



D8.3 Website screenshots



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Website screenshots

Summary			
<p>This document presents initial screenshots from the MiniStor website, which can be accessed on the following Uniform Resource Locator (URL): http://ministor.eu This document serves as a “hardcopy” version of the website, in its current version of April 2020. The website will evolve as more information becomes available</p>			
Deliverable Number		Work Package	
D8. 3		WP 8	
Lead Beneficiary		Deliverable Author(S)	
FEUGA		Ines Arias Iglesias	
Beneficiaries		Deliverable Co-Author (S)	
All consortium members			
Planned Delivery Date		Actual Delivery Date	
30/04/2020		29/04/2020	
Type of deliverable	D	Demo	
Dissemination Level	CO	Confidential, only for members of the consortium (including the Commission)	
	PU	Public	X

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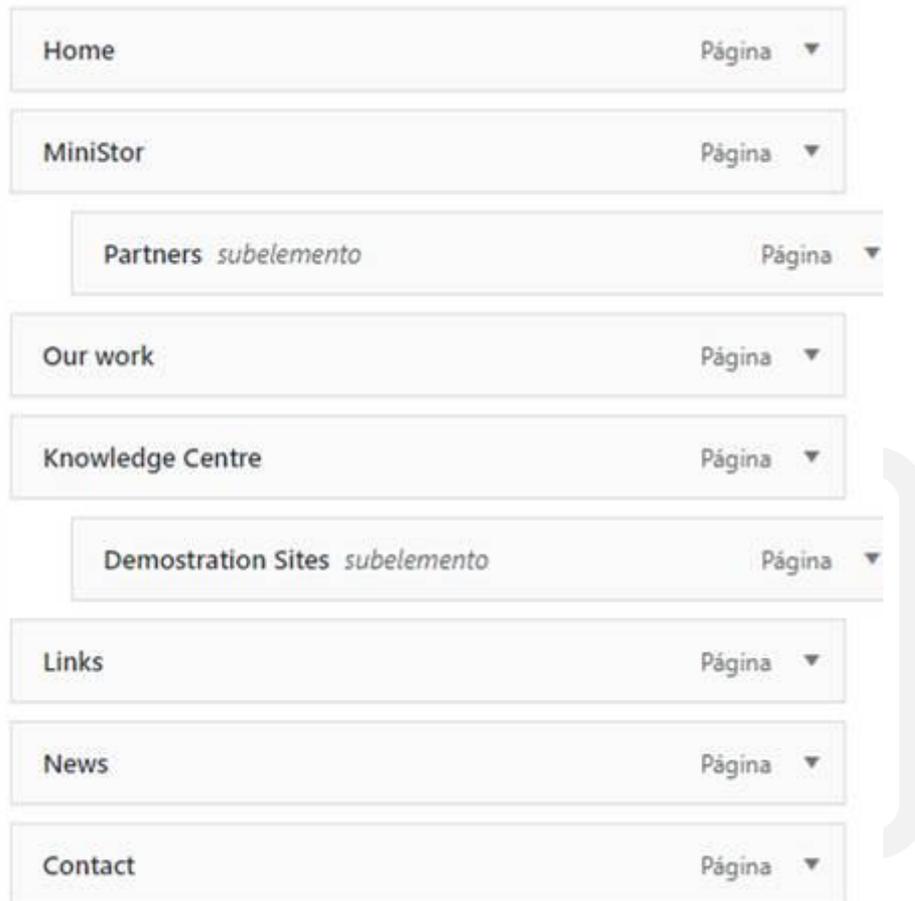
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1 Website structure

The website structure is outlined in the figure below. The Uniform Resource Locator (URL address, or commonly referred as website address) is <http://ministor.eu/>

When the site is loaded on the user browser, the opening page is the “Home” page. From there, users can make click on any of the links outlined on the home page as upper links, or examine the Home page contents. The upper links are always visible while opening the rest of pages, allowing a return to the home page.

