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<b>PP</b>	Restricted to other programme participants (including the Commission Services)	
<b>RE</b>	Restricted to a group specified by the Consortium (including the Commission Services)	
<b>CO</b>	Confidential, only for members of the consortium (including the Commission Services)	

**GROUNDMED PROJECT**

**DISSEMINATION PLAN**

**CENTRE FOR RENEWABLE ENERGY SOURCES**

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## SUMMARY

GROUND-MED is a collaborative project which demonstrates innovating ground source heat pump solutions in 8 buildings in Mediterranean EU member States. It involves 25% research and technology development and 75% demonstration (including dissemination activities) of integrated GSHP systems for heating and cooling of considerably higher seasonal coefficient of performance (SPF) than present technology.

The aim is to demonstrate integrated ground source heat pump systems of:

- annual SPF for both heating and cooling higher than 5,0
- payback time of less than 7 years compared with a system comprising natural gas boiler of 0.04 €/kWh for heating and air source heat pumps of COP=3.5 for cooling
- high system durability expressed as at least 20 years life span

The first statement has a straightforward direct impact on energy efficiency. The other two statements define whether the proposed technological solutions and practices will be widely accepted by the end users or not, and are essential conditions, if we aim at their wide market penetration and large scale impact.

Demonstrating the superior performance of the technology is essential in order to facilitate its introduction in the market.

During the project, the research and demonstration results will be presented through various dissemination activities in order to boost these innovative technology applications. In this report the proposed dissemination plan is described and planned during the project according to the main dissemination activities stated in the project proposal.

## TABLE OF CONTENTS

1. GEOTHERMAL HEAT PUMPS: MARKET OVERVIEW	3
2. GROUND-MED DISSEMINATION PLAN	10
2.1. Print-out material	11
2.2. Project website development	12
2.3. Publications	15
2.4. Presentations at conferences, meetings, events	16
2.5. Two European conferences and two meetings with EC officials	18
2.6. Seminars and training	20
2.7. On-site visits to demo plants	21
2.8. Forthcoming events for dissemination	22
2.9. Overview table for dissemination activities	23

## 1. GEOTHERMAL HEAT PUMPS: MARKET OVERVIEW

Geothermal energy is becoming all around Europe one of the most interesting sources of renewable energy for the future in the sense of heating and cooling by ground coupled heat pumps. Energy policy and climate protection topped the agenda at the Spring Council in Brussels where EU heads of state and government committed to a binding target for 20% renewables by 2020. However, although ground source heat pump technology and market are developed in countries of Central Europe, the corresponding market in South Europe is at early developing stages, despite the fact that both economics and CO<sub>2</sub> emissions reduction potential are favoured, due to prevailing climatic conditions and the need for cooling.

The cooperation work programme for Energy supports technology development and demonstration of ground source heat pumps aiming at increasing the coefficient of performance of the heat pump and of the overall system in order to reduce the electricity consumption and extend its usage in Europe and particularly to the Mediterranean regions. The increase of efficiency will reduce operating costs and reduce pay-back time.

### **Ground source heat pumps market in Europe**

The GSHP market passed the 100,000 unit mark in 2008 with the sale of 114,452 systems driving the market back into growth (up 9%), after dipping slightly twice between 2006 and 2007. By the end of 2008, the total number of systems installed in the European Union was put at over 785,206, equivalent to 8,955.4 MWth of capacity, Fig.1, Fig.2.

For the first time, *Germany* has moved into the top of the European GSHP market. According to the German HP association (BWP), 34,450 units were installed in the German market in 2008 – a leap of 28.1% over 2007. The main reason for this sharp rise is that in 2008 a new incentive scheme came into effect with subsidies offered according to different criteria (new/old build, residential/ non residential) and HP technology. From 1 January 2009, the HP market has benefited from the enactment of the German law promoting RES in the heating sector (*Wärme-EEG*). Owners of new buildings choosing heat pumps (ground or air source) must ensure that they cover at least 50% of the building's heating requirements.

