshop called "Save today, use tomorrow" on 28th February 2019!



The workshop will be organised within the session Innovation Workshops Energy and Buildings and it will be dedicated to researchers, industrial companies, professionals and the wider public. Project representatives from CREATE, THERMOSS, HYBUILD, SCORES, TESSE2b and SUNHORIZON will introduce their project results and lead interactive poster sessions.

Where? Stadthalle Wels, Pollheimerstrasse 1, A-4600, Wels, Austria

When? 28th February 2019, afternoon session (14:00)

Workshop registration [HERE](#). In order to attend the workshop, [REGISTRATION](#) for WSED is required.

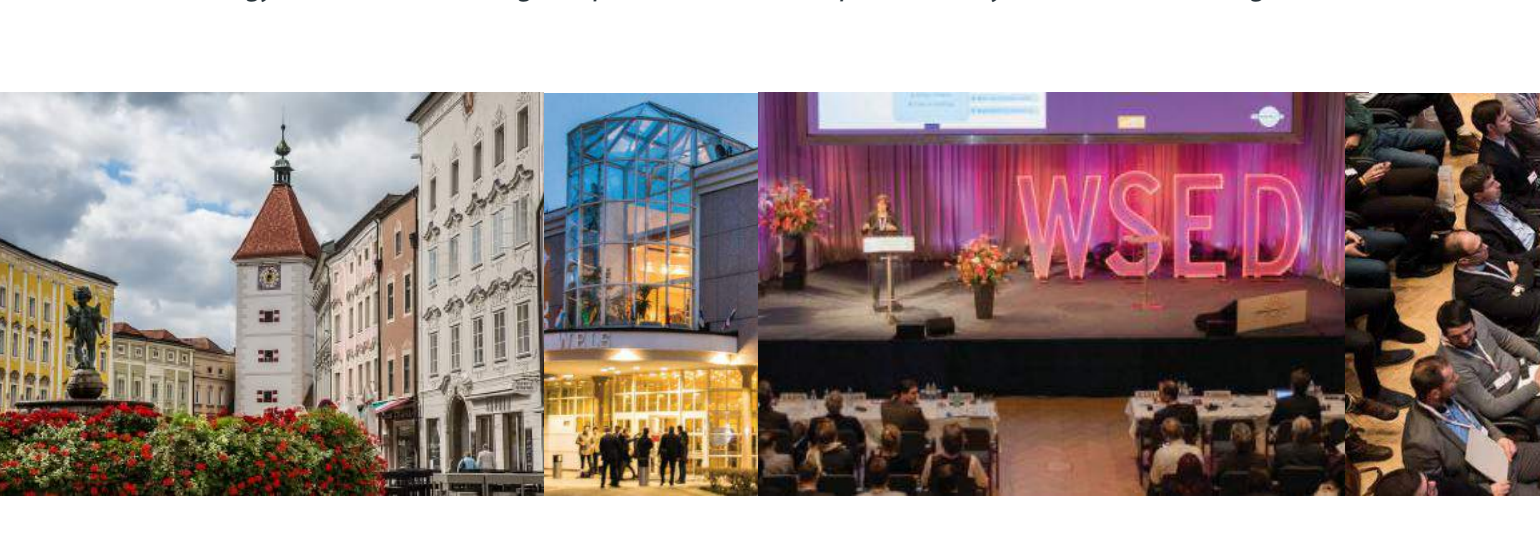
Download the complete workshop flyer [HERE](#).



About WSED 2019

The new Clean Energy Package is changing Europe's energy markets. "Energy efficiency first" and "global leadership in renewables" are at the core of Europe's commitment to a clean energy transition. This requires strong policies, competitive businesses, technology innovation and investments. The WSED conference addresses policies, innovation and business in specialised conferences and interactive events. It connects people from business, the public sector and research and empowers them to embrace the change.

In 3 days, the event offers delegates 6 dedicated conferences (including the European Energy Efficiency Policy Conference, the European Pellet Conference, the Industrial Energy Efficiency Conference and the Smart E-Mobility Conference), technical visits to innovative energy projects, a major tradeshow on building efficiency and renewable energy with 1,600 exhibiting companies. The workshop "Save today, use tomorrow" is organized within the "European Energy Efficiency Conference".



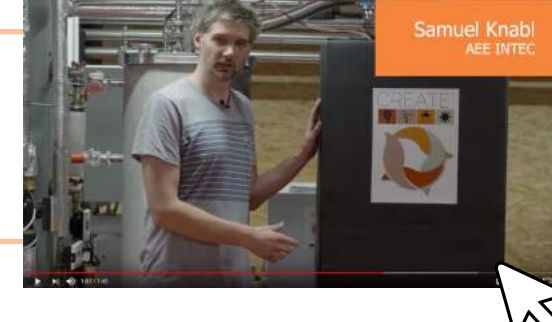
SOCIAL IMPACT SURVEY



The purpose of this survey created within the CREATE project is to collect the views of different stakeholders and identify their needs, habits and preferences related to the thermio storage systems. Please help us to complete this survey with your input. To fill in this survey click [HERE](#) or visit www.surveio.com/survey/A1A811HA2X9Y9Q3R.