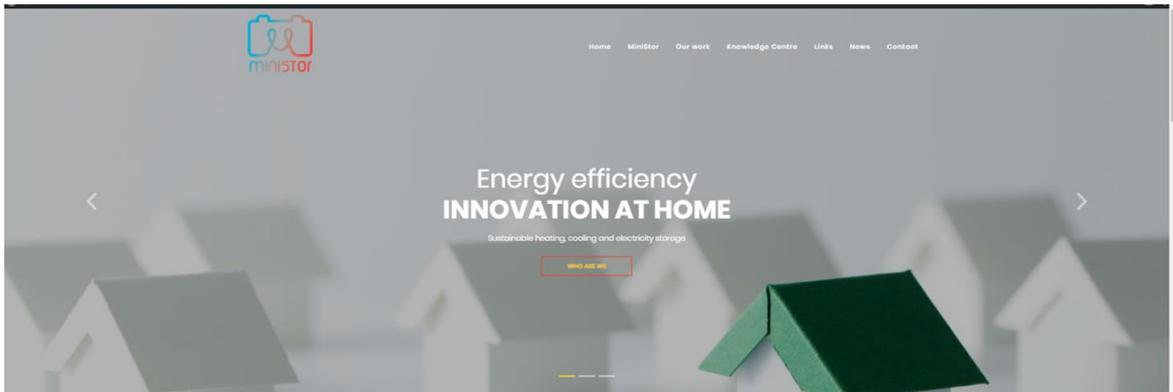


The following sections present screenshots of the initial state of the webpage as of April 2020. Content will be modified and added according to developments in the project.

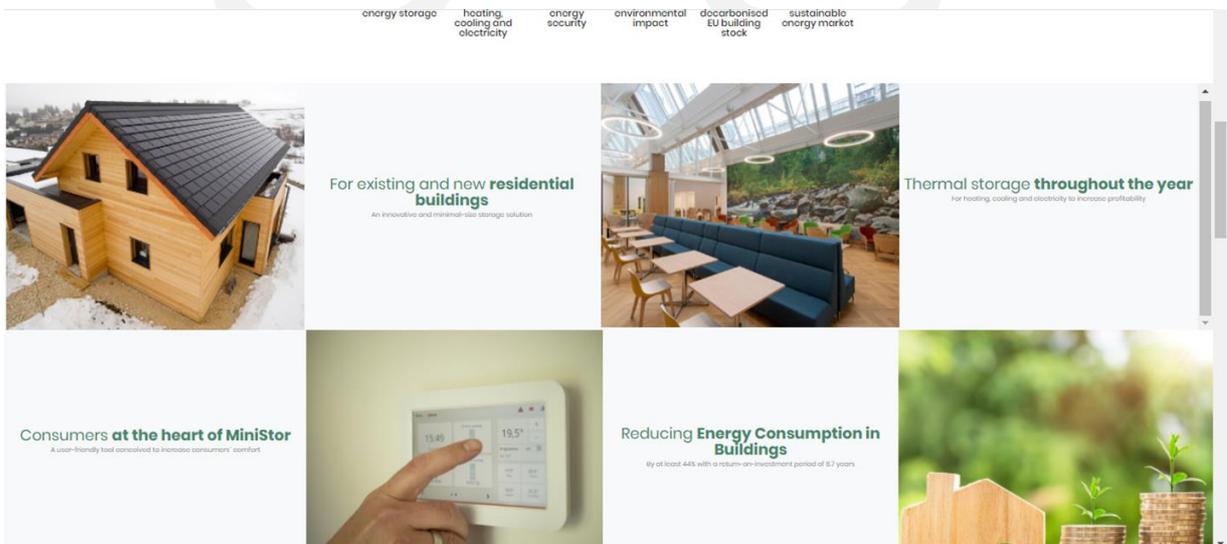
2 Website screenshots

The webpages in their full extent cover more than what can be represented in a standard A4 page. The divisions presented here are for representation purposes only, since all items in the same subject line correspond to a continuous web page, the contents are seen by “scrolling” down the page. Different sections are shown consecutive to one another according to the website structure of the previous section.