Historically, the *Swedish market* has been the European Union's major GSHP market, because 41% of the EU's GSHPs are installed there. However the Swedish market is currently being forced downwards with a drop for the second consecutive year of 10% in

2008 with 25,138 units sold. The fierce competition put up by air source equipment is largely responsible for the 2008 rate. As a result, ground source technologies' market share in the general HP sector dropped from 32.7% in 2006, to 19.6% in 2008. In Sweden, subsidies are available for GSHPs in the form of tax reduction for replacing electric heating systems. This scheme which has been in force since 1 January 2006 has been extended until the end of 2010.

France maintained its 3rd place in the EU GSHP market in 2008 with according to EurObserv'ER, 21,725 units sold in 2008, as against 21,200 in 2007, or market growth of 2.5%. The property slump had direct consequences bringing down the number of new house builds (by 12.7% in 2008), and the domino effect held back the ground source HP market. Another explanation for this feeble performance by the GSHP sector is the tax credit scheme, 50% between 2006 and 2008, that does not discriminate between HP technologies. Consequently, the cheaper air source systems are presenting a stiff challenge to ground source systems although from 2009 onwards air-to-air ASHPs are excluded from the scheme.

	2007	2008*
Germany	26 887	34 450
Sweden	27 938	25 138
France	21 200	21 725
Austria	8 288	8 566
Finland	5 300	7 500
United Kingdom	3 000	5 000
Netherlands	3 529	4 098
Czech Rep.	1 792	2 203
Ireland	2 608	2 095
Belgium	1 200	1 300
Poland	1 700	1 000
Estonia	1 123	972
Slovenia	420	405
Greece	65	n.c.
<b>Total</b>	<b>105 050</b>	<b>114 452</b>

\* Estimation. Estimate.  
 Les décimales sont séparées par une virgule. Decimals are written with a comma.  
 Source EurObserv'ER 2009

Fig.1: Number of installed ground source heat pumps units in the European Union countries in 2007 and 2008.

Austria in 2008 was 8,566 units, up 3.4% on 2007. Geothermal technology still has the upper hand in the HP heating market segment (65.3% market share in 2008), although the GSHP market appears to be sluggish, especially when compared with the ASHP

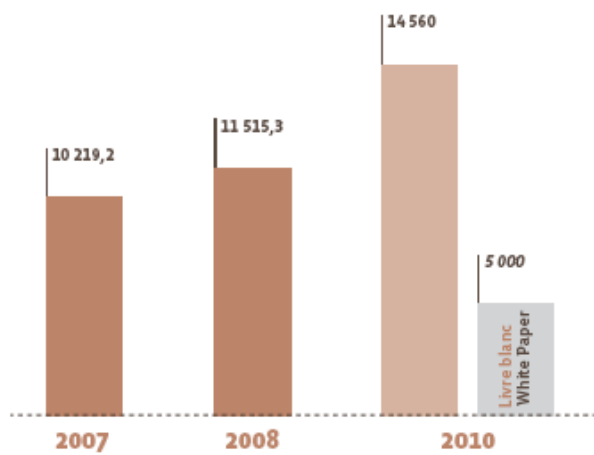
market which almost doubled in Austria over the same period. The tough energy efficiency regulation for new build, promotes the installation of GSHPs with a very high seasonal performance factor in particular. The Austrian incentive scheme is essentially federal, for example taking the form of aid tied to installation performance level as is the case in Upper Austria.

	2007		2008*	
	Nombre/Number	Puissance/Capacity (MWth)	Nombre/Number	Puissance/Capacity (MWth)
Sweden	298 049	2 682,0	320 687	2 909,0
Germany	115 813	1 273,9	150 263	1 652,9
France	105 056	1 155,6	124 181	1 366,0
Finland	38 912	827,9	46 412	857,9
Austria	40 549	454,1	48 641	544,8
Netherlands	15 230	392,0	19 310	508,0
Poland	10 000	133,0	11 000	180,0
Ireland	8 028	130,0	10 123	167,0
Italy	7 500	150,0	7 500	150,0
Czech Rep.	6 965	112,0	9 168	147,0
United Kingdom	5 350	69,6	10 350	134,6
Denmark	11 250	123,8	11 250	123,8
Belgium	8 200	98,4	9 500	114,0
Estonia	3 913	50,1	4 874	63,0
Hungary	350	15,0	350	15,0
Slovenia	720	6,4	1 125	12,2
Lithuania	200	4,3	200	4,3
Romania	40	2,0	40	2,0
Greece	194	1,9	194	1,9
Slovakia	8	1,4	8	1,4
Bulgaria	19	0,3	19	0,3
Latvia	10	0,2	10	0,2
Portugal	1	0,2	1	0,2
<b>Total EU</b>	<b>676 357</b>	<b>7 684,1</b>	<b>785 206</b>	<b>8 955,4</b>

