



Solar Combi+

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Kick Off Meeting – 27/9-2007, Bolzano

Workplan for:
WP 6: Dissemination and Communication

WP 6: Dissemination and Communication

In Total 8 Tasks with 13 Deliverables:

T1 Webpage and Newsletter	(D6.1, D6.2)
T2 Brochure on package solutions	(D6.3)
T3 Publications in professional magazines	(D6.4)
T4 Presentations on trade fairs and conferences	(D6.5, D6.6, D6.7)
T5 Presentations to professionals	(D6.8)
T6 Information and advice to authorities	(D6.9, D6.10, D6.11)
T7 Initiation of pilot plants	(D6.12)
T8 Media campaigns	(D6.13)

WP 6:

Dissemination and Communication

Time schedule:

	IV/07	II/08	III/08	III/09	I/10	
<u>T1 D6.1</u>	3					<u>WWW</u>
<u>T1 D6.2</u>			11	20	30	<u>Newsletter</u>
<u>T2 D6.3</u>				22		<u>Brochure</u>
<u>T3 D6.4</u>					30	<u>>20, 3 articles each</u>
<u>T4 D6.5</u>	3	8		22 22		<u>4 posters/leaflets</u>
<u>T4 D6.6</u>					30	<u>5 fairs/2-3Pr. each</u>
<u>T4 D6.7</u>					30	<u>15 Conf. Pres. total</u>
<u>T5 D6.8</u>					30	<u>15 Pres. Prof. total</u>
<u>T6 D6.9</u>				22		<u>Authority Guide</u>
<u>T6 D6.10</u>					30	<u>Inform 15 bodies</u>
<u>T6 D6.11</u>					30	<u>Recomm. EPBD</u>
<u>T7 D6.12</u>					30	<u>7*3 feasib. Studies</u> <u>=>10 pilot systems</u>
<u>T8 D6.13</u>					30	<u>>3 Press releases</u>

Important Specific Comments:

D6.3 Brochure: 14 pages, pdf + 3000 prints (No per language has to be decided)
Start early because it takes long time

D6.5 Leaflets/Poster:

- I) Project description
- II) Results of market analysis
- III) Standard systems / Online tool
- IV) Most promising applications

48 printouts

General: Costs for Layout and Printing are shared =>
Doing the work central => Invoice to all partners

D6.9 Guidelines for negotiations: Assistance needed to cover specific conditions

WP 6: Dissemination and Communication

English:

D6.1 Webpage's base language is English
D5.1-D5.6 Reports on dissemination and training activities
D6.2 Newsletter

D2.1-D2.3 Market situation reports
D2.5 SWOT analysis
D2.6 Market share report

D3.2-D3.3 Reports on virtual case studies
D4.1 Report on identification of standard system configurations
D4.8 Online tool for database

D6.7 Presentations at conferences

English and partners' languages (ES, FR, GE, GR, IT, SE):

D6.1 Webpage: project information summary, resp. deliverables, announcements of events, List with trained persons
D6.5 Presentation material (I)

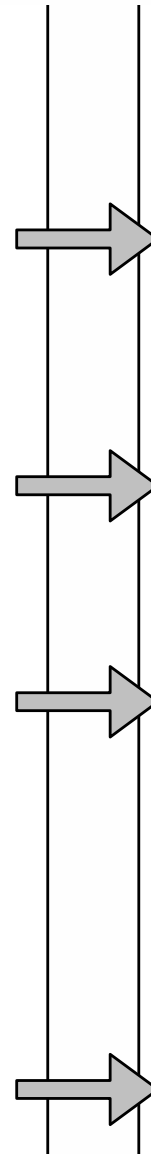
D6.5 Presentation material (II)

D6.5 Presentation material (III)
D6.3 Information brochure on standard system configurations

D4.2-D4.6 Package solutions
D4.7 Description and visual representation of most promising applications
D6.13 Press releases (in most promising areas)

