

WP5 Training measures

Status and next steps..

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Content

- **Goals, concept & synergies**
- **Planning**
- **Development of material**
- **Organisation events/courses**



* **Goals** : To create a comprehensive set of training units and didactic material. For the participating countries, training courses will be prepared and evaluated through pilot courses.



Practical training

* **Audience** : Supply side

Mainly installers (+ planners)



Installation, CUT Osnabrück



Real installation feedback



WP5 Training on package solutions

* Task 5.1 Preparation of training materials

Inputs from Manufacturers and especially from WP4 (month 20 = May 2009)

Task 1	Preparation of training material TECSOL will guide the Industry partners in preparing their training material and planning the courses	D5.1-D5.5, D5.6	TECSOL, together with industry partners
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Deliverable(s) of this work package:

- D5.1 Training material related to the package solution – ROTARTICA (month 22)
- D5.2 Training material related to the package solution – CW (month 22)
- D5.3 Training material related to the package solution – SorTech (month 22)
- D5.4 Training material related to the package solution – SOLution (month 22)
- D5.5 Training material related to the package solution – SK (month 22)
- D5.6 Training material on SolarCombi+ to be included in trainings organized by related projects as e.g. SOLAIR (month 22)



WP5 Training on package solutions

* Task 5.2 Implementation of pilot trainings

3 pilot training courses/industry partner for 20-30 people => 350 installers

2 day course : 1 theory + 1 practice

Task 2	<p>Implementation pilot trainings Three pilot training courses per industry partner for 20 – 30 people in the different participating countries (at least one per target country, distribution depends also on chiller partners' target markets and solar thermal partners) The general concept foresees 2 day-courses: 1 day theory and 1 day practice o the package. This time is needed, because not only installation, but also maintenance and exploitation need to be described, which are quite specific, and in general not known for absorption/adsorption chillers. The training courses will be announced online (on project and partner websites), on fairs and through the usual dissemination channels of the industry partners</p>	D5.7	Industry partners, together with their solar thermal partners
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D5.7 Pilot training courses on package systems organised by each industry partner (at least 3 per partner → 15 courses with 20 – 30 participants each → more than 350 participants (month 27)



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* Task 5.3 Evaluation of the trainings (Report on pilot training courses, recommendations for optimisation)

Task 3	<p>Evaluation of the trainings and optimisation of materials for further trainings (to be implemented outside the project frame)</p>	D5.8	TECSOL
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D5.8 Report on pilot training courses, recommendations for optimisation (month 28)



WP5 Training on package solutions

Outcome of this work package

- Each industry partners has elaborated tailored training material on its package solution(s)
- Moreover training material to be included in trainings in related project (e.g. SOLAIR, but also upcoming ones) has been prepared
- More than 350 solar thermal installers have been informed and trained on package solutions in pilot training courses.
- These pilot training courses have been evaluated and suggestions for optimisation have been made
- Optimised training materials and concepts are ready for application.

The countries covered by the courses will be held a priori the ones, where the industrial partners are implemented or present (but the list can be enlarged in the next months), however also Greece will be covered.

Rotartica → Spain, France, Italy
CW → France, Spain, Italy
Sortech → Germany, Spain, Italy
SOLution → Austria, Germany, France, Spain, Portugal
SK → France, Germany, Spain

Targeted countries valid ?



WP5 Training on package solutions

Benefits by target groups

- *TG1 Producers of small scale sorption chillers* included as direct partners
Benefit: Training material prepared, installers trained on their solutions, relation with solar thermal partners on training courses established, first experiences evaluated.
- *TG2 Solar thermal enterprises:*
Benefit: On the one hand relation with chiller partners on training courses can be established, on the other hand, if no such partnership exists, the participation in training courses might open new collaborations and markets
- *TG3 Professional groups:*
Benefit: detailed information on concrete package solutions
- *TG5 Potential consumers:*
Benefit: installers trained on package solutions guarantee for high quality installations