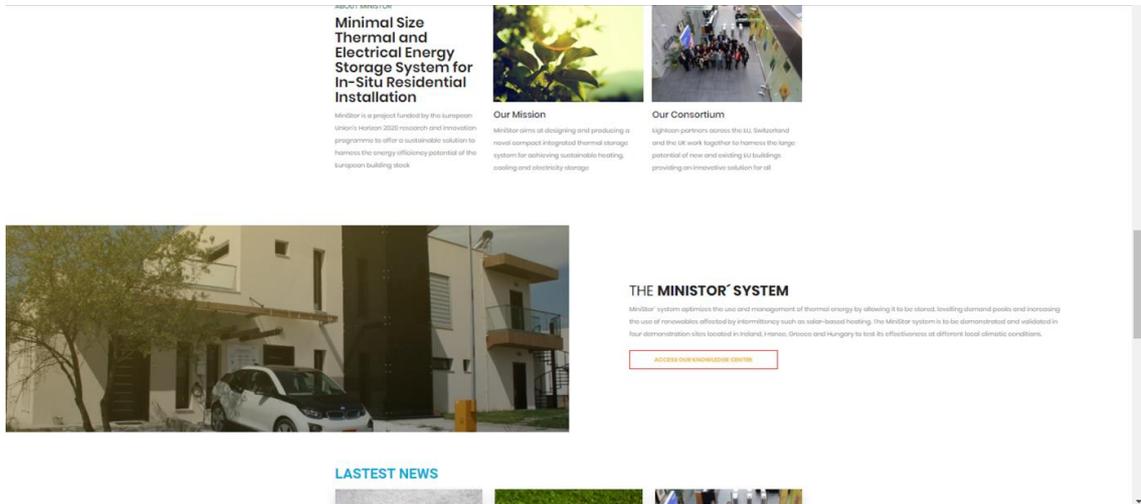
2.1 Home (first page seen by users)



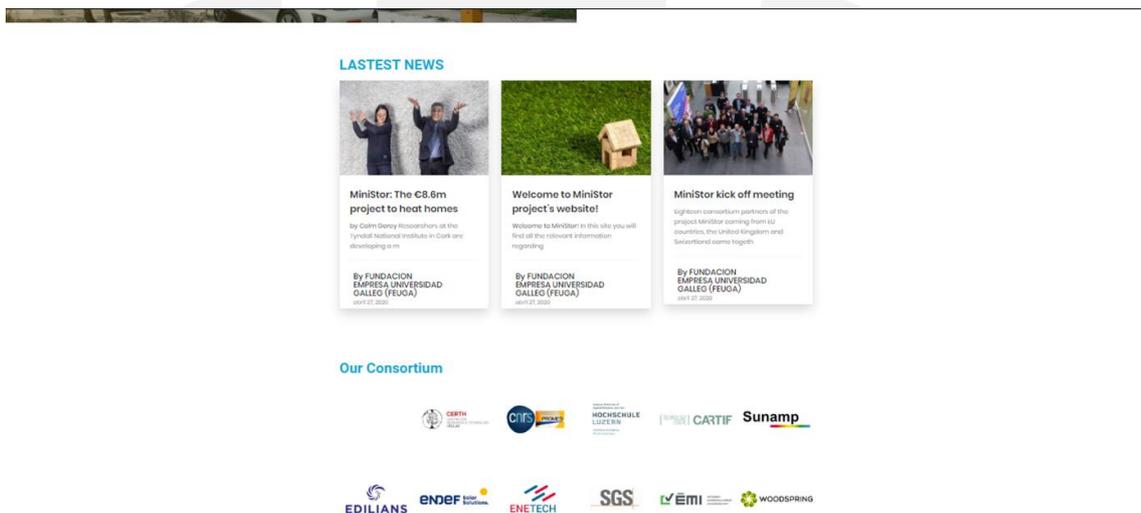
Home page (1) – the opening image changes and shows relevant links



