

Solar Combi+ -Kick-off Meeting

Bolzano/Bozen 27-28 September 2007
EURAC, viale Druso 1 - Bolzano Italy

Minutes

27 September 2007 - Solar Combi+ - morning session

Participants: CRES, ISE, AEE, UNI BG, TECSOL, IKERLAN, CLIMATEWELL, SONNENKLIMA, EURAC

Represented by delegates: ROTARTICA, SORTECH, SOLUTION

Chair: Alexandra Troi (EURAC)

Salutation by Mr. Stuflessner, EURAC's President

The meeting began with greetings of EURAC's president Werner Stuflessner. In those he expressed to be looking forward to the participation in and the coordination of this challenging project, where some of the most prominent European research institutes and promising SMEs will contribute to a sustainable development. Mr. Stuflessner further drafted South Tyrol's considerable resources and activities in the field of renewables leading in a coverage of 43% of energy demand excluding transports.

Salutation by Alexandra Troi, Project Director

Explanation of changes in Agenda and organisation of meeting
Personal introduction of each participant.

Presentation on key features of the Solar Combi+ project:

Alexandra Troi (EURAC)

("1_SolarCombi+_Kickoff_Key Features.ppt", link see "Notes" below)

Presentation of Cristina Boglia on organisational and legal aspects

Cristina Boglia, Head of EURAC's Project Development Department, focused on the general administrative aspects of project implementation.

("2_SolarCombi+_Kickoff_organisation.ppt")

She highlighted the following points:

- All members of the consortium are party in the Grant Agreement and must contribute to the fulfilment of contractual obligations vis-à-vis the IEEA
- The first pre-financing instalment (30% of the total grant) is due by the end of October 2007. As soon as EURAC receives the instalment, partners will be informed and their respective share will be transferred on their back account. For the transfer of the funds, each partner must send a request of payment with the bank coordinates to EURAC. The format for such request was tabled at the meeting and will be sent to all partners via e-mail.
- The Grant Agreement foresees that EURAC distributes the respective share to partners within 30 days. In case of need, EURAC's financial service could accelerate this process (it should be feasible within 14 days instead).
- Ms. Troi will be project director and technical coordinator, in amendment to the project proposal where Cristina Boglia had this function. The IEEA has been duly informed about the change. In her function as project director Ms. Troi will also chair the Project Steering Committee (PSC) meetings.
- The project duration is strictly limited to 30 months. Obligatory post-project reporting work should therefore preferably be conducted as far as possible within this timeline.
- Mr. Gianluca Tondi, the project officer at the IEEA, has been very cooperative during the project negotiation stage. Questions and doubts concerning the implementation of the project could be addressed to the IEEA officers through Ms. Troi.

Additional points presented for discussion and decision:

- **Bi-monthly updates.** The need for an internal monitoring tool was generally recognized, but at the same time some partners were concerned about the additional administrative work required for the preparation of the bi-monthly updates, as proposed by EURAC. The PSC finally agreed that the Partners will start with the bi-monthly system based on a format to be drafted and circulated by Ms. Troi. This system will be reviewed (and modified if necessary) on the occasion of the next PSC meeting. See Annex I.
- **Functioning of PSC.** The *modus operandi* of the PSC as proposed by EURAC was unanimously approved. See Annex I.
- **Confidentiality.** Mr. Wiemken raised the issue of confidentiality for certain information to be provided by partners during the implementation of the project. It was agreed to consult with EURAC's legal officer and to come back on the question the following day.

Description of single work packages with presentations

WP2 “Market analysis”: Yannis Vougiouklakis (CRES)

(“3_SolarCombi+_WP2.ppt”, link see “Notes” below)

Main discussions: “Questionnaires on consumers preferences”. With aim of investigating consumers profile. Mr. Vougiouklakis suggests to question suppliers and will prepare a draft of action.

The discussion of details is left to the first topic of the afternoon session (WP2: fine-tuning and organization of work).

WP3 “Virtual case studies”: Edo Wiemken (ISE)

(“4_SolarCombi+_WP3.ppt”, link see “Notes” below)

Edo Wiemken outlined how this WP can be based on experiences from previous projects (especially SACE) and underlined the three major new aspects in SolarCombi+: (i) more precision on modelling, configurations and control, (ii) actual performance and cost figures and (iii) applications based on market analysis.

All partners share the opinion, that the work to be done should be based as much as possible on existing experience since the objectives of the WP are challenging for the time at disposal. Moreover the importance of good results of market analysis (WP2) for economical evaluation in WP3 was underlined (Mr. Clauß/SK).