D6.11 Support material for EPBD
D6.12 Feasibility studies

D6.4 Articles in professionals' magazines
D6.7 Presentations at fairs
D6.8 Presentations to professionals







IEA SHC Task 38 – Subtask A ↔ Solar Combi+

- A1: Market Overview – existing and developments:
Solar combisystems, cold storages, chillers,
heat rejection systems
- A2: Generic systems => Package solutions
- A3: Monitoring => evaluation of WP3 results
- A4: Evaluation procedure based on the FSC concept
Reference cases based on IEA SHC Task 32
- A5: Installation and maintenance guidelines



WP 2: Survey on end-users and technology side

2.2 State of the Art of:

- Seasonal thermal energy storage
Who? SOLITES / CRES
- Solar space heating and cooling applications
Who? ISE / POLIMI
- Cold storage devices
Task 38, ?FhG-Umsicht?, Polysmart? Who? SOLITES / ISE
- Advanced / new storage techniques
Task 32 Who? AEE INTEC / CRES
SOLITES
- New generation of collectors
Task 33 brochure Who? AEE INTEC / ??

WP 2:

Survey on end-users and technology side

2.3 Identification of system concept:

- Greece
Who? CRES / SOLE / SOLITES
- Italy
Who? POLIMI / Prov. d. Milano
- Spain
Who? AIGUASOL / SOLITES
- Austria 1
Who? AEE / SOLID
- Austria 2
Who? AEE / SOLID

WP 2:

Survey on end-users and technology side

2.4 Preliminary identification of heat driven cooling technology
(absorption/adsorption/DEC) :

- Greece

Who? SOLE / CRES / ISE

- Italy

Who? POLIMI / Prov. d. Milano / ISE

- Spain

Who? ?Aiguasol? / ISE

- Austria 1

Who? AEE / SOLID / ISE

- Austria 2

Who? AEE / SOLID / ISE



WP 2:

Survey on end-users and technology side

2.5 Laboratory testing for low or zero cost insulation materials:

- Greece

Who? CRES / POLIMI



WP 2: Survey on end-users and technology side

TO - DO:

2.1 Market survey/analysis – load characterization

	Main responsible	Till
Table of content – all topics	AEE INTEC	15/7-07
Draft of Infos`s and sources		15/8-07
Draft of Report		30/9-07
Finish Report D5		<u>30/10-07</u>
Residential	?	
Office	AEE INTEC	
Tourist	?	

WP 2: Survey on end-users and technology side

TO - DO:

2.2 State of the Art of similar applications

	Main responsible	Till
Draft of Infos`s and sources		30/09-07
Draft of Report		15/11-07
Finish Report D6		<u>23/12-07</u>
Seasonal Storage	?	
Solar applications	?	
Cold storage	?	
New storage techniques	?	
New collectors	?	

WP 2: Survey on end-users and technology side

TO - DO:

2.3 + 2.4 System concept & Identification of cooling technology

	Main responsible	Till
Draft of concept		30/09-07
Concept for WP3 (Simulation)		31/10-07
Draft design data of cooling technology		23/12-07
Finish Report D7		<u>31/01-08</u>
Greece	?	
Italy	?	
Spain	?	
Austria 1	AEE INTEC	
Austria 2	AEE INTEC	

WP 2: Survey on end-users and technology side

TO - DO:

2.5 Laboratory Testing of low or zero cost insulation material

	Main responsible	Till
Proposal of material	CRES	30/07-07
Build up test equipment	CRES	31/09-07
First test results	CRES	31/10-07
Finish Report D8	CRES	<u>31/11-08</u>

WP 5: Monitoring and technology validation

Work-package No ¹	Work package title	Lead contractor No ²	Person-months ₃	Start month ⁴	End month ⁵	Deliverable No ⁶
WP5	Monitoring and technology validation	4	37,5	24	48	D15, D16, D17

