



This Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement N. 818329



## Sun coupled innovative Heat pumps D8.2 – SunHorizon Leaflet and Poster

Due date of deliverable: **31/01/2019**

Actual submission date: **31/01/2019**

Organisation name of lead contractor for this deliverable: RINA-C

Dissemination Level (Specify with "X" the appropriate level)		
PU	Public	X

History of deliverable	
V1	Submitted on 31/1/2019

### Project Contractual Details

<b>Project Title</b>	Sun coupled innovative Heat pumps
<b>Project Acronym</b>	SunHorizon
<b>Grant Agreement No.</b>	818329
<b>Project Start Date</b>	01-10-2018
<b>Project End Date</b>	30-09-2022
<b>Duration</b>	48 months
<b>Supplementary notes:</b> This document will be publicly available (on CORDIS and project official websites as soon as approved by EC.	

## Table of Contents

---

Table of Contents .....	2
1 Introduction .....	3
2 Brand identity .....	4
2.1 Project Logo .....	4
2.2 EU Emblem and Official Disclaimer.....	4
3 Project leaflet.....	6
3.1 External part of the leaflet .....	6
3.2 Internal part of the leaflet .....	7
4 Project poster .....	10
5 Conclusion and Future Plans .....	14

# 1 Introduction

---

The current deliverable (D8.2) is entitled “SunHorizon Leaflet and Poster” and is a public document of the SunHorizon project, produced in the context of WP8, Task 8.1 “Communication and Dissemination Activities”. The objective of WP8 is to maximise SunHorizon’s impact by connecting research and innovation activities to the public and professional audience.

Its objective is to present and describe the scope of the project communication material: a promotional project leaflet and a general project poster. These are used as means of communication activities which are undertaken to support dissemination activities and promote objectives and findings. The leaflet and poster are oriented to raise awareness and provide visibility for the large non-specialist community as well as the community of relevant stakeholders.

Last but not least, the development of a project poster and leaflet, enhances the project visual identity and public image and hence, allows an easier identification by the public, ensuring visibility and recognition. The aforementioned material, will be properly displayed and distributed to the project related conferences, exhibitions and workshops.

Dissemination activities are undertaken from the beginning of the project and aim, in a first instance, at raising interest in the proposed technology of relevant stakeholders. In a second instance, exploitation-oriented dissemination activities aim at promoting the novel technology that is developed throughout the project, along with the benefits it can provide, towards potential target end-users/adopters, to speed up its adoption and take-up. As it is necessary to disseminate the importance of flexible back up power plants for the stability and affordability of the EU energy scenario, the project partners need to promote SunHorizon technologies – both through communication and dissemination activities – as the perfect environmental-friendly fossil fuel technology solution, to be coupled with RES. Hence, the distribution of the communication material is foreseen as an effective solution of promoting the concept and results of SunHorizon.

In particular, this report aims at making SunHorizon communication and dissemination promotional material available for:

- Project partners, so that they can use both the leaflet and the poster to raise awareness about SunHorizon at scientific conferences and trade fairs
- Event organisers, so that they can understand the main concept of the project and help the partners to promote it in the best way.

## 2 Brand identity

---

The first step of a successful communication and dissemination strategy is the definition of a brand identity, which means building a solid and long-lasting visual identity that can be easily recognised by potential stakeholders, the media and the general public.

### 2.1 Project Logo

---

The logo is one of the most important aspects of an EU project, and its shapes, colours, fonts, and images need to be strikingly different from other logos of the projects that applied to the same call. For this reason, SunHorizon logo is distinctive, appropriate, practical, graphic and simple in form in order to convey the project concept also to a non-specialised audience.

The project logo has been designed using two different and contrasting colours because one of the main objective of SunHorizon is to optimize the existing technologies for heating and cooling applications:

- A bright orange has been chosen to represent the heating technologies
- An intense blue has been selected to represent the cooling technologies

Moreover, to reinforce the idea that heating and cooling technologies are involved in the project, two icons (one representing a snowflake and one representing heat waves) have been used as the dot of the “I” letter of SunHorizon project name. Finally, a symbol of the sun has been integrated into the project logo to convey the message that solar energy plays an important role in the project as, in fact, SunHorizon consortium will demonstrate innovative, reliable, cost-effective coupling of solar and Heat Pump technologies.



*Figure 1: SunHorizon Colour Palette*

### 2.2 EU Emblem and Official Disclaimer

---

In accordance with the Commission’s guidelines on visual identity, SunHorizon project is identified by the EU Emblem and the official disclaimer “The project received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 818329”.

All the promotional material displays the EU emblem and the name of the European Union is always spelled out in full.



