

## *Detailed implementation plan of the pilot actions*

**PROJECT TITLE:** *Enhancing Mediterranean Initiatives Leading SMEs to innovation in building energy efficiency technologies*

**AXIS:** *Strengthening innovation capacities*

**OBJECTIVE:** *Dissemination of innovative technologies and know-how*

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**Responsible partner:** *CAPENERGIES*

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## List of abbreviations and terms

AREA	stands for AREA Science Park, head quartered in Trieste, Friuli Venezia Giulia region, Italy
CAP	is a short name of the Capenergies cluster, headquartered in Aix-en-Provence, PACA region, France
CIRCE	Stands for Centro de investigación de recursos y consumos energéticos, headquartered in Zaragoza, Aragón region, Spain
IAT	stands for Instituto Andalousian de Technologico, headquartered in Seville, Andalousia region, Spain
IJS	stands for Institute Josef Stephan, headquartered in Ljubljana, Ljubljana region, Slovenia
REA	stands for Regionalna Energija Agenci, headquartered in Rijeka, Kvarner region, Croatia
PACA	stands for Provence Alpes Côte d’Azur, the south-east region of France
SunLab	is the short name of the pilot action implemented in Italy, Friuli Venezia Giulia region , addressing <i>Solar Cooling technology Lab for building conditioning</i>
HVACLab	is the short name of the pilot action implemented in Spain, Andalousia region, addressing a <i>HVAC technology Lab for office buildings</i>
SmartEE	is the short name of the pilot action implemented in France, PACA region, demonstrating a <i>Smart interface to impulse behaviour changes favourable to Energy Efficiency</i>
InfraSun	is the short name of the pilot action implemented in Slovenia, Ljubljana region, approaching <i>Sun as an energy infrastructure</i>
Glassolating	is the short name of the pilot action implemented in Spain, Aragón region, dealing with <i>Phase Material Change technology in glass envelopes</i>
SunCool	is the short name of the pilot action implemented in Croatia, Kvarner region, addressing <i>Solar Cooling technology for a thermal comfort laboratory</i>

## **Executive summary and abstract**

This document presents the detailed implementation planning of the 6 pilot plants proposed by the EMILIE project. Then, it gives some insight about the coherence and synchronization of the actions in the 6 regions involved in the partnership.

## 1 Introduction

This Deliverable D4.1.2 resulting from the action 4.1 of the EMILIE project aims at describing how and when the physical pilot plants will be installed and turned to operation. The 6 pilot plants are:

- SunLab in Italy, Friuli Venezia Giulia region, under the lead of AREA
- HVACLab in Spain, Andalusia region, under the lead of IAT
- SmartEE in France, PACA region, under the lead of Capenergies
- InfraSun in Slovenia, Ljubljana region, under the lead of IJS
- Glassolating in Spain, Aragon region, under the lead of CIRCE
- SunCool in Croatia, Kvarner region, under the lead of REA

The first section gives the Gantt charts of the implementation schedules of the 6 pilot plants. Then, the next section gives some insights on the level of synchronization the partners could achieve, although significant discrepancies appeared in the tendering procedure which had to be implemented to select the technology providers (see Deliverables D4.2.1 and D4.2.2).

## 2 Schedules of the installation and operation of the pilot plants

Please jump to next page to review the implementation Gantt charts.