Home page (2)



Home page (3) – description of the system

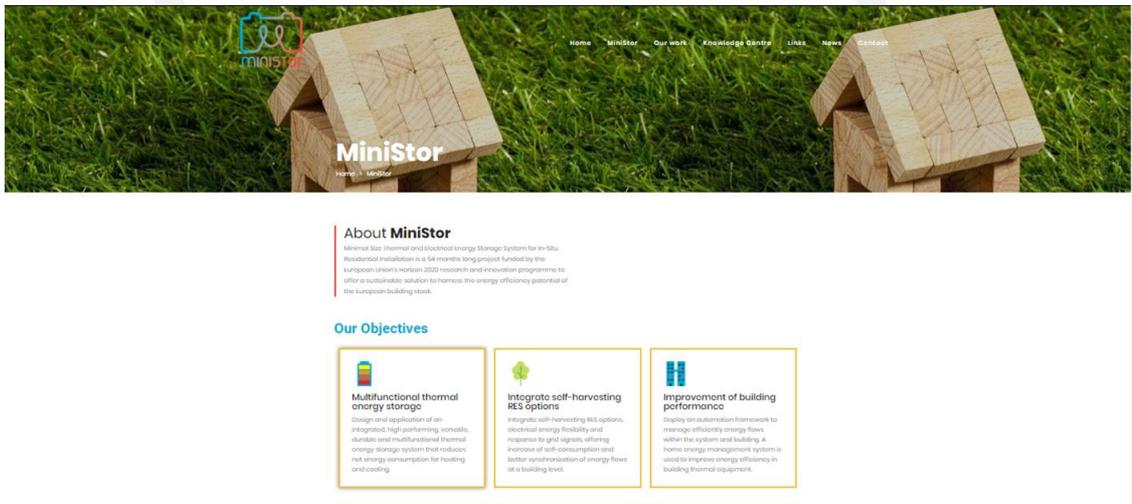


Home page (4) – link to current project news



Home page (5) footer – partner logos including acknowledgements to the Commission

2.2 Menu Item MiniStor



menu item MiniStor (1)

Our Objectives

 <p>Multifunctional thermal energy storage</p> <p>Design and application of an integrated, high performing, versatile, durable and multifunctional thermal energy storage system that reduces net energy consumption for heating and cooling.</p>	 <p>Integrate self-harvesting RES options</p> <p>Integrate self-harvesting RES options, electrical energy flexibility and response to grid signals, offering increase of self-consumption and better synchronization of energy flows at a building level.</p>	 <p>Improvement of building performance</p> <p>Deploy an automation framework to manage efficiently energy flows within the system and building. A home energy management system is used to improve energy efficiency in building thermal equipment.</p>
 <p>Methods for decreased installation time</p> <p>Design and construction methods to decreased installation time with minimum maintenance needs. Utilize time and cost-effective construction methods, reducing on-site installation time and disruption to occupants.</p>	 <p>Minimum environmental impact</p> <p>Develop an effective storage solution with minimum environmental impact. Economic, social and environmental issues, including comfort/indoor quality, safety and time effectiveness adopting a life-cycle approach.</p>	 <p>Circular economy-driven business models</p> <p>Elaborate and validate circular economy-driven business models (BMs) and market design to stimulate market penetration of the developed and validated integrated storage system at European level.</p>