 This Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement N. 818329



Figure 2: EU Emblem and Official Disclaimer

### 3 Project leaflet

This is the first design for a project Leaflet.

As the project has only recently started, this leaflet was created with a three-fold objective:

- To publicize the existence of the project itself;
- To convey the project's objectives and scope in a clear and visually appealing way;
- To encourage European local authorities and other potential end-users to contact the project coordinators and get involved in the project as potential demonstrators.

In light of this, the marketing and graphic design teams of RINA-C have worked closely with Project coordinator and with EHPA, WP7 leader, to outline a solid market positioning of the project and define the key elements of the leaflet.

The project's leaflet is a trifold leaflet that follows the roll fold design and was developed using Adobe Indesign, a desktop publishing and typesetting software application produced by Adobe Systems.

The leaflet will be used by project partners to raise awareness about SunHorizon so the technical messages have been translated into simpler messages. In this way, also a non-specialised audience can understand SunHorizon concept.

This leaflet will be printed for all partners' use at conferences, events and workshops where SunHorizon will be presented. According to the project's further developments and needs, the design may be updated by RINA Consulting into a second version, to advance new promotional campaigns and including updated project outcomes.



Figure 3: SunHorizon Leaflet

#### 3.1 External part of the leaflet

When the leaflet is folded, only two parts of it are visible:

- The Leaflet cover (see Fig. 2), which as mentioned in the previous chapter displays the EU Emblem and Official Disclaimer. Moreover, the website address is highlighted in order to invite potential stakeholder to visit the project website and become part of SunHorizon community
- The section which introduces the project consortium. Particular focus is on SunHorizon social media pages in order to promote social engagement and invite potential stakeholders to keep up-to-date through social media channels. Moreover, also the contact of the Project Technical Coordinator is highlighted.



Figure 4: Consortium and Contacts

### 3.2 Internal part of the leaflet

The internal part of the leaflet contains four sections:

- *The Project Challenge:* introduces the mission and the challenges that the project aims to tackle
- *SunHorizon Innovative Solution:* a brief description of the technologies that will be developed during the project is presented
- *The Monitoring Platform:* the cloud based functional monitoring platform that will drive the smart monitoring of end users as well as will optimize the management of the installed technologies to maximise the solar exploitation is presented.
- *The benefits for the EU community:* this last part shows which will be the environmental benefits that can be reached thanks to SunHorizon project

As the target of the leaflet is the general public, particular emphasis is put on the social challenge that SunHorizon aims to address and on the advantages for the EU citizens. Moreover, a lot of icons and images have been used to convey the main messages of the project in a more direct way. In fact, the project consortium decided to communicate SunHorizon through schemes and images rather than technical words that might turn out to be more difficult to understand.

## CHALLENGE

Heating and Cooling represents the largest source of energy demand in Europe and the majority of EU's gas imports are used for these purposes (especially to heat and cool residential and tertiary buildings).



Unfortunately, this demand is mostly met by fossil fuels, with natural gas having the main share (45%) and renewable energy sources (RES) remaining very marginal (5%).

The proposed Technology Packages (TP) aim at covering at least 80% of the Heating & Cooling needs of refurbished and new single/multi-family/tertiary buildings.

In fact, SunHorizon innovative and reliable Heat Pump solutions (thermal compression, adsorption, reversible) will act properly coupled and managed with advanced solar panels (PV, Hybrid, thermal), providing heating and cooling to residential and tertiary building with lower emissions, energy bills and fossil fuel dependency.

Figure 5: SunHorizon Challenge

## THE INNOVATIVE SOLUTION

SunHorizon will design and demonstrate 5 technology packages (TPs) to be applied all across EU climates and building, coupling different solar technologies and HPs also integrated with Thermal Storage (TES). In particular, different innovative and reliable Heat Pump solution (thermal compression, adsorption, reversible) will be properly coupled and managed with advanced solar panels (PV, Hybrid, thermal) and demonstrated in 8 demosites all around Europe (Germany, Spain, Latvia, Belgium).



Hybrid PVT panels



Hybrid adsorption compressor cascade chiller



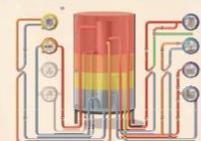
Hybridation of HP, solar thermal and PV



Thermal Compression HP



Vacuum solar thermal panels



Stratified thermal storage tank

Figure 6: SunHorizon Innovative Solution

## THE MONITORING PLATFORM

SunHorizon consortium will develop also a cloud based functional monitoring platform to:

- Act as the “performance data mine” for the development of Data Driven/KPI oriented optimized algorithms and tools for predictive maintenance;
- optimize the management towards maximisation of solar exploitation;
- give to the manufacturer inputs for enhancing the design of their components.