\* Estimation. Estimate. – Les unités mises hors service durant l'année 2008 ont été déduites du parc 2008. Those systems that were decommissioned during 2008 have been deducted from the cumulated figures of the end of 2008. – Les décimales sont séparées par une virgule. Decimals are written with a comma. Source EuroObserv'ER 2009

Fig 2: Number and installed capacity of ground source heat pumps in the European Union countries in 2007 and 2008.

The EurObserv'ER forecasts are therefore optimistic (Fig. 3), maintaining market growth rate at around 10% in 2009 and 2010. This growth would bring the total number of GSHP installed in the European Union by 2010 to just over 1 million. If we assume that the mean HP capacity for these two years is 11 kWth that would mean that the European base will rise to a capacity of about 11,860 MWth. The target set in the European White Paper (5,000 MWth in 2010) for all geothermal energy heating applications was outstripped long ago. If we add the other direct uses of geothermal heat (low- and medium- enthalpy geothermal energy), total geothermal capacity should be approaching 14,560 MWth in 2010 – in other words almost three times the initial target.



*Fig 3: Comparison between current trend and White paper objectives for geothermal heat production (in MWth).*

Through European projects (*the GeoCool European project, the SHERPHA European project, the GROUNDHIT European project*), ground source heat pumps systems were installed and demonstrated in the South European region. According to the above mentioned it is evident that new techniques and innovating ground source heat pump solutions are needed in order to dominate the ground source heat pump market in the Mediterranean EU member States. Innovation is one of the main characteristics of GROUNMED project in order to launch an already known technology with success; to improve the existing technology (of considerably higher seasonal coefficient of performance (SPF) than present technology) and give new perspectives. Extensive research, in order to make GSHPs competitive in comparison with conventional systems in the Mediterranean EU member States, as well as dissemination of research results is necessary so that GCHPs enter the market dynamically.

GROUNDMED project is a research project in the field of GCHPs which can contribute to the GCHPs market expansion by achieving the following targets:

- annual SPF for both heating and cooling higher than 5,0
- payback time of less than 7 years compared with a system comprising natural gas boiler of 0.04 €/kWh for heating and air source heat pumps of COP=3.5 for cooling
- high system durability expressed as at least 20 years life span.

The above technologies or engineering solutions will be demonstrated as GSHP systems for heating, cooling and optionally domestic hot water supply, operating with  $SPF > 5,0$  at 8 demonstration sites of South Europe, which are listed in Table 1.

Table 1: GROUND-MED Demonstration Sites

project partner	building owner	description	system capacity kW
CIAT	CIAT	Building in the region: SEPTEMES LES VALLONS -FRANCE	30-200
HIREF	HIREF	Factory canteen room	10-30
UOR	UOR	Students' residence	20-80
ISR	ISR	University building: classrooms, offices, etc.	50-200
GEJZIR	Municipality of Benedikt	Benedikt Cultural Centre	20-80
UPV	UPV	University building: offices, computer room, common room.	10-30
ECO	Barcelona City Council	Renewable Energy Demonstration Site	50-200
EDRASIS	EDRASIS	Company head offices	20-80

Following the aforementioned brief market overview and the short description of the GROUND-MED project, the structure of the dissemination plan for the GROUND-MED project is presented herewith.

## 2. GROUND-MED DISSEMINATION PLAN

Generally, various dissemination activities take place during the whole project in order to spread the GROUND-MED project technology innovation to all types of market actors. There are some activities containing general information for the project that have already been materialized. However, most of dissemination activities have not already begun since research has not been completed yet and there is a lot of information that will be generated later on during the project implementation.

