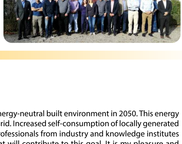
NEWSLETTER °1 November 2018

Dear Reader,
We are delighted to introduce this first edition of the of the SCORES newsletter. In this edition, we will share with you a brief overview of the project, invitation to the first workshop co-organized by our partners and short reports from the events where the SCORES project was presented.

SCORES project Consortium



Coordinator´s message

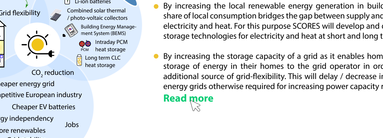
The European Commission has set ambitious goals in order to move to an energy-neutral built environment in 2050. This energy transition imposes major challenges on the building sector and the energy grid. Increased self-consumption of locally generated renewable energy sources is a must to achieve this. A motivated team of professionals from industry and knowledge institutes has taken on the challenge to develop a hybrid energy storage system that will contribute to this goal. It is my pleasure and honour to be the coordinator of this young and dynamic team and I am confident that we will succeed in our mission. I gladly share my enthousiasm for the project with you and invite you to follow our activities in the next years.

Christophe Hoegaerts (TNO) – SCORES project coordinator

Briefly About the Project

SCORES consortium aims to develop a building energy system including **new compact hybrid storage** technologies increasing self-consumption of local renewable energy in residential buildings at the lowest cost and deferring investments in the energy grid.

The combination and optimization of multi-energy generation, storage, and consumption of local renewable energy (electricity and heat) bring new sources of flexibility to the grid and give options for tradability and economic benefits, enabling reliable operation with a positive business case in Europe's building stock.



Objectives

As the building sector accounts for **40% of the total European energy consumption** and intends to be "near zero energy" in 2050, the share of renewable energy locally generated and self-consumed in the building must be increased. Hybrid storage (i.e. storage of electricity and heat) is indispensable for creating flexibility, allowing to optimize the balance between the supply and consumption profiles of both electricity and heat for the lowest cost.

The main goal of SCORES is to demonstrate in the field the integration, optimization and operation of a building energy system including new compact hybrid storage technologies, that optimizes supply, storage and demand of electricity and heat in residential buildings and that increases self-consumption of local renewable energy in residential buildings at the lowest cost.

This hybrid energy system removes the technical barriers for better use of renewable energy sources in two ways:

- By increasing the local renewable energy generation in buildings with a high share of local consumption bridges the gap between supply and demand for both electricity and heat. For this purpose SCORES will develop and demonstrate local storage technologies for electricity and heat at short and long time scales.
- By increasing the storage capacity of a grid as it enables home-owners to offer storage of energy in their homes to the grid operator in order to provide an additional source of grid-flexibility. This will delay / decrease investments in the energy grids otherwise required for increasing power capacity reserves.

Read more

Impact and demonstartion

Impact of the SCORES system will be a broad assessment covering various economical levels like individual home owners, housing companies, grid owners, energy companies and governments, ecological issues and also the security of supply /reduced European dependence on fossil fuels originating from instable countries from across the globe.

Demonstration of the integrated hybrid energy system will take place in two real buildings representative of different climate and energy system configurations for three cases, in **Central Europe (Austria)** with and without a heat grid, and in **Middle/Southern Europe (France)** without a heat grid.

Read more

Partners

TNO innovation for life · EDF · CAMPA (LES HABITATIONS D'EXCEPTION) · SIEMENS · KÖNIG METALL · AEE INTEC · RINA · Stadtwerke Gleisdorf · FENIX TNT · IPS Instituto Politécnico de Setúbal · heliopac · FORSEE POWER

The project leading to this application has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 766464.

Visit our website for more information:
www.scores-project.eu

Where can you see our project?

WORKSHOP "SAVE TODAY, USE TOMORROW" (WORLD SUSTAINABLE ENERGY DAYS 2019)

Six H2020 research and innovation projects, including SCORES project, are pleased to invite researchers, industrial companies, professionals and wide public interested in the topic of thermal energy storage to the common workshop called "Save today, use tomorrow". Projects representatives will introduce their results and lead interactive discussions related to the topic. The event will be held in English. The workshop is organized within the World Sustainable Energy Days on 28th February 2019 in Wels, Austria.

Workshop registration is free of charge, but it is necessary to be **registered on the WSED conference** in order to participate in the workshop.