This monitoring platform will also drive smart monitoring end user interfaces that will be applied at building level to collect thermal comfort data towards a new thermal comfort driven heating control system.

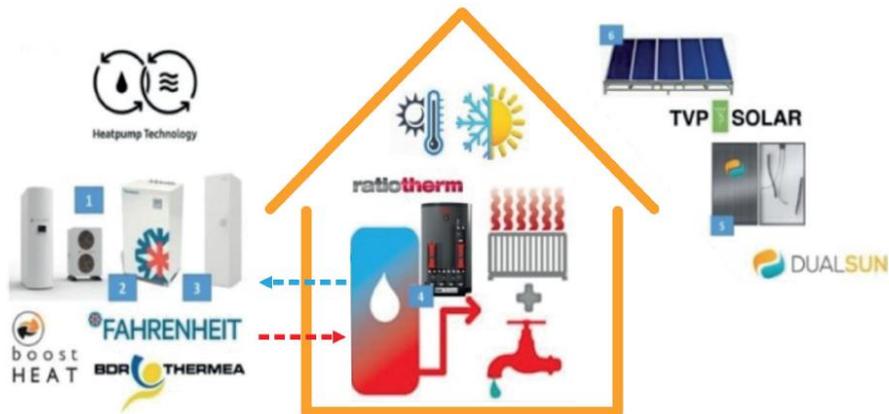


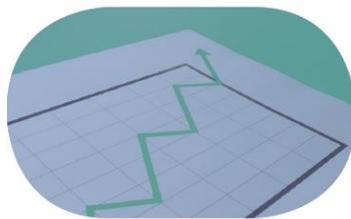
Figure 7: SunHorizon Monitoring Platform

## BENEFITS FOR THE EU COMMUNITY

SunHorizon will provide heating and cooling to residential and tertiary buildings and will have the following main benefits for the EU community:



**Reduction of the dependence on fossil fuels through the demonstration of optimised, cost-effective H&C components**



**Primary energy savings and, consequently, lower energy bills**



**Reduction of Greenhouse Gas Emissions**



[@SunHorizonEU](https://twitter.com/SunHorizonEU)



[SunHorizon-Project](https://www.linkedin.com/company/sunhorizon-project)



[www.sunhorizon-project.eu](http://www.sunhorizon-project.eu)

Figure 8: SunHorizon Benefits for the EU Community

## 4 Project poster

---

As mentioned for the project leaflet, this poster design also has three main objectives:

- To publicise the existence of the project itself
- To convey the project's objectives and scope in a clear and visually appealing way
- To encourage European local authorities and other potential end-users to contact the project coordinators and get involved in the project potentially as demonstrators

In light of this, the marketing and graphic design teams of RINA-C have worked closely with Project coordinator and with EHPA, WP7 leader to define an effective graphic and text for a project poster. As a consequence, we have created a rectangular, A1 poster.

The poster follows the same reading logic as the leaflet, though using a different order:

- Project logo, acronym and long title
- Technologies that will be developed within the project and the 5 technology packages that will be demonstrated in the 8 SunHorizon demosites
- Demosite studied in SunHorizon
- The monitoring platform that will be created
- Contacts
- Reference to EU funding and to grant agreement number
- Partnership logos

The design is captivating and full of schemes and images in order to catch the attentions of potential stakeholders during the poster sessions at scientific events.

As for the project leaflet, the contacts of SunHorizon technical coordinator, the website and the social media pages are carefully highlighted in order to drive traffic to the official project channels.

This poster will also be printed for all partners' use at conferences, events and workshops where SunHorizon will be presented. According to the project's further developments and needs, the design may be updated by RINA-C/EHPA into future versions, to advance new promotional campaigns.

# Sun Coupled Innovative Heat Pumps

*The main objective of SunHorizon is to demonstrate innovative and reliable Heat Pump solutions (thermal compression, adsorption, reversible) that acting properly coupled and managed with advanced solar panels (PV, Hybrid, thermal) can provide heating and cooling to residential and tertiary building with lower emissions, energy bills and fossil fuel dependency.*

## SUNHORIZON TECHNOLOGIES

*The project will analyze heat pumps and building integrated solar solution. Such integration aims to cover the whole H&C demand of the building. The technologies that will be installed are:*