Description of work

1. Second (conclusive) phase of commissioning after 3 months of monitoring and the necessary adjustment / balancing of the demo-plants (e.g. adjustment of set-points, modifications of control strategy and/or sensors etc.). Operation and maintenance instructions submission to the end users
2. Demo plants operation (and operation's optimisation), monitoring and maintenance for 24 months.
3. Monitoring data analysis. Identification of influencing parameters.
4. Compare monitoring data with simulation and design calculations; validate software tools.
5. Technology evaluation in practical, energetic, environmental and economic terms. Assessment of end-user acceptability.

D15	Operation and maintenance instructions for all demo plants	29th month	R	RE
D16	Software tool validation report	41st month	R	RE
D17	Description of demo plants performance and technology evaluation	42nd month	R	PU

WP 5: Monitoring and technology validation

Strong coordination/cooperation with Task 25 / 38 !?!
Monitoring Concept WP 4.4

Operation and Maintenance instructions

Regular exchange of experience

Data analysis: common form of basics ! NOT Task25 !

Validate specific simulations

Validate user-friendly software tool (WP3.4)

Evaluation: end-user acceptability!

Environmental? Wet cooling tower?! Influence on ground
around the seasonal storage?, ??

UOR: Overview/Comparison of the systems ??

Participants

Partic. Role	Partic. No	Participant name	Participant short name	Country
CO	1	CENTRE FOR RENEWABLE ENERGY SOURCES	CRES	Hellas
CR	2	NATIONAL OBSERVATORY OF ATHENS	NOA	Hellas
CR	3	SOLE SA	SOLE	Hellas
CR	4	AEE – Institute for Sustainable Technologies	AEE INTEC	Austria
CR	5	S.O.L.I.D. Solarinstallation und Design GmbH	SOLID	Austria
CR	6	Fraunhofer Gesellschaft zur Foerderung der Angewandten Forschung e.V.	FRAUNHOFER - ISE	Germany
CR	7	Steinbeis Innovation GmbH	SOLITES	Germany
CR	8	POLITECNICO DI MILANO	POLIMI	Italy
CR	9	Provincia di Milano - Direzione Centrale Risorse Ambientali	PROVINCIA DI MILANO	Italy
CR	10	SISTEMES AVANÇATS D'ENERGIA SOLAR TERMICA	AIGUASOL	Spain
CR	11	Societat Municipal d'Habitatge de Terrassa, S.	SOMUHATESA	Spain
CR	12	University of Oradea	UOR	Romania



Feistritzwerke Gleisdorf

Office Building

Main Data: Feistritzwerke Gleisdorf

- Space 1.000 m² 15 x 37 m
- Volume 3.000 m³
- Persons 42 (+ 50 in a Seminar room)
- Space heating load 65 kW
- Cooling load 35-40 kW
- Ventilation Windows (no ventilation system)
- Wall 25 cm bricks (Leca-Beton)
- Insulation 6 cm Polystyrol
- Windows, U-value 1.3 W/m²K

Existing Components:

Natural Gas boiler

CHP plant powered by vegetable oil (18 kW_{th}, 8 kW_{el})

