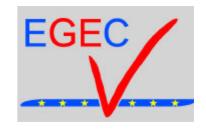
### **EGEC NEWS**



#### THE VOICE OF GEOTHERMAL ENERGY IN EUROPE

Issue n°5. July 2007

WELCOME... to the second issue of the EGEC Newsletter...for 2007

#### A word from the EGEC President:

Dear members of EGEC, dear readers of this newsletter,

it is more than a month now since we could close the European Geothermal Congress 2007 in Unterhaching, Germany. EGEC has been a vital partner with EGC 2007, by integrating the EGEC Business Seminar 2007 into the international conference. The EGEC Business Seminar in one session collected the papers concerning economy and policy for geothermal energy,



and in the other session it offered a platform for presenting EU-funded R&D-projects in the geothermal field. The papers are distributed with the EGC 2007 proceedings on a CD-ROM, and later will also become available online (we will inform our members when and where).

I reckon those of you having attended EGC 2007 will agree that, looking back at the whole of the action, we can call it a great success, bringing together ca. 400 persons from throughout Europe and overseas, presenting the latest in R&D as well as in business and policy to the geothermal community, and showing exhibits from all the geothermal sectors.

EGEC wishes to express sincere appreciation for all efforts and contributions to the event, and in particular likes to mention: The municipality of Unterhaching, under the leadership of the mayor Erwin Knapek; the main organiser GtV-BV e.V.; the congress convenor IGA ERB / IGA EBF; the European Commission DG-TREN supporting the EGEC sessions through projects K4RES-H and RESTMAC. And finally, EGC 2007 would not have been possible without all the speakers, poster presenters, exhibitors, congress participants, visitors, who with their activity and presence made EGC 2007 what it was - THE meeting for geothermal energy in Europe!

Albeit the second quarter of 2007 was dominated by EGC 2007, also a substantial number of other activities had to be carried out for promotion of geothermal energy, and to secure a favourable environment for geothermal energy use for heat, cold and electric power. A particular highlight was a hearing on June 22, when two Commissioners, Andris Piebalgs (Energy) and Janez Potocnik (Science & Research), listened to the energy industry to learn about ideas on a Strategic

Energy Technology Plan (SETP). EGEC was honoured to represent geothermal energy at that event. Visit our website to learn more about the SETP in the near future!

Sincerely yours,

Dr. Burkhard Sanner

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### **POLICY**

#### Britta Thomsen report on the Roadmap for Renewable Energy in Europe

The Danish Member of European Parliament Britta Thomsen has been designated as rapporteur to the report the Parliament will adopt on the various communications concerning renewables, including the renewable energy roadmap. The roadmap foresees that the Commission will come forward with a new framework directive covering all renewable energy sources including binding national targets and necessary framework legislation in order to reach them. Initially the Commission announced to come forward with such a directive proposal "within the third quarter of the year". It seems now this might be delayed, partially because the Commission wants to listen to the Parliaments expectations for this directive.

The draft Thomsen Report is now available and under discussion in the different committees concerned. The report contains among others, elements on the future directive's legal basis and on strengthening existing legislation for renewable electricity and biofuels. In principle the report agrees with the proposed line of the Commission. It calls for sectoral targets on the national level and milestones to be included into the National Action Plans submitted by Member States. It would also like to ensure that the Commission could take legal action against Member States before 2020 if a country is not fulfilling its obligations.

From EGEC's point of view the general line of the report is very much welcomed, but we hope to see some further improvements. The Parliament will hopefully agree to take a strong position on measures for renewable heating & cooling as well as detailing some other aspects, such as the removal of administrative barriers and importance of finding an agreement timely.

Next steps: The report is being debated in various European Parliament committees. The debate in the Industry, Research and Energy Committee (ITRE) was held on 5 June, and the vote in the ITRE committee on 26 June sent a strong signal by calling for the upcoming Framework Directive to strengthen existing renewable energy legislation and be accompanied by ambitious legislation on heating and cooling. Vote in plenary is planned for 26 September.