SCORES www.scores-project.eu · CREATE www.createproject.eu · THERMOSS www.thermoss.eu · World Sustainable Energy Days 2019 www.wsed.eu · TESSe2B www.tesse2b.eu · HYBUILD www.hybuild.eu · SunHorizon

Past events

GENERAL-STATES ON HYDROGEN AND FUEL CELLS

SCORES representatives from RINA-C introduced our project during the seminar "General-States on Hydrogen and fuel cells - The role of hydrogen in the energy transition and mobility" at Polytechnic University of **Milan, Italy** on **28th November 2018**.
The use of hydrogen is becoming increasingly widespread in the whole world. Despite the full compatibility of these technologies with the Italian energy system, their diffusion is still limited in Italy. General States Hydrogen and Fuel Cells 2018 discussed this topic with the world of research, industry, and institutions, in light of Italy's recent adhesion to the " Hydrogen Initiative " of the European Union.

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 on **13th to 14th November 2018** in **Brussels**. Representatives from **HELIOPAC** presented our project during the "Most Promising Technologies" session of the conference.
In addition, the ECTP conference offered an exhibition area in which key results from innovation projects were presented. **FENIX TNT** represented the SCORES project via stand.

GENERAL ASSEMBLY MEETING IN GERMANY

SCORES consortium met at the General Assembly meeting after 12 months of the project on **6th to 8th November 2018** in **Baden-Baden, Germany**. They had a chance to discuss the project progress and plans for the next six-month period. Coordinator of the project also appreciated the partners from **HELIOPAC** for a great representation of the project during the ECTP conference, where their HELIOPACSYSTEM+, also used in the SCORES project, was awarded as one of the most promising technologies.

TESSE2B CONFERENCE

SCORES project was part of the TESSe2b Conference: "Thermal Energy Storage Systems for Energy Efficient Buildings. An integrated solution for residential building energy storage by solar and geothermal resources" which was held within the "ENERGY in BUILDINGS" Conference on **3rd November 2018** in **Athens, Greece**. The project was introduced by Barbora Blaskovicova from FENIX TNT.

EFINTEC FORUM

Joao Garcia from **IPS (Instituto Politécnico de Setúbal)** gave a presentation titled "The SCORES project and the new compact hybrid storage technologies" at the workshop organised within EFINTEC - Exposicion y Forum de las Empresas Instaladoras y Nuevas Tecnologias on **4th October 2018** in **Barcelona, Spain**. The workshop aimed to bring together all the sectors of installation and distribution of professionals in energy, electricity, telecommunications, air conditioning, gas, refrigeration, plumbing and, generally, intelligent and connected technologies and facilities. As Joao Garcia claimed, the project was very well received by the participants of the workshop.

PCM4BUILDINGS 2018

PCMs4Buildings

Representatives of the SCORES project from **IPS (Instituto Politécnico de Setúbal)** were present in the Seminar "PCM4Buildings - PCMs: Thermophysical characterization and buildings' applications" that that took place in the Department of Chemical Engineering from the University of **Coimbra, Portugal**, on **14th and 15th June, 2018**. João Garcia gave a presentation titled "The SCORES project and the new compact hybrid storage technologies".

THE EEB PPP PROJECT REVIEW 2018

The SCORES 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. SCORES project was presented via presentation and brochures.

SUSTAINABLE PLACES 2018

On 27th June 2018, **TNO** introduced the SCORES project within the workshop called "The future of energy storage" (organized by R2M Solution from the HYBUILD project) at Sustainable Places 2018. SP2018 were held in **Aix-les-Bains, France** from **27th to 29th June**. Other H2020 projects presented within this workshop were: HYBUILD, CCREATE, E2VENT, TESSe2b and STORY project.

BUILDING FAIRS BRNO

FENIX TNT team represented the SCORES project at Building Fairs in Brno, Czech Republic. From **25th to 28th April 2018** visitors had a chance to see a unique presentation of all aspects of housing and house constructions, building management services, technical solutions and equipment.

GENERAL ASSEMBLY MEETING IN FRANCE

SCORES consortium met at the General Assembly Meeting after 6 months which took place from **18th to 20th April 2018** in **Paris, France**. The meeting was hosted by two project partners, **FORSEE POWER** and **CAMPA**, and partners also had a chance to see the FORSEE POWER facilities. During the meeting, partners discussed a progress made within individual work packages.

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