In order to have a successful dissemination plan, it is very important to specify the **target groups** to address. Concerning GROUND-MED project, the list of actors should include developers (construction companies), investors, GCHPs specialists, power utilities, decision makers and end users. Partners should specify target groups for their countries with the aim to have a common list for the project containing all aforementioned actors. So, **a mailing list** should be created by each partner for dissemination purposes both at a national level as well as a European or international sector audience.

## **2.1. Print-out material**

The dissemination print-out material will include brochures that will be produced (two page fact sheets) for each one demonstration site (9 fact-sheets in total) explaining the technology, the main innovations leading to improved energy efficiency, and results from monitoring operations. Furthermore the GROUND-MED website shall provide these project brochures in order to be available for downloading.

## 2.2. Project website development

The official launch of the project website took place on 25 May 2009 ([www.groundmed.eu](http://www.groundmed.eu)). In 2009 all eighteen news articles were published. All available information about the eight demonstration sites to be monitored in the course of the project is to be found on the website.

The **Heat Pump Best Practice Database** was implemented into the website. Developed within the framework of the IEE project GROUND-REACH the database structure was advanced according to the needs of this project and the IEE project SEPEMO-Build as well. Recently over 60 case studies from 17 countries are compiled in the database. The website statistics for the second half year of 2009 indicate a remarkable interest in this project. Although in the start-up phase yet, nearly 25.000 page requests were registered.

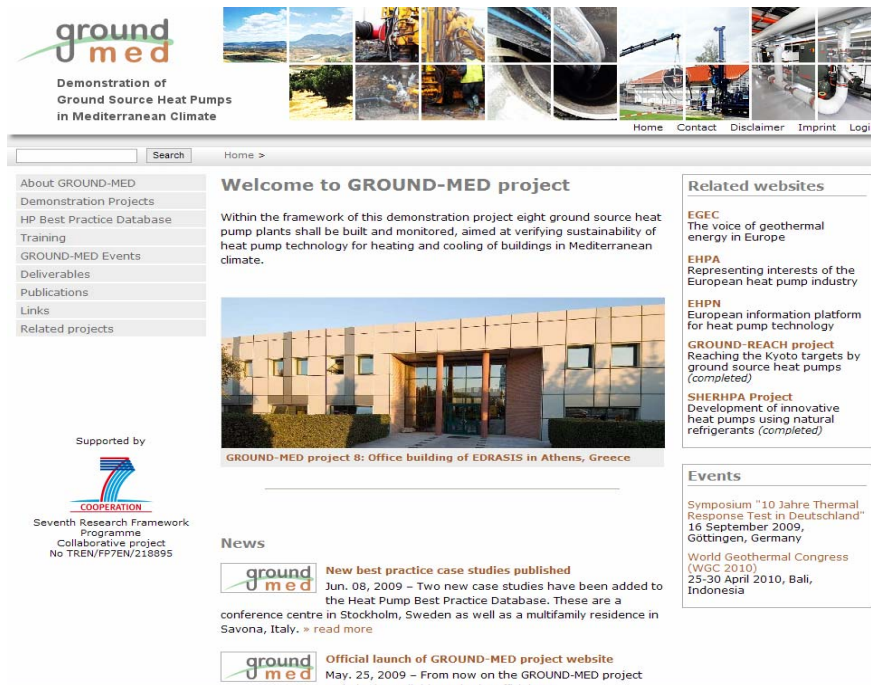


Fig.4: GROUND-MED website

The project website comprise a members area for continuous exchange of internal information (e.g. minutes of the Work Package and Steering Committee meetings), a public area for European-wide distribution of project results to heat pump market key actors (politicians, decision makers, electric utilities, house keeping companies, heat pump manufacturers, designers, installers etc.), the results of the demonstration sites as best practices case studies. The website will allow everybody to access to the performance data of each demo building, but with some limitations depending on the involvement of the user in the project.

Furthermore the GROUND-MED website provides a number of documents for download, such as project brochures, presentations given at project workshops, all deliverables and other documents produced in the course of the project (some documents available only from password protected partner section).

