



ENGINE – Project
3rd WP 5 Meeting, Mid-term Conference
10. & 12.01.2007 in Potsdam, Germany

– Minutes –

Place: GeoForschungsZentrum, Potsdam, Germany
Begin : 10th January 2007, 8.30 a.m.; 12th January 2007, 2.30 p.m.
End: 10th January 2007, 10.00 a.m.; 12th January 2007, 4.00 p.m.

Participants

See attached list of participants

Procedure

Wednesday, 10th January 2007

1. Welcome address by work package 5 leader, Martin Kaltschmitt (IE).
2. Discussion of the timetable (see slides of the meeting):

The recent version of the timetable concerning the deliverables of work package 5 was presented. Thereby all WP 5 relevant workshops and conferences are listed. Further the articles, including the responsible partner for co-ordinating them, are displayed. Here some adaptations have been made in order to adjust the co-operation to the expertise of each partner. The co-ordinator of an article is responsible for the outline, asking the partners for their specific contribution and compiling these materials. The draft version of the article has then to be sent to all partners for their final validation.
3. Discussion of the reports of study and scientific disseminations
 - All partners are asked to provide (e-mail to Stephanie.Frick@ie-leipzig.de or uploaded at <http://engine.brgm.fr/partnersAccess.asp> (please see attachment about partners' shared spaced)) material about the WP 5 relevant topics: exploitation, economics, environmental aspects, rising policy makers' awareness and miscellaneous helpful contributions. These materials can e.g. be by the partner already composed reports.
 - The so far provided materials (by CRES, IVTRAN, JSC, IGR, IGG, IE) are available in the shared space at ENGINE>DOCUMENTS>WP5>reports of study and dissemination (please see attachment about partners' shared spaced)
 - Following materials will be provided soon, if possible. The named partners are asked to give further information when the material can be provided or where obtained:
 - Evald Shpilrain (IVTRAN):
 1. report containing an economic approach of HDR
 - Ad Lokhorst (TNO)
 1. book-contribution about geothermal energy containing economic and hindering non-technical aspects
 2. report of the Ministry of Environment concerning environmental aspects of geothermal energy use
 3. short report about TNO dealing with raising policy makers' awareness
 4. investment plan for geothermal plant

4. Discussion of the article “Economic Approach of Geothermal Energy”

- Due to the fact that not all partners have access to respective information about production costs of heat and power production in their country, the article will focus on few case studies where this information is available. These case studies will be based on as realistic as possible production costs (running plants as well as plants in the design state) and will represent the energy production from exemplary low and high enthalpy fields.
- The case studies will describe and analyse the specific geological, economic and political frame conditions in order to identify the cost driving factors. These factors will then be assessed on a more widely European scale, e.g. an overview of the costs in Europe for drilling, conversion plant (surface part), etc. Concerning particular cost information the binary power plant in Russia and the geothermal heat plant in Denmark were addressed.
- Because of the needed information the raw version will be prepared by IE till end of July 2007. All information and drawn conclusions from a European viewpoint will be compiled in a long version. This version will be available for all Engine partners. Secondly a short version of 15 to 20 pages will be prepared and afterwards published in e.g. Geothermics or another reviewed journal.

5. Discussion of the article “Non-technical Barriers of a Geothermal Energy Use”

The draft version of this article has been presented (see attachment) and all partners were asked to make comments and further contributions till 15th of February. Afterwards the article will be published in e.g. Geothermics or another reviewed journal.

6. Discussion of the article “Environmental impacts”

- Based on the paper authored by CRES “Environmental Impact of the Geothermal Industry” (see Launching Conference) and the study made for the Federal Ministry of Environment by IE this article will be composed. The partners are asked to provide further possible information about the environmental impacts of geothermal energy use.
- The draft version will be prepared till end of September 2007 by IE and sent to all partner for evaluation. Afterwards the article will be published in e.g. Geothermics or another reviewed journal.

7. Closure of the WP meeting by Martin Kaltschmitt.

Friday, 12th January 2007

8. Welcome address by Dimitrios Mendrinis (CRES) representing Costas Karytsas (work package 8 leader) and Stephanie Frick (IE) representing Martin Kaltschmitt

9. Discussion about work package 8

- Following participants were discussed and proposed to the steering committee to be in the expert-group of work package 8
 - Mr. Z. Zarmiento (FEDCO)
 - Dr. C. Karytsas (CRES)
 - Mr. D. Mendrinis (CRES)
 - Dr. K. Povarov (JSC)
 - Dr. O. Mertoglu (ORME)
 - Dr. L. LeBel (BRGM)

- Dr. D. Tournaye (CFG)
- Dr. P. Ungemach (GPC)
- Dr. O. Flovenz (ISOR)
- Prof. I. Goldbrunner (GEOTEAM, external advisor)
- Dr. P. Seibt (GTN, external advisor)
- Dr. J. van Wees (TNO, observer)
- The expert-group of work package 8 will compile the chapter 3 & 4 of the best practice handbook covering the topics exploitation, economic, environmental and social impacts. Based on the deliverables of work package 5 CRES will compile these chapters and send the draft versions for evaluation to the expert-group.
- Meetings of the expert-group will in 2007 take place together with the work package 5 meetings during the upcoming workshops if possible.