#### "Implementing 20% renewable energy by 2020 - what is needed to make it happen?"

The European Energy Forum (EEF) on May 8, 2007, organised a dinner debate at the European Parliament, with sponsoring by EREC. The topic was: "Implementing 20% renewable energy by 2020 - what is needed to make it happen?". About 150 persons, among them notably 20 MEPs, attended the debate. The keynote speaker of the evening was Dr. Winfried Hoffmann, the president of the European Photovoltaic Industry Association (EPIA) and one of the directors of EREC.

On behalf of EGEC, Pierre Ungemach attended the event; he made a statement during the debate: "In certain regions, geothermal energy can contribute to the production of RES electricity. And we have to underline the large potential of geothermal heat pumps for heating and cooling. Geothermal energy has a great future in Europe". More info on the event, incl. the slides from the keynote speach for downlad, can be found on <a href="https://www.egec.org">www.egec.org</a>

# Reaching 20% of renewable energy by 2020 only feasible if a fast and adequate policy framework is adopted.

Arthouros Zervos, President of the European Renewable Energy Council (EREC), was invited by the Portuguese Presidency to express the renewable industry's opinion on the Renewable Energy Roadmap. Professor Zervos made his point clear: 'In our view, it is possible to generate 35 % of Europe's electricity



supply by renewable energy sources, 25 % of the total heat production and at least 10 % biofuels but to make these targets come true, timing is a key element. In only thirteen years from now we want to have achieved an increase of thirteen percentage points in renewables. This means the EU needs to adopt the necessary measures as soon as possible. A delay in legislation can cause tremendous delays in action.'

For the European renewables industry, a key objective for the future legislation framework is to maintain investor confidence. This can only be guaranteed if a clear pathway is shown for the different sectors in renewables. Renewable heating and renewable electricity for example are two completely different sectors with different needs and actors. This needs to be pointed out clearly in the national action plans.

The sensitive question 'how to distribute the 20% overall target into national targets' was another core element of the 2-day debate. 'Increasing the share of renewables in the EU from today's around 7% to 20% in 2020 means an increase of 13 percentage points in 13 years for the EU. One simple option would be for each Member State to increase its share of renewables by 13 percentage points. 'Such an approach would make the process transparent and would avoid long negotiations. The commitment was taken in solidarity and so should the actions. There is absolutely no scientific evidence in any country which could justify that a single Member State is not able to deliver a 13 percent point increase', commented Zervos.

#### Member states to decide on renewables for heating EU homes

Despite Commission promises in 2006 to propose binding targets for renewables on heating and cooling, these can no longer be expected. It will now be up to member states to decide on the targets as part of upcoming national action plans to reduce greenhouse-gas emissions by 20% in 2020. According to figures by Greenpeace, nearly 50% of the EU's primary energy is consumed for heating and cooling in private homes, buildings and industrial processes.

Eufores, the European Forum for Renewable Energy Sources, puts the figure closer to 40%. Such figures put the energy market for heat in the EU neck-and-neck with the market for transport and electricity. Already in its 2005 Biomass Action Plan, the Commission stated that legislation on renewable energy in heating "is the missing piece of the jigsaw, alongside existing directives covering electricity and transport". In February of 2006, Parliament adopted, with massive support of MEPs, a resolution asking the Commission to put forward legislation that would double the share of renewable energies for heating and cooling by 2020. In response to the resolution, EU Energy Commissioner Andris Piebalgs promised that the Commission would put forward a proposal on the issue before the end of 2006.

## EGEC's response to the EC Public consultation exercise on the European Strategic Energy Technology Plan.

The public consultation launched by the European Commission on the SET Plan ended 13/05/2007. EGEC supports the idea of a European SET Plan. It could permit geothermal energy to reach ambitious targets for 2020 (14 TWh –electricity, 8 Mtoe heating & cooling).

Geothermal energy is one of the possible topics for this Plan on strategic energy technologies, both for electric power and in the heating and cooling sector. With geothermal energy, also the otherwise difficult base-load part of the renewable energy supply can successfully be met.

The EGEC input to that consultation can be found on our website www.egec.org > news.