Radiators for space heating

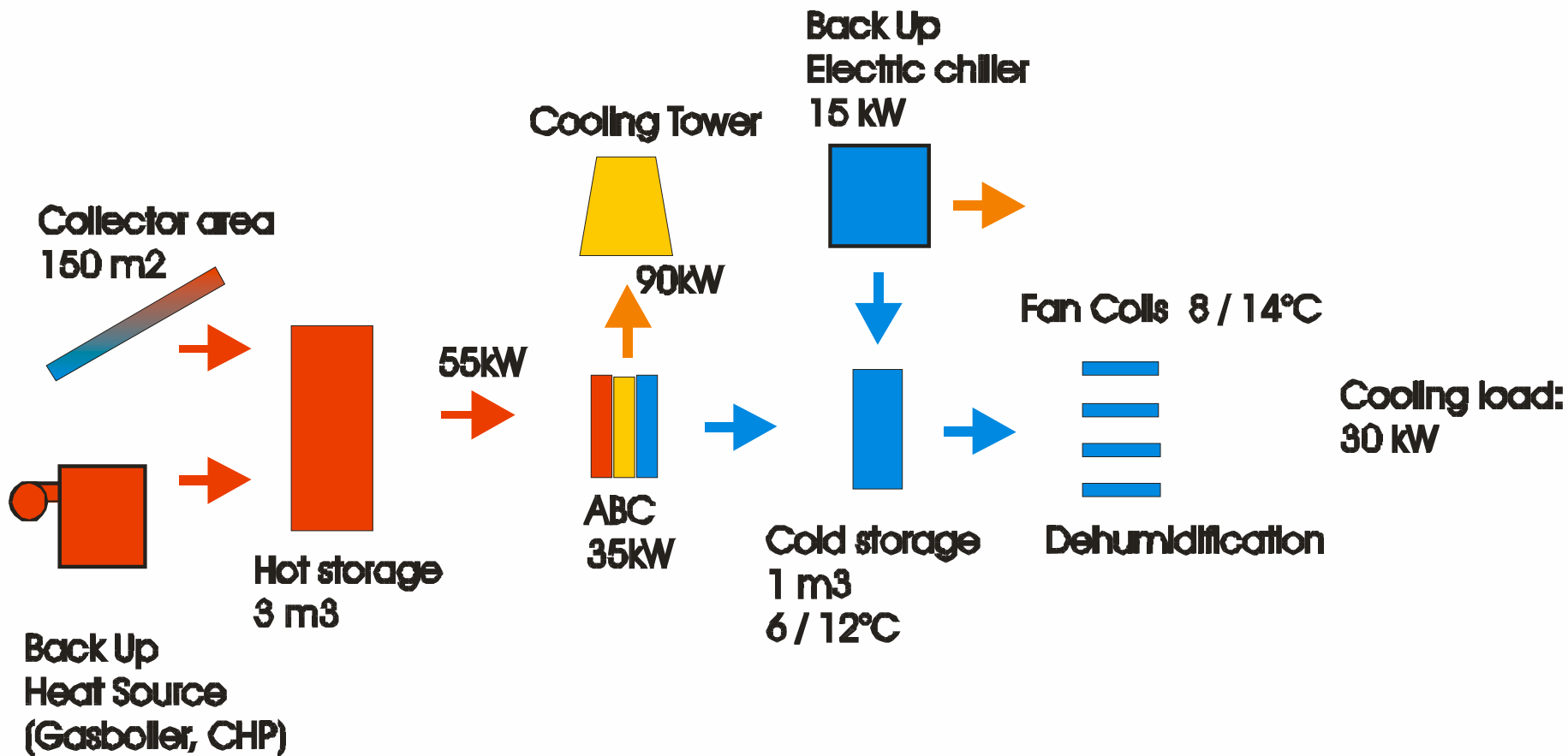
No ventilation

Main Data: Feistritzwerke Gleisdorf



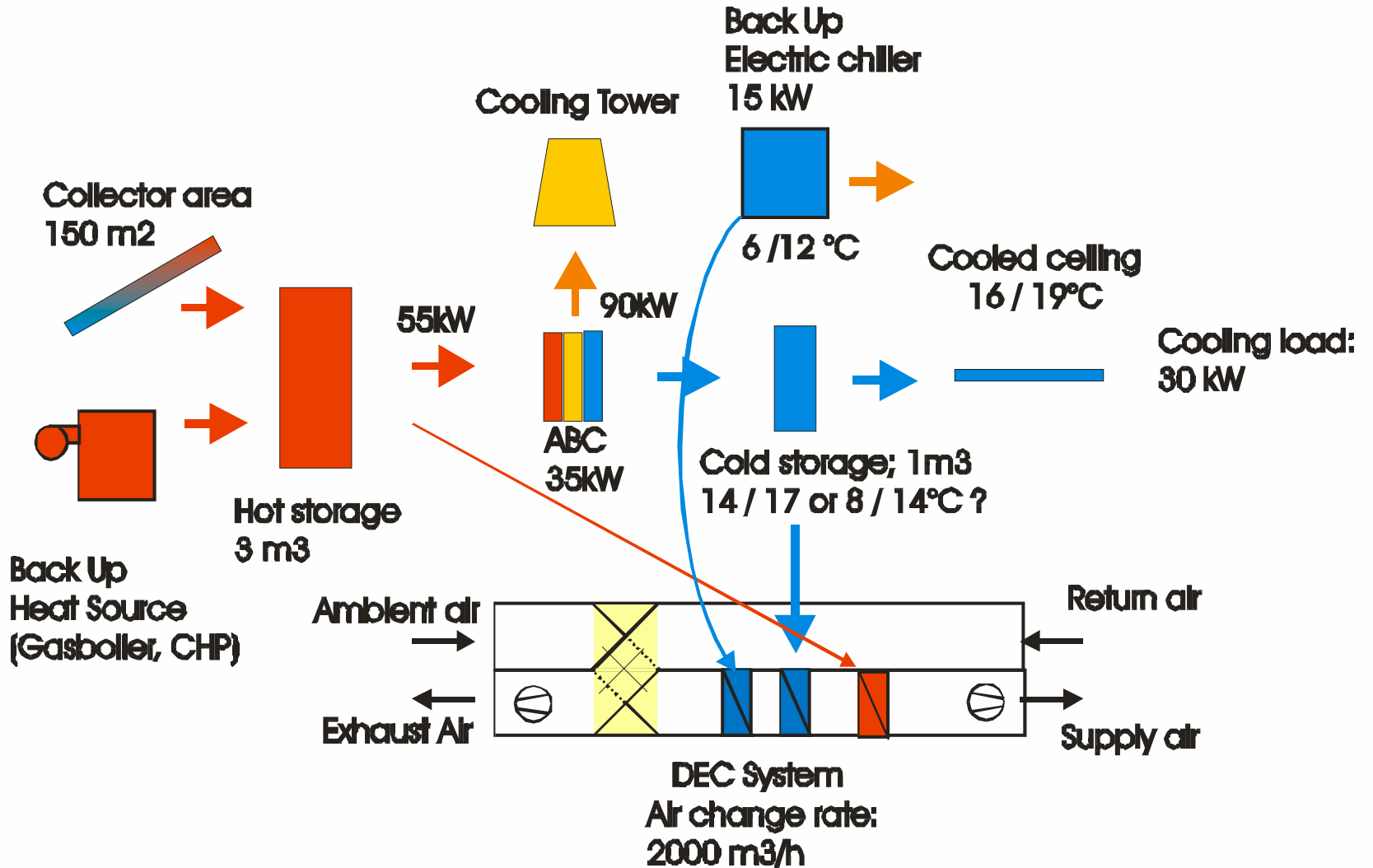
Office Building Felstritzwerke