menu item MiniStor (2) – Description of the main project objectives

<p style="font-size: 24px; margin: 0;">18</p> <p style="font-size: 10px; margin: 0;">PARTNERS</p>	<p style="font-size: 24px; margin: 0;">9</p> <p style="font-size: 10px; margin: 0;">COUNTRIES</p>	<p style="font-size: 24px; margin: 0;">54</p> <p style="font-size: 10px; margin: 0;">MONTHS</p>	<p style="font-size: 24px; margin: 0;">4</p> <p style="font-size: 10px; margin: 0;">DEMONSTRATION SITES</p>
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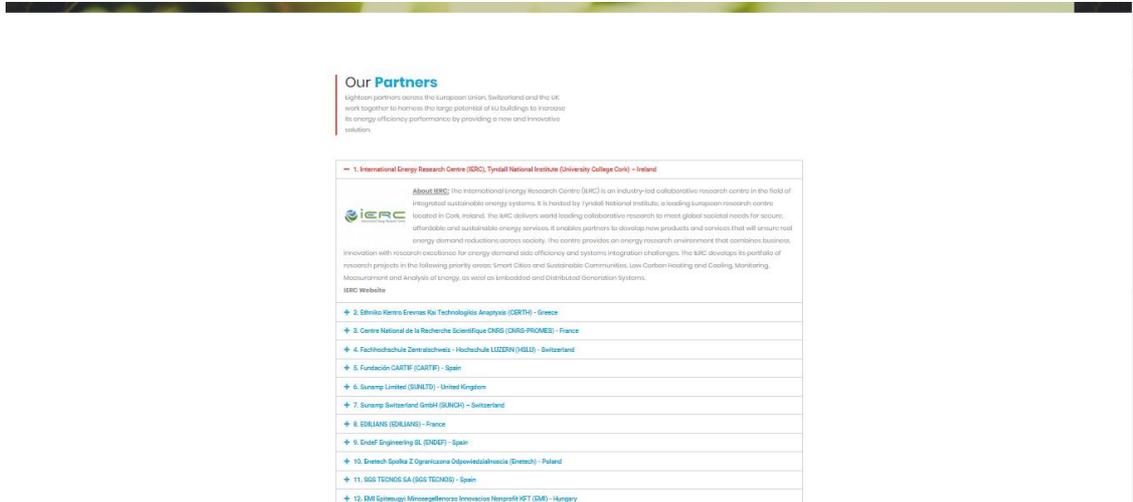


DEMONSTRATION SITES

The MiniStor system is to be demonstrated and validated in four demonstration sites located in Ireland, France, Greece and Hungary to test its effectiveness at different local climatic conditions, facilitating market replication while offering an innovative, efficient and clean thermal and electrical energy storage solution for all Europeans.

KNOWLEDGE CENTRE

menu item MiniStor (3) – link to description of demonstration sites

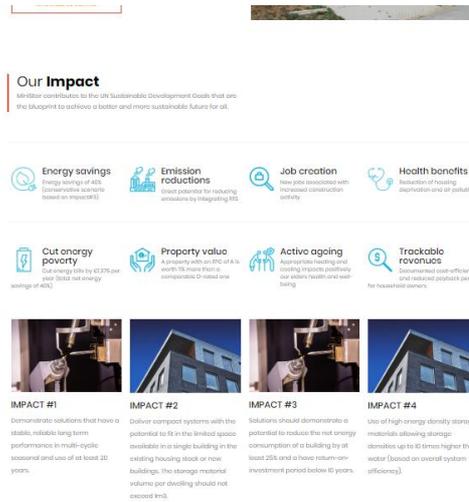


Sub-menu item Partners – Description of each partner can be expanded by clicking on the plus (+) sign. Contains links to each partner website.

2.3 Menu Item Our Work



menu item Our Work (1)



Our Impact
MiniStor contributes to the UN Sustainable Development Goals that are the blueprint to achieve a better and more sustainable future for all.

- Energy savings**: Energy savings of 40% (Operative scenario based on impact#1)
- Emission reductions**: Lower potential for reducing emissions by integrating BES
- Job creation**: New jobs associated with increased construction activity
- Health benefits**: Reduction of heating degradation and air pollution
- Cut energy poverty**: Cut energy bills by 43.2% per year (total net energy savings of 40%)
- Property value**: A property with an EPC of A is worth 7% more than a comparable D-rated one
- Active ageing**: Appropriate heating and cooling impacts positively our users' health and well-being
- Trackable revenues**: Guaranteed user efficiency and reduced payback period for household users

IMPACT #1: Demonstrate solutions that have a stable, stable long-term performance in multi-cycle seasonal and use of at least 20 years.