#### Improving the Implementation of the Emission Trading Directive

In January 2005, the European Union Greenhouse Gas Emission Trading Scheme (EU ETS) commenced operation as the largest multi-country, multi-sector Greenhouse Gas emission trading scheme world-wide. They said that "the EU ETS is an ambitious effort by the EU to correct for the market failure that surrounds climate change, and to deliver the EU's commitments to reduce carbon dioxide emissions under the Kyoto Protocol" – the international deal to cut CO2 by 8 percent below 1990-levels by 2012.



The scheme is based on Directive 2003/87/EC, which entered into force on 25 October 2003. It aims at reducing emissions of carbon dioxide and combating the serious threat of climate change. Under the scheme, each participating country has a National Allocation Plan (NAP) specifying caps on greenhouse gas emissions for individual power plants and other large point sources. Each facility gets a maximum amount of emission "allowances" for a particular period. To comply, facilities can either reduce their emissions or purchase allowances from facilities with an excess of allowances. Progressively tightening caps is foreseen for each new period, forcing overall reductions in emissions.

The European Environment Agency recently published the second report on how Member States have implemented the Emissions Trading Scheme. Reflecting on the first full year of the Scheme's operation (2005), the report provides a compilation of experiences from 23 Member States. Areas identified as problematic include allocation rules, definition of combustion installations and competition with installations from outside the EU. Several Member States also expressed concerns over the burden imposed by the Emission Trading Directive on operators and authorities. This was seen as a problem, especially for operators of small installations. The report also states that in many cases it has been difficult for Member States to stick to the tight timetable for reporting and verification. Overall, this report provides the first comprehensive picture of the implementation of the Emissions Trading Directive in the Member States. The results presented in the report might be useful for improving future application of this Directive.

#### EU rejects 'weak' UN paper on climate change

The European Union has rejected a draft UN document on sustainable development voicing disappointment and frustration over its lack of content on the issue of global warming. The European Union deeply regrets that the United Nations Commission on Sustainable Development (CSD) was unable to agree on an ambitious text on energy, climate, air pollution and industrial development. Because of the negative votes of the EU member states the 15th parliamentary session of the CSD - the most important intergovernmental environmental organ of the UN – ended without a final conclusion. Mr Dimas said it was "unfortunate that the CSD 15 was unable to deliver" on the challenges posed by climate change. EU governments agreed in March to cut the bloc's CO2 emissions by 20 percent by 2020 and to work for a deal to cut emissions by 30 percent by 2020 in developed nations across the world. EU leaders argued that this way it would be easier to get an international deal in place, however. But the prospects of getting the US and China – some of the world's biggest polluters – on board looks bleak.

#### Six European regions launch renewable-energy network

The Renewable Energy Regions Network (RENREN) aims to enhance co-operation between local administrations and companies on biomass, wind, oceans, solar, geothermal and hydro-energy. The network, launched on 17 April in Brussels, includes the regions of Oberösterreich (Austria), Schleswig-Holstein (Germany), North Sweden and Wales (UK), as well as small European states Cyprus and Iceland. The objective of RENREN is to exchange best practice and information between regional administrations but also to enhance co-operation between private companies and raise public awareness on renewable energy via educational programmes.

#### MEP advocates greater role for cogeneration in 'energy showdown'

Speaking at a 9 May stakeholder conference on cogeneration, Green MEP Claude Turmes called on the EU to make co-generation a cornerstone of its future energy policy and efforts to reduce greenhouse-gas emissions.

Usually fuelled by natural gas, renewable energies or waste, cogeneration installations can vary in size from small units in residential buildings to large facilities in so-called district-heating systems that provide heat and electricity for entire neighborhoods. Because of the simultaneous production of heat and electricity, cogeneration is generally considered to be more efficient and ecological than traditional



electricity- producing facilities, such as nuclear or coal power plants, which simply expel heat into the atmosphere as a byproduct of electricity production.

In February 2004, the EU adopted the CHP Directive to promote cogeneration in the EU by addressing several problems, including inadequate control of energy monopolies, inadequate support from local and regional authorities, incomplete market liberalisation, regulatory obstacles and the lack of European standards for network connection.