**Hybrid PV/T panels**



**Hybrid adsorption Compressor cascade chiller**



**Hybridation of HP, solar thermal and PV**



**Thermal Compression HP**



**Vacuum solar thermal panels**



**Stratified thermal storage tank**

SUNHORIZON TP		SOLAR/HP INTEGRATION CONCEPT
TP1	TVP+BH	Parallel integration
TP2	DS+BH	Mixed Solar/assisted - Parallel integration
TP3	TVP+FAHR	Solar-Driven HP for Cooling
TP4	DS+BDR	Parallel integration
TP5	TVP+BH+FAHR	Mixed Solar-Driven - Parallel integration

## DEMO ACTIVITIES



*SunHorizon Demo activities will be held in different EU contexts to evaluate different climatic and energy market solutions (Berlin, Nürnberg, Saint Cugat del Valles, Madrid, San Lorenzo de Hortóns, Verviers and Riga) SunHorizon Innovative technologies will be deployed in small and large scale residential (single house and apartment blocks) and tertiary buildings (public buildings, sport centers).*



## THE MONITORING PLATFORM

*SunHorizon consortium will develop also a cloud based functional monitoring platform that will act as the "performance data mine" for the development of Data Driven/XPI oriented optimized algorithms and tools for predictive maintenance. In this way, it will be possible to optimize the management towards maximisation of solar exploitation and give to the manufacturer inputs for enhancing the design of their components.*

## CONSORTIUM















[www.sunhorizon-project.eu](http://www.sunhorizon-project.eu)

The Project has received funding from the European Union Horizon 2020 Research and Innovation Programme under Grant Agreement N. 101019333

Contact:  
@SunHorizon - Project Coordinator  
@SunHorizon - Project Coordinator  
@SunHorizon - Project Coordinator

Figure 9: SunHorizon Project Poster

## 5 Roll-up

---

In order to present the project also during public events, a roll-up is created following the same logico and structure of the poster.

As mentioned for the poster, the roll-up design also has three main objectives:

- To publicise the existence of the project itself
- To convey the project's objectives and scope in a clear and visually appealing way
- To encourage European local authorities and other potential end-users to contact the project coordinators and get involved in the project potentially as demonstrators

The roll-up follows the same reading logic as the poster. The roll-up will be used during the international ISH Event in Frankfurt on 13<sup>th</sup> of March, during the first launching event of SunHorizon project.



## Sun Coupled Innovative Heat Pumps

### SUNHORIZON TECHNOLOGIES



Hybrid PV/T panels



Hybrid adsorption Compressor cascade chiller



Hybridization of HP, solar thermal and PV



Thermal Compression HP



Vacuum solar thermal panels



Stratified thermal storage tank

SUNHORIZON HP		SOLAR/HP HYBRIDIZATION CONCEPT	
HP	HP-SH	PhotoV Integration	
HP	SH-SH	Mixed Solar-Thermal - PhotoV Integration	
HP	HP-SH-SH	Solar-Thermal HP for Cooling	
HP	SH-SH	PhotoV Integration	
HP	HP-SH-SH-SH	Mixed Solar-Thermal - PhotoV Integration	



#### DEMO ACTIVITIES

SunHorizon Demo activities will be held in different EU contexts to evaluate different climatic and energy market solutions.



### THE MONITORING PLATFORM

SunHorizon consortium will develop also a cloud based functional monitoring platform that will act as the "performance data mine" for the development of Data Driven / KPI oriented optimized algorithms and tools for predictive maintenance

### CONSORTIUM









































[www.sunhorizon-project.eu](http://www.sunhorizon-project.eu)

This Project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement 10.1017/9781009180000

Contract / Action Grant No. - Project Coordinator: 101017-9781009180000 - [www.sunhorizon-project.eu](http://www.sunhorizon-project.eu)



@SunHorizonEU



SunHorizon-Project

Figure 10: SunHorizon Project Poster

## 6 Conclusion and Future Plans

---

In accordance to the previous deliverables defining the project dissemination strategy, this deliverable provides the project leaflet and poster of the SunHorizon project which will be used by the consortium as means of raising general awareness of the large non-specialist community, as well as the community of relevant stakeholders.

With all these measures, including a graphically appealing, easy text formats and well-structured contents, RINA-C, EHPA and the other Consortium partners have laid the ground for an appealing dissemination campaign that attracts many visitors and will redirect to the main communication channels (website/social media).

The structure of the printed material is similar and effectively connected to the main concepts that the project would like to promote.

RINA-C will further update the contents of leaflet and posters according to progress updates and status and also under the guidelines received by EHPA (as WP7 leader). Only by keeping the material updated and addressing audience to an up-to-date website, it is possible to ensure a maximum outreach potential for the project communication and dissemination.

Considering that SunHorizon consortium has just submitted an amendment (which is currently under evaluation) for the introduction of a new partner in the consortium, all the materials here presented will be properly updated including the logo of the new partner.