



Solar Combi+ - 5th project meeting

Perpignan 10th-12th June 2009

Minutes

10th June 2009 - Solar Combi+

Participants:

Joerg Rupp	Sortech
Patrizia Melograno	Eurac
Roberto Fedrizzi	Eurac
Daniel Mugnier	Tecsol
Andrè Juffre	Tecsol
Alexander Thuer	AEE-Intec
Franciska Klein	Solution
Lotta Koch	ISE
Bjoern Nienborg	ISE
Olof Hallstrom	Climatewell
Volker Clauss	Sonnenklima
Yannis Vougiouklakis	CRES
Bacartxo Egilegor	Ikerlan
Ruth Fernandez	Ikerlan
J.M. Chavarri	Fagor

Location: Conference center - Perpignan

Chairs: Roberto Fedrizzi (EURAC)



Salutation and Presentation of the Agenda for first day - R. Fedrizzi EURAC

("1_Perpignan_Agenda.pdf")

Roberto Fedrizzi, as project coordinator, welcomed the participants and presented the agenda for the first day and the list of presentations to be given.

WP4 Standard configurations - Standard configurations selection - P. Melograno EURAC

("2_Perpignan_WP4_Task1_EURAC.pdf")

Patrizia Melograno exposed the changes made in the decks following the discussion held in April at the side meeting in Freiburg.

Results relative to the Climatewell machine were also shown, in terms of total solar fraction, cooling solar fraction and primary energy saved.

Results from the selection of the standard and best configurations was also presented.

A discussion born on the type and way to publish the data: absolute data or relative data only.

WP4 Standard configurations - Simulation work report - B. Nienborg ISE

("3_Perpignan_WP4_Task1_ISE.pdf")

Bjorn Nienborg presented how the aforementioned changes were implemented in the decks and which are in general the improvements obtained in terms of working hours, energy delivered and reduction of stagnation time.

Results relative to the Sortech machine were shown, in terms of total solar fraction, cooling solar fraction and primary energy saved.

Having seen bad performance for the chiller working at low distribution temperatures ISE, in agreement with Sortech, won't simulate fan coils anymore. An improvement on the cost model was also proposed: CRF should be included also in the electricity cost.



WP4 Standard configurations - Simulation work report - A. Thuer AEE-INTEC

("4_Perpignan_WP4_Task1_AEE.pdf")

Alex Thuer presented the results he obtained with regard to the SOLution/EAW SE15 chiller setup in configuration E1. It produces 13.39 kW cold with chilled ceiling distribution system, while 8.95 kW cold with the fan coil distribution system. EAW does not work with evacuated tubes collectors and with the dry cooler.

Increasing the chiller reference driving temperature increases the reference power of the chiller and therefore the collectors' area. The solar fraction for cooling rises up to values close to 1. Changing storage volume from 50 to 75 l/m² and the collectors area from 4.3 to 5 m²/kW do not change much the performance of the system.

Alex Thuer is sceptical on the presentation of the cost per primary energy saved values since approximated type was used for simulating the buildings. Joerg Rupp agrees with Alex Thuer.



11th June 2009 - Solar Combi+

Participants:

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Patrizia Melograno	Eurac
Roberto Fedrizzi	Eurac
Daniel Mugnier	Tecsol
Andrè Juffre	Tecsol
Alexander Thuer	AEE-Intec
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Lotta Koch	ISE
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WP4 - Tasks2 - Package Solutions

("5_Perpignan_PS_Fagor.pdf, 6_Perpignan_PS_Solution.pdf, 7_Perpignan_PS_Sortech.pdf, 8_Perpignan_PS_Climatewell.pdf, 9_Perpignan_PS_Sonnenklima.pdf")

The representative of the manufacturers showed the package solutions presentations to be presented the following day at the DERBI Conference. The proposed package solutions were discussed and the template for writing the deliverables was talked. Data from the manual will be reported at the beginning of the report. Sizing indications will be included, while no charts are going to be shown to avoid comparison among chillers. The proposed translation for such reports were:

Fagor:	EN, ES
SonnenKlima:	EN, DE, ES
Climatewell:	EN, SP, IT
Sortech:	EN, DE, ES, eventually FR
Solution:	EN, DE, eventually FR, PT and ES.