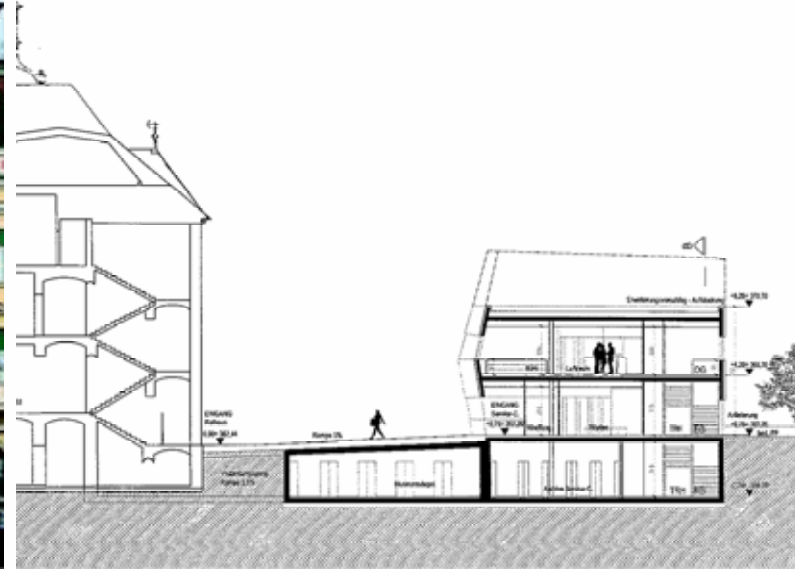
Version A - Fan coils



Office Building Felstritzwerke

Version B - Chilled ceiling





Service Center Gleisdorf

Town Hall and new Service Center

Main Data

