



Project No. TREN/05/FP6/S07.59572/019892

Project Acronym: ASTECH

Project title: Advanced sustainable energy technologies for cooling and heating applications

Instrument: Specific Support Action

Thematic Priority: Priority 6.1 “Sustainable Energy Systems”

**DELIVERABLES 4.2 and 5.2
“Collaborative agreements WP4 and WP5”**

Date of preparation: 30 may 2009

Partner in charge: All

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Duration: 30 months

Project coordinator name:
Bernard Thonon

Project coordinator organisation name:
ASSOCIATION GRETh (GRETh)

Revision:



SIXTH FRAMEWORK PROGRAMME

SUMMARY (English)

This document presents the list of 55 collaborative agreements established with the support of the project partners. 40 are relevant to small and medium scale applications and 15 for large scale applications.

The status of the projects ranges from preliminary contacts to accomplished projects. All the partners have been active in helping companies preparing these projects.

SUMMARY (national language)

	Partner	Topic Description	WP	Partnership	Countries involved	Status of implementation	Document available
2	GRETh	Survey of solar boiler and heat pumps in replacement of gas boilers	WP4	GRETh, energy supplier	FR	Completed	contract
4	GRETh	Natural refrigerant for heat pumps	WP4	Greth, research centre,	FR	Preliminary discussion and	e-mail document
9	Arsenal	Absorption Chiller	WP4	manufacturer	AT	two meetings	contract
10	Arsenal	Analysis of heat pump systems	WP4	industry and institute	AT, BL	running project	contract
11	Arsenal	Monitoring and analysing of a Hybrid Solar Heating	WP4	sme and institute	AT	running project	contract
12	Arsenal	Hybrid fuel cell driven absorption compression transport cooling system	WP4	sme and institute	AT	running project	contract
13	Arsenal	Evaluation of the geothermal potential in Austria	WP4	institute to institute	AT	running project	contract
14	Arsenal	Solar Cooling Monitoring	WP4	industry and institute	AT	running project	contract
15	ASTER	Application of a CHP system based on fuel cell in a food processing industry Collaborative project to develop a component of a building structure coupled with the exploiting of low enthalpy geothermal energy. The collaboration is aimed at participating to the call of Ministry of Environment "for financing research projects aimed at intervention for energy efficiency and for the use of renewable energy sources in urban areas"	WP4	- ENEA (National Agency for New Technologies and Environment) - CONSERVITALIA (company) - Genercon, consultancy and engineering society in the field of renewable energy, representing a regional <u>building company</u> - ICIE, partner of the Innovation Laboratory LARCO-ICOS of the High Technology Network of the Region Emilia-Romagna	Italy	Preliminary discussion on potential customised development and application	Signed participant list
16	ASTER	Focus group on future research trajectories in the HVAC field, residential sector. 2 meetings organised by ASTER in the framework of ASTECH project to prompt the collaboration within regional companies and research groups in the field of heating and cooling.	WP4	7 research centres + Universities 6 manufacturing companies 1 engineergin company	Italy	Project ongoing on private funding; proposal submitted for national cofunding	Signed participant list
17	ASTER		WP4	• University of Modena and Reggio Emilia, Dept. of Mechanical Engineering • IMMERGAS, a company in Reggio Emilia designing and manufacturing gas boilers for domestic use, both in the sectors of traditional and condensing boilers	Italy	Discussion about possible innovation trends	Signed participant list Minutes of meetings
18	ASTER	Development of a high efficiency boiler for domestic application	WP4		Italy	Project ongoing on private funding	A collaboration statement form has been signed by the parties and is available at ASTER's premises. Contract has also been signed but confidential (i.e., not available to ASTER).
21	BS-REC	Joint research on small-scale solar thermal and biomass utilization technologies An agreement for support of the development of the biomass energy utilization projects of ECO-WAT Varna	WP4	Technical University of Sofia	Bulgaria	In progress	Minutes of meetings
22	BS-REC	Development of a solar cooling system in order to cool their products (meat etc.)	WP4	ECO-WAT Varna JSC.	Bulgaria	Project implementation not started yet.	Agreement
23	CRES	Development of a hybrid solar heating & cooling system, in order to provide hot water of use and cooling of the company's products	WP4	CRES, MELTKA	Greece	discussions	fax document
24	CRES	Development of a hybrid solar heating & cooling system, in order to provide hot water of use and cooling of the company's products	WP4	CRES, IRA Chocolate industry	Greece	discussions	e-mail document
25	CRES		WP4	CRES, Kenfood	Greece	discussions	document