WP5 - Package Solutions presentation in training activities - R. Fedrizzi EURAC

("10_Perpignan_Trainings.pdf")

Daniel Mugnier felt sick during the meeting and had to leave before his presentation. Roberto Fedrizzi reviewed the material already prepared for the training courses in collaboration with the industrial partners and reviewed the list of the actions to be planned and performed within this WP; mainly D5.7 was described which should consist of a 2-day training course (30-40 participants x 3 courses x 5 industrial partners). The course should be subdivided into a first day theoretical part and a second day practical experience part. No dates for the courses were yet set.

WP6 - Dissemination activities - A. Thuer AEE-INTEC

("11_Perpignan_Dissemination.pdf")

Mr Thuer, as WP6 leader, reminded all partners what was foreseen in according to Annex1 of the project:



1. Web Site:
Responsible: EURAC
The web site has to be updated continuously. EURAC works on this task.
A counter on the web page was suggested.
2. Newsletter:
Responsible: AEE-INTEC + EURAC
Creation of the addresses list for the newsletters. Alex Thuer emphasized the necessity for all partners to provide AEE-INTEC with updated addresses for sending the next newsletters. Advice will be made to the package solutions, training courses, online tool, potential markets and goals. Brochures and posters will be added.
3. Brochures on Package solutions:
Responsible: AEE-INTEC + partners from WP4
Alex Thuer suggested inserting after a general description ~4 pages, 2 pages for each chiller. The results from all tasks are waited. Translation is needed of about 14 pages in all languages.
Coordination with the development of generic systems in IEA SHC Task 38.
4. Publication in magazines:
Responsible: Institutional partners
At least 4 per 5 countries (Greece, Italy, Austria, Spain, France, with summary of virtual case study results, coupled with announcement of trainings, content of the brochure, details about one of the chillers, etc. Used to advice training courses.
5. Leaflets and Posters:
Responsible: All
Leaflet and Poster III and IV will disseminate the results of WP4 (standard configurations, package solutions and most promising applications). All partners are responsible to PRINT and USE them. AEE INTEC will circulate a form for documentation when, where and how many poster/leaflets were presented/distributed.
6. Promotion in fairs:
Responsible: Industrial partners
Alex Thür asked all partners to propose further fairs in which it will be possible to promote Solar Combi+. We have to announce the fair presentations on SCS+ homepage. AEE-INTEC will circulate a form for documentation when, where and which fair was used for presentation.



7. Conference presentations:

Responsible: Institutional partners

Alex Thür asked all partners to propose conferences in which it will be possible to promote Solar Combi+. AEE INTEC will circulate a form for documentation when, where and which presentations were presented

8. Presentations to professionals:

Responsible: Institutional partners

15 presentations, covering all countries are expected, national Workshops etc. should be used. At the moment the following events are planned:

EURAC: Eurosun2008, Gleisdorf Solar 2008, EUSEW 2009, OTTI-Palermo 2009, AICARR 2009, CISBAT

AEE INTEC: OTTI-Palermo 2009, Ökosan 2009, NOEST, Arsenal (Preisler), Solarwärme events, ASTTP

TECSOL: ESTEC 2009

IKERLAN + UNIBG: OTTI-Palermo 2009

ISE: OTTI-Palermo 2009

CRES: Athens

9. Authority Guide:

Responsible: AEE-INTEC + Institutional partners

AEE-INTEC will prepare a common guideline for the negotiation with authorities. Each partner will be responsible for contacting and meeting the authorities in its country. Alternative approaches, as e.g. the organisation of round tables can be chosen by single partners.

10. Information to 15 bodies:

Responsible: Institutional partners

Personal contacts/meetings with authorities for consultation on results relevant for support & subsidy schemes, implementation of EPBD and future renewable heat and cooling directive and support programmes.