10. Discussion about the workshop “Increasing policy makers’ awareness and public acceptance”

- The workshop will take place 13th - 15th September 2007 in Greece and is organised by CRES. The place Milos Island was changed to Athens in order to enable an easier access for the participants and speakers.
- The workshop will be open to all interested people and is limited – depending on the local facility – to about 50 to 100 participants; in enrolling ENGINE partners will have priority.
- For arranging the workshop content a parallel approach was suggested to CRES: a general call for abstracts will be made to all ENGINE partners and the stakeholder committee and in parallel particular speakers will be addressed. The following possible speakers/presentations were discussed:

Introducing presentations

- Representative of communications’ science about e.g. communication and miscommunication
- IE representing work package 5, general approach of cite specific non-technical barriers and possible ways to overcome them
- PhD study on miscommunication between companies and public (possible contact by Ad Lokhorst)
- N.N., Environmental impact assessment – how public acceptance is dealt with
- ...

Geothermal case studies

- FEDCO, case study of the Philippines (contact within ENGINE)
- Pierre Ungemach, case study of the Paris Basin (contact within ENGINE)
- ENEL, case of Tuscany (contact within ENGINE)
- Case study of Milos Island (contact by CRES)
- Roman Haimberger, GeoEnergy Karlsruhe (Germany), public information video about exploration (possible contact by Stephanie Frick)
- Community of Unterhaching (Germany), case study (possible contact by Stephanie Frick)
- ...

Miscellaneous case studies

- Shell, cast study (contact within ENGINE, stake holders’ committee)
- Case study in the field of CO₂-storage (possible contact by Ad Lokhorst)
- Case study in the field of nuclear power generation
- ...

- To gather further ideas, CRES will set up a questionnaire on increasing policy makers' awareness and public acceptance which will be sent to all work package partners

11. Discussion about the article "Increasing policy makers' awareness and public acceptance"
The article will be co-ordinated by CRES. An outline will be prepared and sent for evaluation before the workshop. A draft version will be compiled out of the results of the workshop and sent around by end of October 2007.

Attachments:

List of participants
Information about partners' shared space
Slides of 3rd WP 5 meeting
Draft paper about non-technical barriers

List of participants

Attendant:

LOKHORST Ad, Netherlands Organisation For Applied Scientific Research, TNO
KALTSCHIMITT Martin, Institute for Energy and Environment Leipzig, IE (Germany)
FRICK Stephanie, Institute for Energy and Environment Leipzig, IE (Germany)
GARCIA-NOCEDA Celestino, Instituto Geológico y Minero de Espana, IGME (Spain)
IRMINSKI Wojciech, Panstwowy Instytut Geologiczny, PGI (Poland)
KRANZ Stefan, GeoForschungsZentrum Potsdam, GFZ (Germany)
MENDRINOS Dimitrios, Centre of Renewable Energy Sources, CRES (Greece)
SARMIENTO Zosimo, Filtech Energy Drilling Corporation, FEDCO (Philippines)
SHPILRAIN Evald, Institut vysokikh temperatur Rossyiskoi akademii nauk, IVTRAN
(Russian Federation)

Absent:

ALICHAEV Mukhtar, Institute for Geothermal Research, IGR (Russian Federation)
KAYA Tevfik, ORME JEOTERMAL A.S., ORME (Turkey)
LE BEL Laurent, Bureau de Recherches Géologiques et Minières, BRGM (France)
MANZELLA Adele, Istituto di Geoscienze e Georisorse, IGG (Italy)
MATHIESEN Anders, Geological Survey of Denmark and Greenland, GEUS (Denmark)
POVAROV Konstantin, Intergeotherm SC (Russian Federation)
TOURNAYE Dominique, CFG Services (France)

Information about partners' shared space

At <http://engine.brgm.fr/partnersAccess.asp> you have access to the partners' shared space of ENGINE (see also e-mail by Philippe Calcagno 13.12.2006).

Because not all accounts could have been fully linked yet, so far only one account per institute/company has access to the work package 5 folder (ENGINE>DOCUMENTS>WP5). The following are these main accounts:

Last name	First name	Institute/Company
Alkhasov	Alibek	IGR DSC RAS
Garcia de la Noceda	Celestino	IGME
Huenges	Ernst	GFZ
Kaltschmitt	Martin	IE
Karytsas	Constantine	CRES
Kaya	Tevfik	ORME
Manzella	Adele	IGG
Mathiesen	Anders	GEUS
Povarov	Oleg	Intergeotherm JSC
Shpilrain	Evald	IVT RAN
Tournaye	Dominique	CFG
van Wees	Jan Diederik	TNO
Wroblewska	Marta	PGI

Please let us know in case you have any problems.