26	CRES	Development of a hybrid solar heating & cooling system, in order to provide hot water of use and cooling of the company's products	WP4	CRES, Master Martini Hellas	Greece	discussions	fax document
28	EC-BREC	Accepted "Promoting Biogas in European Regions – Transfer of a Supporting Acceptance Tool for Stationary and Mobile Applications"	WP4	Aufwind Schmack Nowa Energia Sp. z o.o.	Poland	ongoing cooperatin	signed agreement available
29	EC-BREC	Analysis of solid biomass availability for supplying district heating unit in Dobre Miasto	WP4	Zaklad Energetyki Ciepłej Sp. z o.o. w Dobrym Mieście	Poland	contract is terminated, establishe informal relationships	signed agreement available
30	EC-BREC	Preparating and implement hybrid system to prepared hot water (solar systems and biomas components).	WP4	Siwik Intertrade Sp. z o.o., Mragowo	Poland	ongoing cooperatin	signed agreement available
31	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL CLOSED LOOP NEW APPLICATIONS	WP4	EVE, GOP	Spain	IN PROGRESS	EMAIL
32	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL CLOSED LOOP DESIGN INSTALLATIONS	WP4	EVE, COTENOR	Spain	IN PROGRESS	EMAIL
33	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL FOUNDING WALL MONITORING	WP4	EVE, RODIO	Spain	IN PROGRESS	EMAIL
40	Geonardo	Mini geothermal plant development	WP4	project partnership	Hungary, Greece, Iceland, Czech Republic, Austria, Poland, Romania	finished	available
41	ISE	Development of new materials	WP4	ISE, BASF	Germany	meeting only	minutes
42	ISE	Request of cooperation within a running project	WP4	ISE, Bosch	Germany	ongoing project	contract
43	ISE	Request of the development of an innovative heat recovery component	WP4	ISE, Grenzebach	Germany	ongoing project	Contract
44	ISE	Development of new components	WP4	ISE, Handtmann	Germany	meeting only	minutes
45	ISE	Development of a solar cooling system applicable for cooling of farm products in the Mediterranean countries	WP4	ISE, Kramer	Germany	project proposal	minutes, project proposal
46	ISE	Analysis and evaluation of the conditions for application of new collector technologies combined with open solar cooling systems.	WP4	ISE, SchottSolar	Germany	meeting only	minutes
47	ISE	National project of system test of solar cooling application	WP4	ISE, SolarNext AG	Germany	meeting only	minutes
48	ISE	National project of system test of solar cooling application	WP4	ISE, SorTech AG	Germany	ongoing project	contract
49	ISE	Request for the application of solar cooling	WP4	ISE, Unilever Deutschland GmbH	Germany	meeting only	Minutes
50	ISE	Development of new components	WP4	ISE, Wieland	Germany	meeting only	Minutes
51	ISE	Request for the application of solar cooling	WP4	ISE, Fränkische Rohrwerke	Germany	meeting only	Minutes
52	ISE	System test and adaption for tropical climates	WP4	ISE, SERIS	Germany	ongoing project	meeting minutes
54	IT-Power	Renewable energy Frameworkal agreement of Transfer EU advanced RES cooling technology into	WP4	IT Power has informal cooperation z UK ZERI and Guangxi Autonomous Regional Department of Construction	UK	Informal agreement identifying applicable technologies for transfer in building sector	available
55	Zeri	Guanxi Autonomous Regions of China	WP4		China		

	Partner	Topic Description	WP	Partnership	Countries involved	Status of implementation	Document available
1	GRETh	Evaluation of solar heat for district heating	WP5	Research centre and energy supplier	FR	Completed	contract
3	GRETh	Solar heat for industrial process	WP5	5 EU partner	FR, DE, SP, AT	Proposal	Technical annexe
5	GRETh	Development of a evacuated tube solar collector	WP5	Research centre and manufacturer	FR	running project	contract
6	GRETh	Energy efficiency and renewable energy for industrial process	WP5	4 EU partner	FR, SP, IT , CR	Proposal	Technical annexe
7	GRETh	Heat pumps for industrial process	WP5	Greth, Research centre, industry	FR	running project	contract
8	GRETh	Heat storage for biomass and solar	WP5	Research centre, university, manufacturer and energy supplier	FR	Proposal	Technical annexe
19	BS-REC	Assessment of the feasibility (and potential implementation) of biomass boiler to cover the base heating load (4.4 MW). Two options considered - production of heat only and CHP	WP5	Dalkia - Varna (the central heating company in the city of Varna)	Bulgaria	Feasibility study completed, implementation still under consideration	Agreement
20	BS-REC	Assessment of the feasibility (and potential implementation) of biomass boiler to cover (a part of) the base heating load (6 - 8 MW)	WP5	District Heating Company of Ruse, JSC	Bulgaria	Feasibility study in progress	Minutes of meeting
27	CRES	Development of a hybrid solar heating & cooling system, backed up by geothermal & biomass for 100% coverage in greenhouses	WP5	CRES	Greece, Germany, Spain, Austria, Romainia, Italy, Portugal	EU proposal	project proposal
34	EVE	PARTENERSHIP FOR A GEOTHERMAL SPIN-OFF COMPANY CONSTITUTION	WP5	EVE, AZTERLAN	Spain	TELUR Geotermia y Agua S.A. was constituted on 25 of March of 2009	SOCIETY INF.
35	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL CLOSED LOOP IN MULTIDWELING SOCIAL HOUSES	WP5	EVE, DPT. OF DWELING BASQUE	Spain	IN PROGRESS	AGREEMENT
36	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL CLOSED LOOP DESIGN INSTALLATIONS (2*200KW)	WP5	EVE, FOMENTO DONOSTIA	Spain	IN PROGRESS	AGREEMENT
37	EVE	NEW 300 KW GEOTHERMAL INSTALLATION IN CIC ENERGIGUNE	WP5	EVE, CIC-ENERGIGUNE	SPAIN	IN PROGRESS	EMAIL
38	EVE	TECHNOLOGY SUPPORT FOR GEOTHERMAL CLOSED LOOP DESIGN INSTALLATIONS (310KW)	WP5	EVE, EHU-UPV	Spain	IN PROGRESS	AGREEMENT
39	Geonardo	Biomass utilisation for district heating	WP5	project partnership	Hungary, Poland, Greece, Czech Republic	finished	available
53	ISE	Development of a hybrid solar heating & cooling system, backed up by geothermal & biomass for 100% coverage in greenhouses	WP5	ISE, CRES	Greece, Germany, Spain, Austria, Romainia, Italy, Portugal	EU proposal	project proposal