AEE-INTEC will circulate a form for documentation when and which bodies were contacted.

11. Recommendations to EPBD:

Responsible: AEE_INTEC

1 page in .pdf for each of the following topics:

- Recommendations on SCS+ systems to be included within EPBD
- Short info for inspectors of air-conditioning systems EPBD

12. Feasibility Studies:



Responsible: Institutional + Industrial partners

Feasibility studies for possible customers (preferably national and local authorities in order to get high visibility) for promotion of demonstration plants. 3 studies in each participating country =>10 pilot systems "shall" be initiated.

13. Press releases

Responsible: AEE_INTEC + local partner

3 press releases and contact (at least 6 contact protocols) with local media in most promising regions for promotion of Solar Combi+.

WP2 - Market analysis- Y. Vougiouklakis CRES

("12_Perpignan_Market.pdf")

Yannis Vougiouklakis showed the results of the recently published D2.4 (SWOT analysis) and D2.5 (potential markets and goals).

The results were retained interesting from the industrial partners for their training courses and further industrial developments.

Further improvements of the reports will be delivered when the Standard configurations deliverable will be completed.

WP4 - Tasks3 - Most promising applications and markets- R. Fedrizzi EURAC

("13_Perpignan_MostPromisingMarkets.pdf")

Roberto Fedrizzi showed the approach for the individuation of the most promising markets and application used. GIS maps to define suitable areas for solar heating and cooling use were shown:

- Solar thermal collectors market in Europe
- Heating degree days
- Cooling degree days
- Total radiation
- Useful radiation at 40°C outlet water temperature with FP and ET collectors
- Useful radiation at 60°C outlet water temperature with FP and ET collectors
- Useful radiation at 70°C outlet water temperature with FP and ET collectors during summer



- Useful radiation at 90°C outlet water temperature with FP and ET collectors during summer

Alex Thuer suggested to carefully use such maps and clearly state the hypothesis at the basis of the elaborations obtained.

WP4 - Tasks4 - Online Tool- R. Fedrizzi EURAC

("14_Perpignan_OnlineTool.pdf")

The online tool for the development of the Task4 will be an inquiry tool based on the Oracle DB. It will allow choosing a chiller first, then a location and an application. The semi-fixed parameters will be chosen consequently. As a results a range of suitable "GOOD" configurations will be showed in table. The industrial partners asked that the following figures would be shown:

- Relative PE saved
- Total SF
- Cooling SF (just for checking the results)
- Total electrical efficiency
- Gross solar yield

No indication to the specific chiller should be included. Industrial partners will decide in the next weeks if they want to include cost figures. An indication about the date of publication of the table should be included and a warning should appear after one year from the publication.

The database used in Task4 is going to be used also for Task5

Steering group meeting-R. Fedrizzi EURAC

Roberto Fedrizzi started the steering group meeting reporting on the state of the Rotartica-Fagor amendment procedure (final bureaucratic documents to be signed by the Commission) that bring Fagor in the Consortium starting on the 1 March 2009. He then reported on the Commission comments on the Interim Report and showed the financial statements presented. The requests for payment towards EURAC were gathered.

The delay in completing the tasks of the different WP's and the time schedule for recovering the delay was discussed.



The external evaluation process was tackled. Some companies were suggested by the partners as suitable ones for the process:

Target	DE
SPF	CH
Arsenal	AT
SolarNext (Uli Jacob)	DE
University of Tarragona	ES

The last meeting will be held at AEE-INTEC in Gleisdorf on the 9-10.12.2009



10th June 2009 - Solar Combi+

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Patrizia Melograno	Eurac
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Ruth Fernandez	Ikerlan
J.M. Chavarri	Fagor

Location: Conference center - Perpignan

Roberto Fedrizzi, Joerg Rupp, Franciska Klein, Olof Hallstrom, Bacartxo Eligegor and Volker Clauss presented the project and the package solutions to the DERBI2009 International Conference.