Time schedule

Sept 2007

June 2009

December 2009

Project phase / Duration of the project (in months)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Work package 1: Management																															
Work package 2: Market analysis																															
Work package 3: Virtual case studies																															
Work package 4: Determination of standard applications and most promising markets																															
Work package 5: Training on package solutions																															
Work package 6: Dissemination and Communication																															
Work package 7: Common Dissemination Activities																															
Project meetings *	x						x						x							x				x							x
Project reports to IEEA ^b										PR										IR											FR*
Project deliverables ^c			D6.1 D6.5				D2.1 D2.2 D2.3 D2.4	D2.5 D6.5			D6.2		D3.1 D3.2 D3.3			D4.1			D2.6 D2.7		D4.2 D4.3 D4.4 D4.5 D4.6 D4.7 D4.8 D4.9 D4.10 D6.2	D5.1 D5.2 D5.3 D5.4 D5.5 D5.6 D5.7 D5.8 D5.9 D6.9						D5.7 D5.8			D1.1 D6.1 D6.2 D6.4 D6.6 D6.7 D6.8 D6.10 D6.11 D6.12 D6.13

Contributions

Role and contribution (tasks) of each partner in this work package:

No	Participant	Role & Contribution	Tasks	Hours
4	AEE INTEC	Support of SOLution in preparing training material	Task 1	68
6	TECSOL	WP leader Coordination, Training material on SolarCombi+, support of SK, evaluation of the pilot training courses	Task 1, Task 3	280
8	ROTARTICA	Preparation of training material, 3 2-day training courses	Task 1, Task 2	168
9	CW	Preparation of training material, 3 2-day training courses	Task 1, Task 2	168
10	SorTech	Preparation of training material, 3 2-day training courses	Task 1, Task 2	168
11	SOLution	Preparation of training material, 3 2-day training courses	Task 1, Task 2	100
12	SK	Preparation of training material, 3 2-day training courses	Task 1, Task 2	100

SOLAIR COURSE...

Duration : 1 day theoretical course + ½ day technical tour (optional)

1st day : Theory

Schedule :

Start : 9 am

End : 6 pm

- A) Introduction
- B) Basics
- C) Predesign
- D) Design
- E) Economics & environment
- F) Realised systems and best practice examples

2nd day : Visit

If a solar cooling system is close to the training course site, a visit can be interesting. It can be coupled with a visit of a large solar domestic hot water system to show the large solar collector fields.

No systematic visits in the courses



Duration variable in the countries : ½ day in Germany, 2 in France



Synergies

SOLARCOMBI+

Day1 : Theory

Morning :

- A) Introduction (15 min)
- B) Basics (1h30)
- C) Predesign (0h30)
- D) Economics (0h30)
- E) Realised systems (0h30)

Afternoon :

- A) Concept (30 min)
- B) Technical descriptions (2h)
- C) Realised applications (1h)
- D) Debriething (45 min)

Day 2 : Practice day

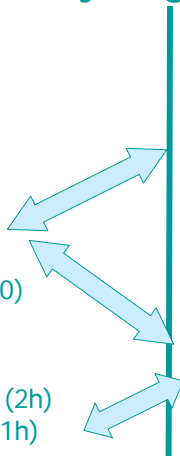
SOLAIR

Morning :

- A) Introduction (15 min)
- B) Basics (1h45)
- C) Predesign (1h15)

Afternoon :

- A) Design (1h30)
- B) Economics & environment (1h)
- C) Realised syst. & best practice (1h30)
- D) Debriething (15 min)




Inputs from manufacturers : 1st part

	SK	ROTARTICA FAGOR	SOLUTION	SORTECH	CLIMATEWELL
Basics	√	√		√	√
Predesign / Results from SC+ WP4	-	-	√	√	√
Economics.	√	√	√	√	√
Environment	√	√	√	√	√

Inputs from manufacturers : 2nd part

	SK	ROTARTICA FAGOR	SOLUTION	SORTECH	CLIMATEWELL
Concept	√	√	√	√	√
Technical descriptions	√	√	√	√	√
Realised systems	√	√	√	√	√
Misc.	√	√	√	√	√



Training courses from manufacturers... ... already planned or to be planned

	SK	ROTARTICA FAGOR	SOLUTION	SORTECH	CLIMATEWELL
1st course	October 2009 (Germany)	?	To be defined	06- 07/07/2009	30/06/2009
2nd course	November 2009 (France)	?	To be defined	08/07/2009	24/09/2009
3rd course	Spain (?)	?	To be defined	15/07/2009	05/11/2009
...					

Advanced Engineering Course
· or Installation Course ??