Town Hall – Old part

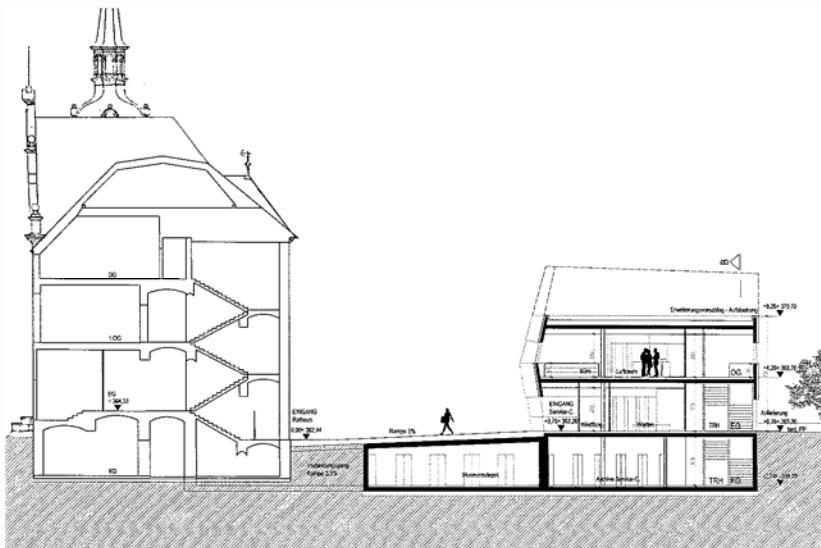
- Persons ca. 25
- Space 1.321 m²
- Volume 4.599 m³
- Space Heating Load 70 kW
- Cooling Load 31 kW
- Air ventilation manual opening of windows