The discussion on details is left to the second session of the afternoon session (WP3: fine-tuning and organization of work)

WP 4 Determination of standard applications and most promising markets:

Alexandra Troi (EURAC)

(“5_SolarCombi+_WP4.ppt”, link see “Notes” below)

Main discussions: Ms. Troi underlines that standard configurations should be applicable for all producers/chillers. Regarding the online tool making the results of virtual case studies accessible to a wider audience, a constructive discussion on key features can be summed up as follows: (i) a pre-selection regarding primary energy efficiency is done in WP3, (ii) a focus on technical aspects is preferable since prices of machines are not yet competitive due to low production numbers (Mr. Clauß/SK) and there are still major movements on the market (Mr. Thür/AEE INTEC), (iii) as economic performance will be highly depending of incentives and energy tariffs, the possibility to change these in accordance to the needs of the user should be foreseen (Mr. Mugnier/Tecsol, Mr. Clauß/SK), (iv) maps should be implemented mainly to set up climatic conditions and other static information.

WP5 “Training on package solutions”: Daniel Mugnier (TECSOL)

(“6_SolarCombi+_WP5.ppt”, link see “Notes” below)

Main discussions: Mr. Mugnier’s suggestion to anticipate the start of editing of training material on producers’ package solutions and to use synergies with other EU-Projects, specifically IEE project SOLAIR (SOLAIR training materials start editing Feb 2008, distribution Sep 2008) was accepted: chiller partners provide information on their machines already now, so that it can be included in SOLAIR training material, while on the other hand, that training material elaborated in SOLAIR (especially the parts describing the technology, etc.) can be used in Solar Combi+. Mr. Mugnier furthermore emphasizes the performance indicator “100 queries of machines due to training courses”.

WP6 " Dissemination and Communication”: Alex Thür (AEE INTEC)

(“7_SolarCombi+_WP6.ppt”, link see “Notes” below)

Main discussions: Mr. Thür emphasizes that he appreciates the common leaflet and the necessity of a high quality implementation. He points out the importance of being present with the theme also in public media. There is the need for clarification on how to deal with printing costs. Mr. Thür further highlights the considerable amount of translation work in the last third of the project and reminds partners to consider man hours.

27 September 2007 - Solar Combi+ - afternoon session

Participants: CRES, FRAUNHOFER-ISE, AEE, UNI BG, TECSOL, IKERLAN, CLIMATEWELL, SONNENKLIMA, EURAC

Represented by delegates: ROTARTICA, SORTECH, SOLUTION

Chair: Alexandra Troi (EURAC)

Discussion on foreseen contact group

Ideas for contact group: Alexandra Troi (EURAC)
(*"8_SolarCombi+_Contact group.ppt"*, link see "Notes" below)

It was agreed that:

1. the solar thermal contact group is of great important to have direct contribution and feedback on project results from the solar thermal industry
2. to invite ESTIF and the partners of "chiller partners" (solar thermal enterprises /SK as well as engineering companies /Climatewell) to participate in the CG
3. that the solar thermal CG will be invited to the meeting in approx. one year, where the results of virtual case studies will be presented
4. if further feedback from a wider group of solar thermal stakeholders is suitable, national associations can be approached (for instance at their annual meetings etc).

Session on work program of WP2 and WP3

WP2 work program: Yannis Vougiouklakis (CRES)
(*"9_SolarCombi+_Kickoff_WP3_Workprogram.ppt"*, link see "Notes" below)

Discussions:

Mr. Vougiouklakis drafted possible synergies with other past and ongoing projects. Mr. Mugnier (TECSOL) presents the questionnaire elaborated by Ambiente Italia within SOLAIR regarding market analysis into consumers and applications. Within SOLAIR it had been decided that the partners will fill in this questionnaire gathering information from national stakeholders. The project consortium agrees that it would be valuable to use this questionnaire also for Solar Combi+, also because for several countries the same partners would do the enquiries (France: Tecsol, Greece: CRES, Austria: AEE-INTEC, Germany: ISE); for Italy EURAC could take over this task, in Spain Ikerlan, Rotartica and Climatewell could work together, in Sweden Climatewell could provide basic data, but a detailed analysis doesn't seem appropriate in this last case. It was agreed that Mr. Mugnier will propose this approach to the SOLAIR consortium.

Mr. Vougiouklakis underlines that the project should include scenarios of price development, Mr. Clauß points out that first the need must be analysed and systems

are to be configured and costs calculated accordingly. It therefore was agreed by partners, that deliverable D2.4 and D2.5 on system cost should be postponed after the definition of the virtual case studies. In any case, the information regarding components cost needed for the economic evaluation will be delivered to WP3 in time.

WP3 work program: Edo Wiemken (ISE)

("10_SolarCombi+_Kickoff_WP3_Workprogram.ppt", link see "Notes" below)

Discussions:

Types (part of task 3.1)

Mr. Wiemken emphasises that partners should soon decide which components/types shall be used for simulations (e.g. collector model without capacity sufficient?

Chiller model of Jan Albers for absorption machines?). He specially put up for discussion whether different models for different chillers shall be used. Mr.

Wiemken asked Chiller producers to possibly provide appropriate measurement data sheets for the creation of models/types.