## 2.1 Schedule of the SunLab pilot plant implementation - Friuli Venezia Giulia Region

Weeks	1 <sup>st</sup> week - 12/05/2014	2 <sup>nd</sup> week - 19/05/2014	3 <sup>rd</sup> week - 26/05/2014	4 <sup>th</sup> week - 02/06/2014	5 <sup>th</sup> week - 09/06/2014	6 <sup>th</sup> week - 16/06/2014	7 <sup>th</sup> week - 23/06/2014	8 <sup>th</sup> week - 30/06/2014	9 <sup>th</sup> week - 07/07/2014	10 <sup>th</sup> week - 14/07/2014	11 <sup>th</sup> week - 21/07/2014	12 <sup>th</sup> week - 28/07/2014	13 <sup>th</sup> week - 04/08/2014
Days	[Grid of days]												
Working Days	[Grid of working days]												
<b>Working categories</b>													
<b>Phase 01</b>	[Blue blocks]												
Construction site set up	[Yellow blocks]												
<b>Phase 02</b>													
Plant modifications to the existing solar thermal power plant (HT)	[Yellow blocks]												
<b>Phase 03</b>													
Supply and installation of the adsorption chiller					[Yellow blocks]								
Supply and installation of low-temperature system (LT).					[Yellow blocks]								
Supply and installation of medium heat temperature system (MT) .					[Yellow blocks]								
Supply and installation of data collection and monitoring system					[Yellow blocks]								
Supply and installation of supervision and control system.					[Yellow blocks]								
<b>Phase 04</b>													
Site restoration and demobilization													[Blue/Yellow blocks]

Authors: AREA Science Park

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## 2.2 Schedule of the HVACLAb pilot plant implementation - Andalusia Region

Step	1st REPORTING PERIOD						2nd REPORTING PERIOD						3rd REPORTING PERIOD						4th REPORTING PERIOD						5th REPORTING PERIOD					
	janv-13	févr-13	mars-13	avr-13	mai-13	juin-13	juil-13	août-13	sept-13	oct-13	nov-13	déc-13	janv-14	févr-14	mars-14	avr-14	mai-14	juin-14	juil-14	août-14	sept-14	oct-14	nov-14	déc-14	janv-15	févr-15	mars-15	avr-15	mai-15	juin-15
Identification of key technologies to be tested																														
Analysis of technology requirements and performance needs																														
Planning and preparation of the pilot plant installation sites. Simualtion models development																														
Open procurement through tender procedure to select enterprises installing the pilot action																														
Selection of applicants and technologies																														
Final design studies and workplan preparation with selected contractor																														
Installation /construction of pilot plants																														
First operation and start-up of pilot plant																														
Follow-up of performances																														
Data collection & agregation, stakeholders and target groups visits to the pilot plant.																														

- Already achieved or in process
- To be done

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## 2.3 Schedule of the SmartEE pilot plant implementation - PACA region

PROJET EMILIE		GRIDPOCKET CONFIDENTIEL																						
AUTHOR : Michaela Kurejova SOPHIA-ANTIPOLIS 10/02/2014		vacances						vacances																
Task description	DATE	Start of the work	Due date	janv-14	févr-14	mars-14	avr-14	mai-14	juin-14	juil-14	août-14	sept-14	oct-14	nov-14	déc-14	janv-15	févr-15	mars-15	avr-15	mai-15	juin-15			
				24.janv	10.févr	22.févr	9.mars	21.mars	15.avr	21.avr	30.avr	3.mai	7.juin	5.juillet	1.sept	18.oct	3.nov	20.dec	5.janv	21.fev	9.mars	25.avril	11.mai	30.juin
Signature de la commande																								
Démarrage des travaux																								
Lancement du projet - bullet points	13.1.2014	23.1.2014	1																					
Spécification du projet et livrables 1er partie (technique)	13.1.2014	23.1.2014		1																				
Spécification du projet et livrables 2ieme partie (gestion)	27.1.2014	10.2.2014			1																			
Planning détaillé des développements et installation	27.1.2014	10.2.2014				1																		
Contacteur WIT et se faire prêter l'écran + leur planning																								
Spécification software																								
Fonctionnalités software - APIs																								
Fonctionnalités EcoTroks 1																								
Maquettes graphiques																								
Formation WIT																								
Développement software	15.4.2014	30.6.2014																						
API UI - serveurs																								
Designers HTML graphique																								
UI HTML																								
Solution logicielle																								
Fourniture des installations des équipements	21.4.2014	3.5.2014																						
Calcul des baselines																								
Chargement et paramétrage logiciel sur les terminaux (tactiles)																								
Démarrage des opérations																								
Solution logicielle opérationnelle																								
Lancement du service EcoTroks pour les élèves		1.9.2014																						
Suivi et maintenance de l'installation		30.6.2014																						
cooperation avec des éco_délégués																								
réception définitif de la solution logicielle		30.6.2015																						
Documentation technique et users guide																								
Deplacements GridPocket à Gap																								
Suggestion intervention Adelta association (à voir par Capenergies)																								
Workshop avec des écodélégués?																								
Explications:																								
Besoins extérieurs																								
Vacances																								
1 colonne = 1 semaine mais les activités sont bordé par les dates																								
C= confcall																								