IMPACT #2: Deliver compact systems with the potential to fit in the limited space available in a single building in the existing housing stock or new buildings. The storage material volume per dwelling should not exceed 1m³.

IMPACT #3: Solutions should demonstrate a potential to reduce the net energy consumption of a building by at least 25% and have a return-on-investment period below 10 years.

IMPACT #4: Use of high energy density storage materials allowing storage densities up to 10 times higher than water (based on overall system efficiency).

menu item Our Work (2) – description of expected project impacts

Our Expertise

The MiniStor consortium consist of 18 members distributed across EU member states, Switzerland and the United Kingdom. The consortium as a whole can supply the expected requirements that are needed to complete the project, both for the supply chain and the demonstration sites.



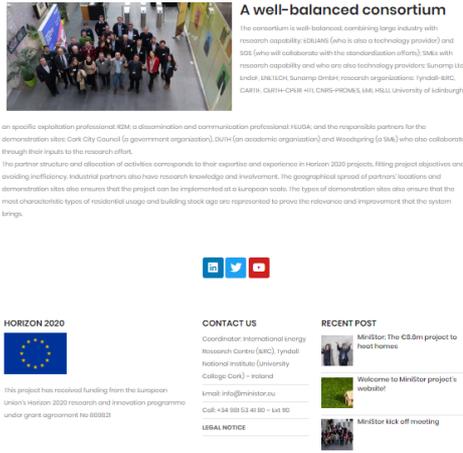
A well-balanced consortium

The consortium is well-balanced, combining large industry with research capability: EDILIANI (who is also a technology provider) and SGS (who will collaborate with the standardization efforts); SMEs with research capability and who are also technology providers: Sunamp Ltd, EndeF, ENETECH, Sunamp GmbH; research organizations: Tyndall-IERC, CARTIF, CERTH-CPERI +ITI, CNRS-PROMES, EMI, HSLU, University of Edinburgh;

an specific exploitation professional: R2M; a dissemination and communication professional: FEUGA; and the responsible partners for the demonstration sites: Cork City Council (a government organization), DUTH (an academic organization) and Woodspring (a SME) who also collaborate through their inputs to the research effort.

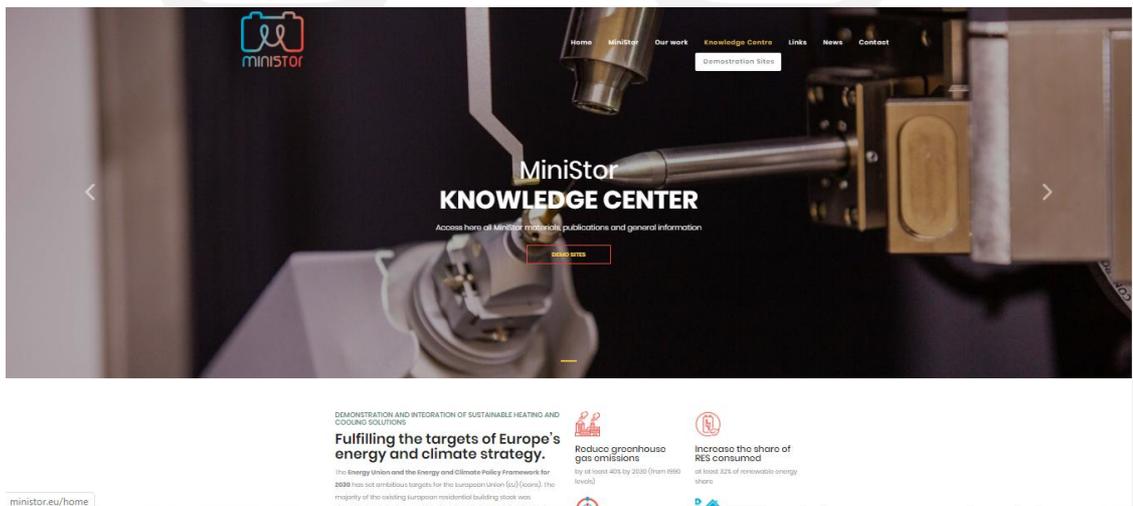
The partner structure and allocation of activities corresponds to their expertise and experience in Horizon 2020 projects, fitting project objectives and avoiding inefficiency. Industrial partners also have research knowledge and involvement. The geographical spread of partners' locations and demonstration sites also ensures that the project can be implemented at a European scale. The types of demonstration sites also ensure that the most characteristic types of residential usage and building stock age are represented to prove the relevance and improvement that the system brings.