Service Center - New

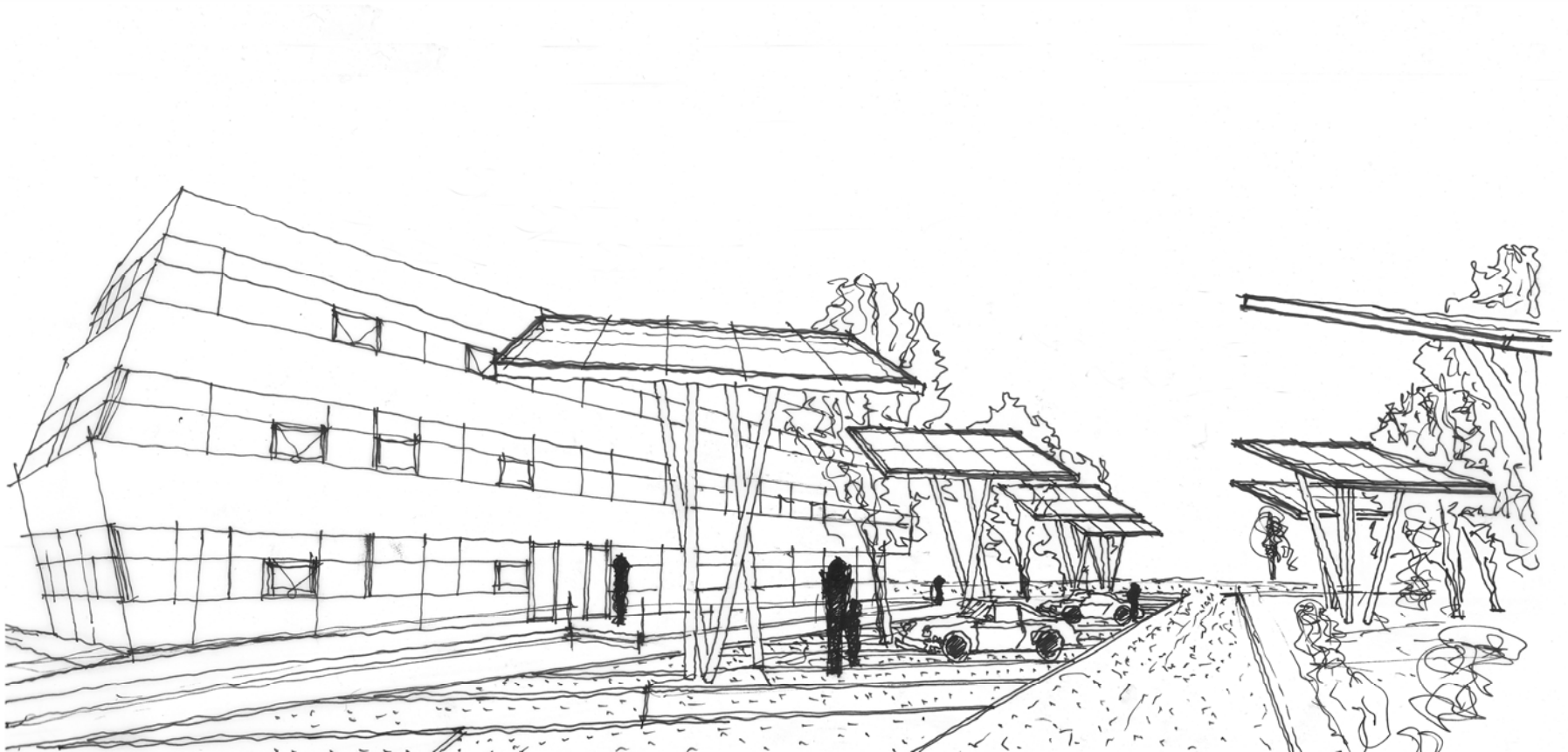
- Persons ca. 25
- Space 1.212 m²
- Volume 3.562 m³
- Space Heating Load 40 kW
- Cooling Load 20 kW
- Air ventilation 6.000 m³/h

Energy Data in Comparison

	Town Hall	Service Center	Christophorus House	
Useful Area	1.321	1.212	1.215	m ²
Space Heating Load	72,6	40,0	18,2	kW
Spec. Space Heating Load	54,9	33,0	15,0	W/m ²
Cooling Load	-37,0	-20,0	-8,262	kW
Spec. Cooling Load	-28,0	-16,5	-6,8	W/m ²
Space Heating Demand	108,8	60,0	19,2	MWh/a
Spec. Space Heating Demand	82,4	49,5	15,8	kWh/m ² .a
Cooling Demand	-17,8	-9,6	-8,3	MWh/a
Spec. Cooling Demand	-13,4	-7,9	-6,8	kWh/m ² .a
U-Value ave	~1	0,7	0,24	W/m ² .K



Solar Trees



Service Center Gleisdorf

Energy Concept Cooling & Air Conditioning