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## 2.5 Schedule of the Glassolating pilot plant implementation - Aragon Region

Step	1st REPORTING PERIOD						2nd REPORTING PERIOD						3rd REPORTING PERIOD						4th REPORTING PERIOD						5th REPORTING PERIOD					
	janv-13	févr-13	mars-13	avr-13	mai-13	juin-13	juil-13	août-13	sept-13	oct-13	nov-13	déc-13	janv-14	févr-14	mars-14	avr-14	mai-14	juin-14	juil-14	août-14	sept-14	oct-14	nov-14	déc-14	janv-15	févr-15	mars-15	avr-15	mai-15	juin-15
Identification of key technologies to be tested (before the delivery of the roadmap)																														
Analysis of technology requirements and performance needs (PCM)																														
Planning and preparation of the demo implementation sites																														
Open public procurement through tender procedure to select enterprises installing the pilot action																														
Selection of applicants and technologies																														
Final design studies and workplan preparation with selected contractor																														
Installation /construction of pilot plants																														
Follow-up of performances																														
Data collection & agregation, stakeholders and target groups visits to the pilot plant.																														

 Already achieved or in process

 To be done

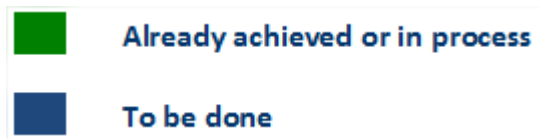
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## 2.6 Schedule of the SunCool pilot plant implementation - Kvarner Region

Step	1st REPORTING PERIOD						2nd REPORTING PERIOD						3rd REPORTING PERIOD						4th REPORTING PERIOD						5th REPORTING PERIOD					
	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Identification of the test site				■																										
Identification of the key technologies to be tested (before the delivery of the roadmap)				■	■																									
Specification of the EE service needs						■	■	■	■																					
Planning of the demo implementations and and prefeasibility study preparation						■	■	■	■	■																				
Transnational synergies outlook										■	■	■	■																	
Public procurement for designs and work supervision															■	■														
Beginning of designing															■															
Public procurement for works																■	■													
Start of construction																■														
Completion of all works and testing performance																	■	■												
Follow-up performances																		■	■	■	■	■	■	■	■	■	■	■	■	
Summary fact sheets for cross fertilization																			■	■	■	■	■	■	■	■	■	■	■	



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### 3.2 Design, installation and operation of the pilot plants

Design and installation of the pilot plants	1st REPORTING PERIOD					2nd REPORTING PERIOD					3rd REPORTING PERIOD					4th REPORTING PERIOD					5th REPORTING PERIOD										
	janv-13	févr-13	mars-13	avr-13	mai-13	juin-13	juil-13	août-13	sept-13	oct-13	nov-13	déc-13	janv-14	févr-14	mars-14	avr-14	mai-14	juin-14	juil-14	août-14	sept-14	oct-14	nov-14	déc-14	janv-15	févr-15	mars-15	avr-15	mai-15	juin-15	
AREA - SunLab - Friuli Venezia Giulia region																															
IAT - HVACLab - Andalousia region																															
CAP - SmartEE - PACA region																															
IJS - InfraSun - Ljubljana region																															
CIRCE - Glassolating - Aragón region																															
REA - SunCool - Kvarner region																															



The second step is to implement the pilot plants at selected sites. It appears that all the installations will be completed in July 2014, leaving almost one year of full operation.

Some of the implementation schedules do not include any design phase, because the design was well advanced in the frame of the preparation work for the call for tenders. This may have delayed the publication date of the calls, but it saved time for the second step.

The consortium can conclude that the implementation plans are in line with the initial expectations, since almost one year of experiment will be achieved by all the leaders of pilot actions.