menu item Our Work (3) – brief description of consortium qualities



menu item Our Work (4) footer – shows social media links. LinkedIn (<https://www.linkedin.com/company/ministorh20>) and Twitter (<https://twitter.com/MiniStorH2020>) are operative as of April 2020

2.4 Menu Item Knowledge Center



menu item Knowledge Center (1)

DEMONSTRATION AND INTEGRATION OF SUSTAINABLE HEATING AND COOLING SOLUTIONS

Fulfilling the targets of Europe's energy and climate strategy.

The Energy Union and the Energy and Climate Policy Framework for 2030 has set ambitious targets for the European Union (EU) (icons). The majority of the existing European residential building stock was constructed before the Energy Performance of Buildings Directive (EPBD). There is large potential to achieve solutions that can be integrated to existing dwellings and through different measures. One of those measures is **optimizing use and management of thermal energy** by allowing it to be stored to level demand peaks, increasing use of renewables affected by intermittency such as solar-based heating. **Thermal Energy Storage (TES) systems** offer an increase in overall efficiency and better reliability when applied in an energy framework, leading to **better economics, reductions in investment and running costs, as well as reductions in carbon dioxide (CO2) emissions.**

[LEARN MORE](#)



Reduce greenhouse gas emissions

by at least 40% by 2030 (from 1990 levels)



Energy savings target

27% of energy savings by 2030



EU building stock inefficiency %

An estimated 97% is considered energy inefficient (around 30 billion m2)



Increase the share of RES consumed

at least 32% of renewable energy share



Improvement in energy efficiency

at least 32.5% by 2030



EU building stock life expectancy

75-85% of it will continue to be utilized by 2050.

menu item Knowledge Center (2)

Get More Information

Click on the links below to deepen your knowledge about MiniStor project



Communication materials

Learn more about the project and our purpose with these materials

[AVAILABLE SOON](#)



Newsletters

Take a look at MiniStor's latest news and sign up!

[READ MORE](#)



Publications and articles

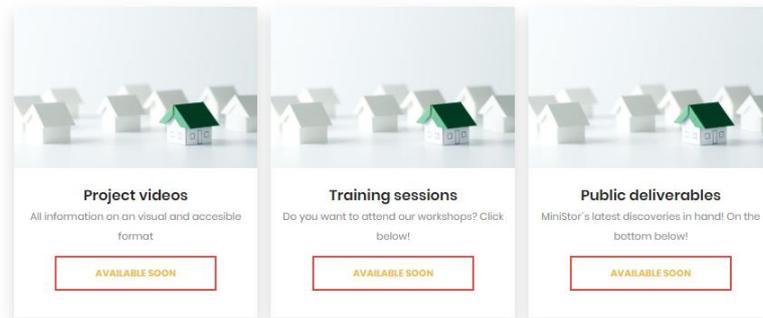
Are you interested in scientific publications? Click below!

[AVAILABLE SOON](#)

menu item Knowledge Center (3) – Links to subscribe to obtain further communication materials, newsletters and publications. Due to the early stage of the project, these links are under construction

Get encouraged and trained with MiniStor

Access our trainings and latest discoveries!



menu item Knowledge Center (4) – Links watch project videos, training sessions and access public deliverables. These items will be populated in due time.