NEW PROJECT VIDEO

We have prepared a short video about the current status of the CREATE project. What are we working on? Click on the pictures below, watch the video and subscribe our YouTube channel!



PARTNERS



HORIZON 2020 RESEARCH PROJECT
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 680450.

YOU CAN FIND US ALSO ON:



www.createproject.eu

UPCOMING EVENTS

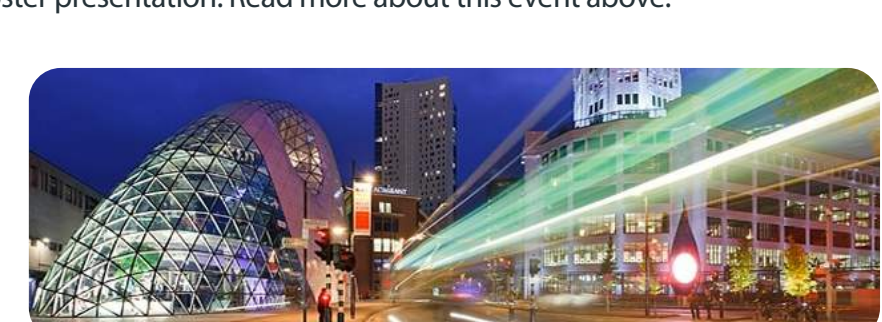
Workshop "Save today, use tomorrow"

World Sustainable Energy Days
27 February - 1 March 2019, Wels/Austria

Six H2020 projects dealing with thermal storage invite you to the workshop "Save today, use tomorrow" within the World Sustainable Energy Days 2019 in Wels, Austria. On 28th February 2019 the projects' representatives will introduce their projects and lead the interactive poster presentation. Read more about this event above.

General Assembly Meeting after 42 months

CREATE consortium will meet again after 42 months of the project in Eindhoven, Netherlands from 25th to 27th March 2019. The meeting will focus on the presentation of progress made within the individual Work Packages and their evaluation as well as on the planning of the final project period.



PAST EVENTS

CREATE project on the Vertigo Starts website

The VERTIGO project is a Coordination and Support Action (CSA) supported by the H2020 Program. The project gathers a consortium of experienced partners in the fields of art-science collaborations, design, tech research and innovation. VERTIGO STARTS website aims to catalyze new synergies between all concerned stakeholders: artists, cultural institutions, R&D projects in information and communication technologies (ICT), companies, incubators and funds.

ECTP conference

Actors from the whole construction value-chain, including academia, industry, and representatives of the European were discussing the topics of innovation in the Built Environment in Europe at the 8th ECTP conference. In addition, the ECTP conference offered an exhibition area in which key results from innovation projects were presented. FENIX TNT represented our project via stand and partners from Mostostal Warszawa SA presented the roll-up poster during the poster session.

Scientific Council of BIC BRNO

The 10th session of the Scientific Council of BIC Brno took place on 25th October 2018. This time at the premises of the innovative company ENBRA a.s. FENIX TNT presented the CREATE project within the "Energy Efficiency as a Key Theme" practice. The presentation was focused on examples of good practice of projects supported by the H2020 program, focusing on new eco-materials and eco-solutions in construction.

TESSE2b

On 3rd November 2018 ASHRAE Hellenic Chapter hosted the thematic TESSE2b conference in Athens, Greece. The conference was focused on the energy storage targeted to Energy Efficient Buildings. FENIX TNT presented the CREATE project via presentation and promo materials.

General Assembly meeting

The CREATE consortium met during the General Assembly meeting after 36 months in Brussels, Belgium. This meeting was followed by the Review meeting with Project Officer and Project Technical Advisor where all partners presented the project progress.

PCMs4Buildings

CREATE project was presented by Luis Coelho, during the seminar "PCMs4Buildings - PCMs: Thermophysical characterization and buildings" applications at University of Coimbra, Portugal within the presentation of the TESSE2b project. The seminar took place from 14th to 15th June 2018.

China Academy of Building Research visit

CREATE project was introduced to the representatives of the China Academy of Building Research (CABR) who visited the FENIX TNT premises in Brno, Czech Republic on 26th June 2018. CABR is the largest comprehensive R&D institution in the building sector in China. In recent years, CABR has put more efforts into research and development of technologies concerning green buildings, new energy applications, disaster prevention and mitigation and intelligent integration. CREATE project was presented via video, presentation and brochures.