Mr. Mugnier suggested that if a model is not provided by producer himself, then the latter should preferably validate it.

Applications (Task 3.2)

Applications to examine shall be defined on base of WP2. There was consensus that if possible no "new" applications should be defined but those defined in other projects should be used in order to be able to compare results (IEA Task 26 resp. 32, feasibility studies of a building conducted by ISE).

Not more than 5 climatic zones should be analysed. The selection could be based on work previously done (e.g. ECOHEATCOOL), but reliability and appropriateness have to be evaluated.

Load (Task 3.3)

Partners decided to simulate load-profile and cooling/heating system in different steps: hourly data of load profile will be created. The calculation of the load within the model (which would allow the investigation of performance of solar autonomous systems) was considered not to be of interest for this project.

System configuration and control strategy (Task3.4)

Mr. Wiemken suggested 5 different decks for 5 configurations. Control strategy shall be provided by Chiller producers and treated confidentially.

28 September 2007 - Solar Combi+ - final session

Participants: CRES, FRAUNHOFER-ISE, AEE, UNI BG, TECSOL, IKERLAN, SONNENKLIMA, EURAC

Represented by delegates: ROTARTICA, SORTECH, SOLUTION

Chair: Alexandra Troi (EURAC)

Discussion on “Memorandum of Understanding” and confidentiality issues

Both the Chair and Ms Boglia accepted Mr Wiemken’s proposal to extend the scope of the Memorandum of Understanding drafted by EURAC. The new version of the Memorandum of Understanding will include a clause on confidentiality to integrate the provisions of the Grant Agreement. The concept to be incorporated in the Memorandum of Understanding is the following:

“List of additional confidential information and results, which must be treated as confidential by partners and which can not be disclosed to third parties without authorisation of all the parties concerned (with reference to article II.4 of the grant agreement):

- *TRNSYS decks, which are developed within WP3 of the project SolarCombi+, can be used only by the partners of the consortium and shall not be given to third parties*
- *Measured chiller characteristics are only used within the project to the aim of adapting the TRNSYS Types and will not be used for other purposes*
- *Financial data regarding chillers and components have to be treated as confidential if classified as such, this is especially true for internal cost data.*
- *all documents which are marked have to be treated as confidential*

Lengths of obligation beyond the date of end ...”

All partner agreed that once the new version of the Memorandum of Understanding is ready, this will be forwarded to partners and signed by the legal representatives in order to have a legally binding document.

Solar Combi+ in a wider context

Activities of the ESTTP and Italian government: Wolfram Sparber (EURAC)
(*"11_SolarCombi+_Kickoff_WP3_Workprogram.ppt"*, link see "Notes" below)

South Tyrols Activities for sustainable development:
Dr. Walter Huber (Province of Bolzano)

Ongoing related projects/ synergies

SOLAIR-project, ROCOCO-project: Daniel Mugnier (TECSOL)
(*"12_SolarCombi+_Kickoff_SOLAIR&ROCOCO.ppt"*, link see "Notes" below)

Possible synergies with

- a) SOLAIR: (i) questionnaire shall possibly be used for Solar Combi+, (ii) training material, (iii) dissemination
- b) ROCOCO: state of the art report, mainly based on cost (in anonymous form), experience with simulation

Mr. Mugnier coordinates information exchange between Solar Combi+ and SOLAIR as well as ROCOCO.

IEA SHC 38 Subtask A: Alex Thür

Mr. Thür: Subtask A and Solar Combi+ actually deal with the very same topic.

Therefore it shall function as source of information and vice versa.

In the framework of IEA SHC 38 there is a discussion about ca. 15 systems < 15 kW to be installed and monitored. Those could help with the evaluation of simulation models.

Mr. Thür: Reported about "FSC-procedure" using key values to rate/compare systems and suggest an adaptation for Solar Combi+

SENTRO-project: Alexandra Troi (EURAC)

(*"13_SolarCombi+_Kickoff_SENTRO.ppt"*, link see "Notes" below)

SOLCO-project: Alexandra Troi (EURAC)

Mr. Mugnier: Solera-Project with ISE-coordination (Nunez) Partners Solid, Tecsol

Final words by Alexandra Troi

Ms. Troi thanked participants for coming to the fruitful meeting. She emphasized to be looking forward to working together in the next 30 months.

Ms. Troi notified that EURAC will together with AEE INTEC start with the set up of the Solar Combi+ Homepage and order a Logo. EURAC will further arrange an email address with automatic forward to all partners.

Notes

- The presentation can be downloaded at a protected webdav space (online), Partners will each receive a username and password after signing Eurac's "rules for acces to the network".
- Next meeting shall take place 21-22 February 2008, possibly in Bilbao just after project meeting of SOLAIR, in order to arrange common session.

Annexes

- I: Agreements on Project Steering Committee meeting and on Bi-monthly updates
- II: List of participants
- III: Agenda