



## Solar Combi+ - Telephone meeting

20<sup>th</sup> July 2009

### Minutes

#### Participants:

Ruth Fernandez	IKERLAN
Jose Maria Chavarri	Fagor
Franciska Klein	Solution
Lotta Koch	ISE
Bjoern Nienborg	ISE
Alexander Thuer	AEE-INTEC
Joerg Rupp	Sortech
Volker Clauss	Sonnenklima
Myrto Theofilidi	CRES
Olof Hallstrom	ClimateWell
Patrizia Melograno	EURAC
Roberto Fedrizzi	EURAC

Following the proposed agenda, the following points were discussed:

#### 1. Standard configurations selections

For the selection of the standard configurations it was decided that the "And" approach studied by Volker Clauss and Daniel Mugnier will be followed; only the cases that meet given performance are taken into account:

- Straßbourg:  $PE_{saved} > 0$  AND  $TSF \geq 40$  AND  $COP_{el} \geq 15$  AND Cost  $PES < 70$ .
- Toulouse:  $PE_{saved} > 0$  AND  $TSF \geq 45$  AND  $COP_{el} \geq 15$  AND Cost  $PES < 70$ .
- Naples:  $PE_{saved} > 0$  AND  $TSF \geq 60$  AND  $COP_{el} \geq 11$  AND Cost  $PES < 70$ .
- GSY and CoolingSF will be used as check parameters to avoid selecting cases meaningless cases:  $CoolingSF = 10\%$  characterizes a simple SolarCombi application, where the sun utilization for cooling is irrelevant.



The selected cases will be reduced in number, by taking into account only the three best solutions per studied case (combination of location, application, distribution technology, heat rejection technology,...)

2. Within the online tool, the following parameters will be surely shown:

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

The industrial partners will decide on a majority base about the presentation of the Cost of PEsaved.

Result:

3. New simulations will be carried out to characterize the performance of the studied systems without the backup heater during the cooling operation; only the best cases will be taken into account (best collectors area and storage volume) for each studied case. In addition Fan coils and Chilled ceilings will be both studied. Therefore maximum 13 simulations will be performed:

- 3 applications and 2 distribution systems in Naples
- 3 applications and 2 distribution systems in Toulouse
- 1 application and 1 distribution systems in Strasbourg

4. The D3.3 structure and charts are in principle acceptable. Franciska Klein suggested to highlight the improvement possibilities comparing data to the best than to the worst solutions. Lotta will circulate the draft version for approval to the partners as soon as possible.

5. The D4.1 will be structured as the D3.3, with the same kind of charts but using absolute values instead of relative ones. Only values selected with the procedure as in 1 will be shown in this report. Charts with values undistinguished by chiller will be made.

6. Package solutions reports: the ISE-Sortech like report (machine description, proposed solutions description, performance description), sent to all partners during the meeting, with performance charts undistinguished by chiller (same charts on all reports) will be used in this case too.



7. The final project meeting was set at AEE-Intec on the 17th-18th of December.