Demo plants summary results should be available to the website and updated every six (6) months or less, if necessary. Extensive and elaborated reports could be included in partners' intranet space.

Partners intranet space should be in the GROUND-MED website including updated documents being put by each partner. All partners should be informed by email automatically for each update.

Electronic newsletters in English could be presented in the website and they will be updated regularly every 6months.

Press releases in English should be a separate hyperlink in the website.

The elaborated mailing list will be used to disseminate the electronic newsletters and press releases to stakeholders.

Every new information concerning the public may be presented in the website with a ***flashing “NEW”*** indication such as public deliverables, events or novelties further described in newsletters, press releases etc.

### 2.3. Publications

Publications to technical and scientific journals should be a clear effort in order to spread the appropriate information and having a more permanent record that can be used for a future reference.

Forthcoming publications:

- Submitted to Energy and Buildings Feb 2010: A Quasi-Steady State Mathematical Model of an Integrated Ground Source Heat Pump for Building Space Control, J.M. Corberan, D.P. Finn, C.M. Montagud, F.T. Murphy and K.C. Edwards.
- Experimental measurements from year 2007 until nowadays were collected by UPV. Representative parameters such as calculated heat injected or extracted from the ground as well as measured water temperatures entering and exiting the ground source heat exchanger will be implemented in several graphs and a scientific publication will be sent to a journal on year 2010. Experimental data will keep on being collected during the next years of the project duration.
- “Geothermal Resources and Utilisation Possibilities”, “Mesagerul Energetic”, the Bulletin of the National Committee of the World Energy Council, Bucharest, Romania (in Romanian)

Proposed journals:

- CORDIS focus (<http://www.cordis.lu/focus/en/home.html>)
- Technology opportunities today (CORDIS focus supplement)  
(<http://www.cordis.lu/focus/en/src/supplements.htm>)
- Euroabstracts ([http://aoi.cordis.lu/list\\_publ.cfm?Pub=2&r=1](http://aoi.cordis.lu/list_publ.cfm?Pub=2&r=1))
- European Innovation ([http://aoi.cordis.lu/list\\_publ.cfm?Pub=1&r=1](http://aoi.cordis.lu/list_publ.cfm?Pub=1&r=1))
- RTD info ([http://europa.eu.int/comm/research/rtdinfo/index\\_en.html](http://europa.eu.int/comm/research/rtdinfo/index_en.html))
- EGEN news (<http://www.egeg.org/>)
- Managenergy (<http://www.managenergy.net/>)
- Renewable Energy World (<http://www.earthscan.co.uk/defaultREW.asp?sp=&v=3>)
- Refocus (<http://www.re-focus.net/>)

## 2.4. Presentations at conferences, meetings, events

The project was also presented in several international conferences and meetings:

- 25–27/05/2009: IGD Slovakia 2009 – International conference on national development of geothermal energy use
- 10–19/10/2009: International Association of Hydrogeologists – Commission for Mineral and Thermal Waters Annual meeting
- 25–27/11/2009: RENEXPO Salzburg – International Trade Fair For Renewable Energy & Energy Efficient Building and Renovation
- ENREG 2009, 1<sup>st</sup> International Conference on Energy Efficiency in Buildings and Renovation in Romania and South-East Europe, Arad, Romania: “Ground Source Heat Pumps at the University of Oradea Campus”, Bendea, C., Rosca, M., and Guertler, R.
- 19-20/05/ 2009, Linz (Austria): EHPA Conference
- 26-29/05/2009, Castá Papiernicka, Slovakia: International Geothermal Days - Slovakia 2009
- 9-11/06/2009 - Bilbao, Spain, European Future Energy Forum
- 14-17/06/2009 - Stockholm, Sweden, EFFSTOCK 2009: Thermal Energy Storage for Efficiency and Sustainability
- 01/07/2009, Madrid-Spain, CEN Annual Meeting
- 23-25/09/2009, FERRARA- Italy, GEOTHERXPO 2009
- 9/10/2009, Faculté Polytechnique de Mons- Belgium UMONS, Geothermics Day

Forthcoming presentations and conferences:

- 25-29/04/2010, World Geothermal Congress 2010, Bali, Indonesia: The European Project Ground-Med “Advanced Ground Source Heat Pump Systems for Heating and Cooling in Mediterranean Climate” , Dimitrios Mendrinou, Constantine Karytsas and Marcel Rosca
- 10-11/03/2010, Madrid, GEOENER congress “Optimización Energética de una instalación de bomba de calor acoplada al terreno para calefacción y refrigeración en un edificio de viviendas ” organized by Regional Ministry for Economy and Treasury, through the General Directorate for Industry, Energy and Mines, and the Regional Energy Agency of Madrid (Fundación de la Energía de la Comunidad de Madrid)
- 10-11/03/2010, Madrid, GEOENER congress “Ground-med project: Advanced Ground Source Heat Pump Systems for heating and cooling in Mediterranean climate ” organized by Regional Ministry for Economy and Treasury, through the General Directorate for Industry, Energy and Mines, and the Regional Energy Agency of Madrid (Fundación de la Energía de la Comunidad de Madrid)
- 23-24/02/2010, Bilbao (Spain), Annual General Meeting of ETP-RHC
- 6/05/2010, Brussels (Belgium), Buildings for the Future conference
- 14-16/04/2010, Sofia (Bulgaria), 6th International Congress on Energy Efficiency and Renewable Energy Sources for South East Europe
- “Romanian Geothermal Resources and Utilisation Possibilities” at the Workshop on Monitoring Energy Resources, organised by the Romanian National Committee of the World Energy Council, Bucharest, Romania (in Romanian)

## **2.5. Two European conferences and two meetings with EC officials**

Two European conferences will be organized where the project results will be announced to the European research community.

The first one will be held after the completion of research results and the development of the prototypes during the 3rd year of the project, and the second one during the fifth year of the project, when monitoring and technology evaluation information will be available from demonstration sites. Both conferences will be held in Mediterranean EU member states and will include visits to project demonstration sites. In particular, the intermediate conference will be held in Grenoble and will be organised by Partners 2-CEA and 15-GRETh, while the final conference will be organised in Valencia organised by Partner 11-UPV. Partner 4-FIZ will disseminate the events to a European audience through the project web site.

During the first conference the project research results will be presented to the European Geothermal Community (EGC), specialized scientists & engineers as well as to developers, investors, power utilities, decision makers and energy agencies.

The second conference will concern also project demonstration results. The target audience could be separated in two main categories:

1. EGC and specialized scientists & engineers (GCHPs specialists).
2. Developers, investors, power utilities, decision makers, end users and general public.

It is anticipated that analysis of all technical characteristics (using diagrammes and energy balances), feasibility studies of geothermal applications could be presented in detail to GCHPs specialists. A panel discussion could be carried out after the final session.

Furthermore, visual presentations of demo installations is suggested to be presented to developers, investors etc. explaining the main technical characteristics as well as the economic evaluation of the plants. A panel discussion could also be carried out after the final session.

Moreover, a separate visual presentation for the installers concerning details from on site installation as well as a further discussion could be presented.

Two meetings with EC officials in Brussels will be also organized in order to inform them of the project results, one at midterm (month 18) and the second towards the end of the project (Partner 3-EHPA).

## 2.6. Seminars and training

The target groups of the dissemination tasks are policy representatives and decision makers from local, regional, national and EU authorities, house business market actors (brokers, investors, etc.), house owners, house building market actors including heating/cooling system design and installation (architects, civil engineers, mechanical engineers, electrical engineers, other engineers, building contractors), ground coupled heat pumps market actors (heat pump manufacturers, geologists, works contractors, drilling contractors), and power utilities.

The organized training activities are:

- The development, through an inductive approach, of design guidelines that architects, engineers and service personnel will use according to the experience gained from designing and monitoring the GSHP systems at the demonstration sites.
- The organization of one training course for architects, engineers and service personnel in each EU member state with at least one demonstration site; there are 7 training courses in total, each one in Portugal (Partner 8-ISR), Spain (Partners 11-UPV and 12-BESEL), France (Partners 2-CEA, 15-GRETh and 19-CETIAT), Italy (Partner 17-UNIPD), Slovenia (Partner 9-GEJZIR), Romania (Partner 7-UOR), and Greece (Partner 1-CRES) respectively; visits to demonstration sites will be included, in order to train the participants on how to replicate the energy concept of the project. Partner 4-FIZ will collaborate with before mentioned project partners for this purpose.