Our MiniStor System

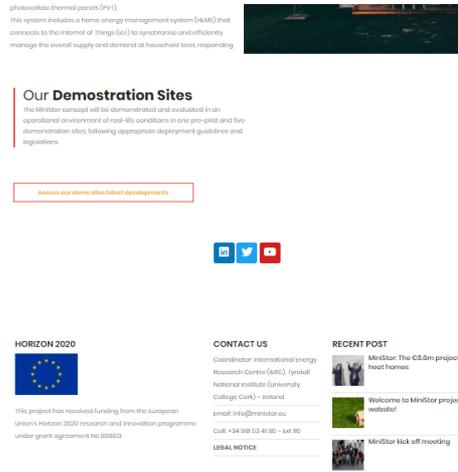
The MiniStor system provides stability, performance and usage of at least 20 years with a minimal-size.

The MiniStor thermal storage system

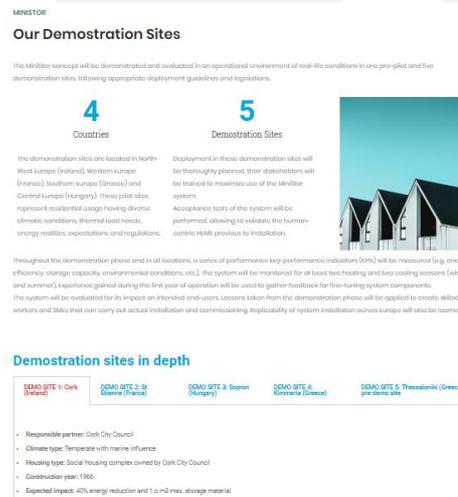
The MiniStor thermal storage system is based on a high-performing thermochemical material (TCM) reaction, combined with a hot and a cold phase-change materials (PCM). The PCMs use their latent heat during phase change to store the heat and the cold produce from the TCM. The electrical storage is a conventional system based on a Li-ion battery for flexibility and usage year-round. The storage system allows for compact storing of RES-based energy using hybrid photovoltaic thermal panels (PVT). This system includes a home energy management system (HEMS) that connects to the Internet of Things (IoT) to synchronise and efficiently manage the overall supply and demand at household level, responding



menu item Knowledge Center (5) – Brief explanation of the system concept.



menu item Knowledge Center (6) – Link to demo sites' description, opens page below.



Sub- menu item Demonstration sites – Synoptic description of the current demonstration sites.

2.5 Menu Item Links



European projects

+ NOVICE Innovative business model for Energy Service Companies (ESCOs)
+ Superhomes Optimisation of Air Source Heat Pump Applications in NZEB Residential Retrofits
+ PANTERA European forum of Research & Innovation stakeholders active in the fields of smart grids, storage and local energy systems
+ COMSOS validate and demonstrate fuel cell based combined heat and power solutions

menu item Links (1) – page where EU-funded projects with related theme to MiniStor can be accessed and where partners participate

2.6 Menu Item News



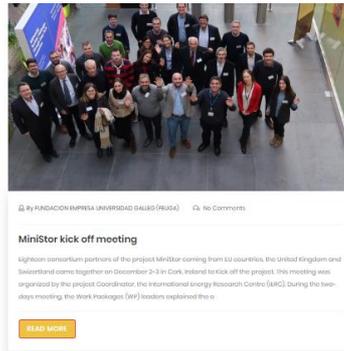
Categories

News

Recent Posts

MiniStor: The C8.6m project to heat
abril 27, 2020

menu item News (1) – page where users can find and read in detail news related to the project. Sourced from communications by partners and their social media accounts such as LinkedIn.



menu item News (2) – footer of the page with news ordered in chronological order.

2.7 Menu Item Contact



Contact Us!

We are here for you! Send us your doubts, requests or comments. We will try to answer you as soon as possible! If you would like to sign up to our newsletter, please write in the subject box 'Newsletter'.

+34 981 53 41 80
info@ministor.eu

Your Name (required)
Your Email (required)
Subject
Your Message

menu item Contact – users can send a message to the information email outlined in the page.