## **2.7. On-site visits to demo plants**

In addition to the abovementioned dissemination activities it is suggested that on-site visits to the demonstration plants by specific target groups of engineers and installers in separate sections could be planned. These visits could include demonstration of heat pumps operation and the relevant on-line results from the monitoring process. In parallel, there could be more detailed information for each different group i.e. a scientific analysis of the operation for the GCHPs experts and a more practical one for the installers.

## 2.8. Forthcoming events for dissemination

Although a final decision will have to be agreed between project partners, it is suggested that dissemination activities such as the brochure distribution, poster exhibition etc. could take place in the following events.

- **25-29/04/2010, World Geothermal Congress 2010, Bali, Indonesia**
- **10-11/03/2010, Madrid, GEOENER congress** organized by Regional Ministry for Economy and Treasury, through the General Directorate for Industry, Energy and Mines, and the Regional Energy Agency of Madrid (Fundación de la Energía de la Comunidad de Madrid). It is an initiative that aims to be a forum of meeting for scientists and technicians from research centres, universities, public administration and companies from the geothermal sector, interested in the different thematic areas related to this renewable energy source, widely developed in other European countries, analyzing the procedures of application, the equipment available in the market and the adaptation to the current regulation. Therefore all the interested actors are called to participate in the II Congress of Geothermal Energy in Building and Industry, that will be celebrated in Madrid on the 10th and 11th March 2010.

The main objectives of GEOENER are the following:

- To provide a forum for meeting and discussion to scientists, professionals, industrials and consumers, to disseminate and share their knowledge, experiences and research on geothermal energy for building and industry.
  - To transfer and exchange knowhow and experiences developed in different regions contributing to promote this renewable energy source.
- 
- **23-24/02/2010, Bilbao (Spain), Annual General Meeting of ETP-RHC**
  - **6/05/2010, Brussels (Belgium), Buildings for the Future conference**
  - **14-16/04/2010, Sofia (Bulgaria), 6th International Congress on Energy Efficiency and Renewable Energy Sources for South East Europe**

## 2.9. Overview Table for Dissemination Activities

The following table depicts briefly all dissemination activities suggested for the GROUND-MED project.

<b>Planned/ actual dates</b>	<b>Type</b>	<b>Type of audience</b>	<b>Size of audience</b>	<b>Partner involved</b>
During the project	Project website	General public, stakeholders and partners		FIZ
3rd year of the project	1 <sup>st</sup> European conference (Grenoble)	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies	60-75 participants	CEA, GRETh
End of the project	final European conference (Valencia)	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers, end users & general public	100 participants	UPV
Month 18	1 <sup>st</sup> meeting with EC officials in Brussels	Project partners		EHPA
End of the project	2 <sup>nd</sup> meeting with EC officials in Brussels	Project partners		EHPA
Month 45	Training courses in Portugal	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		ISR
Month 18	Training courses in Spain	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		UPV, BESEL
Month 24	Training courses in France	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		CEA, GRETh and CETIAT
Month 36	Training courses in Italy	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		UNIPD
Month 42	Training courses in	EGC, Spec. scientists & engineers Developers,		GEJZIR

	Slovenia	investors, power utilities, decision makers and energy agencies		
Month 48	Training courses in Romania	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		UOR
Month 51	Training courses in Greece	EGC, Spec. scientists & engineers Developers, investors, power utilities, decision makers and energy agencies		CRES
During the project	Mailing lists	All GCHP stakeholders		Each Partner
During the project	Project results & Demo-plant results (Partners Intranet Space)	Partners		FIZ
During the project	Newsletters (website)	General public & GCHP stakeholders		FIZ
During the project	Press releases	General public & GCHP stakeholders		FIZ
During the project	Publications (technical/scientific magazines)	Journals' readers		