Combined heat and power (CHP) plants are not a new use of energy for geothermal energy. However, what has been happening recently in the geothermal arena is the use of low-temperature resources (down to 98 °C) in combination with binary or Organic Rankine Cycle (ORC) power units. Two installations, one in Australia at Birdsville and one in Germany at Neustadt-Glewe, are using temperatures this low.

#### World Bank data points to rising global CO<sub>2</sub> emissions

Emissions of global warming gases continue to rise dramatically, according to new data published by the World Bank on 9 May. On a global scale, emissions of CO<sub>2</sub> in 2003 were 16% higher than in 1990, the bank found in its 2007 edition of the Little Green Data Book.

The other main conclusions of this year's edition include:

- Emissions are spread evenly between industrialised and developing countries.
- although poor countries' emissions are growing fast, some industrialised countries are also doing badly: the US and Japan showed an emissions growth of 20% and 15% between 1990 and 2003 respectively; the EU grew by 3%;
- as a group, the industrialised countries are missing their Kyoto targets;
- the emissions per person in China and India are a lot lower than in the US or Japan. The average Chinese emits 16% of the average US citizen and the average Indian 6%, and;
- in developing countries, emissions are mainly originating from agriculture and land-use changes; avoided deforestation in developing countries is therefore one of the key components of good climate policy.

#### United Nations points to global renewable 'energy boom'

The UNEP's report, 'Global Trends in Sustainable Energy 2007' published in June 2007, states a growth of 43% of the investments in renewable energies between 2005 & 2006, and plans the same growth for 2007.

Some \$100bn in investment capital flowed into renewable energy in 2006, up from \$80bn in 2005.

The report attributes this boom to factors such as climate change, increasing energy demand, the persistently high price of oil and clean-energy policy initiatives that both facilitate investment and create a stable environment for a continued sector growth.

More than 70% of investment in sustainable energy is either in the EU and the US. However, the EU-27 lags in research investment, the report states. Statistics also proved that the renewable-energy industry is no longer dominated by developed countries, as around a fifth is represented by the developing world.

#### Cost of renewable energy 10 times cheaper than "business as usual" fossil-fuelled future?.

Investing in a renewable electricity future will save 10 times the fuel costs of a "business as usual" fossil-fuelled scenario, saving \$180 billion USD annually and cut  $CO_2$  emissions in half by 2030, according to a joint report by Greenpeace and the European Renewable Energy Council (EREC).

The joint report and press release can be downloaded on the EREC website ( www.erec.org )





### **R&D FUNDING**

#### **Intelligence Energy Europe**

The European Commission launched a new call for proposal for the programme ALTENER (promotion of RES). The deadline to submit a proposal is 28 september 2007.



The project description and other necessary information could be found on our website in member's corner.

| Closing date for submission of applications       | 28 September 2007       |
|---|-------------------------|
| Date of opening of applications                   | mid October 2007        |
| Estimated date of completion of the evaluation    | End of February 2008    |
| Estimated date for the notification of applicants | from March 2008 onwards |
| Estimated date for signature of contracts         | from June 2008 onwards  |

#### FP7 Capacities Work Programme: Part 2 - research for the benefit of SMEs

In the FP7, a special opportunity is open for SMEs. A first call just closed on 1<sup>st</sup> june, but here is a new one:

• Call identifier: FP7-SME-2007-2

• Date of publication: 22 December 2006

• Closure date: 04 September 2007 (first stage), at 17.00 h (Brussels local time)

• Indicative budget: €100 000 000

• Topics called: call is open to all research fields

# SEVENTH FRAMEWORK PROGRAMME

#### Thinking to finance your project: The European Investment Bank

The EIB is the European Union's long-term lending institution set up to support capital investment promoting EU policies. To support the EU's energy objectives, the EIB will set aside a budget in the order of EUR 4 bn per year for projects in one of five priority areas:

- . Renewable energy, Energy efficiency,
- . Research, development and innovation (supporting the European Technology Platforms),
- . Diversification and security of internal supply (for instance, trans-European energy networks),
- . External energy security and economic development (supporting a pan-European Energy Community with neighbouring countries, and enhancing security of energy in the EU).

The Bank's lending for renewable energies (RE) investment was totalling over EUR 1.6 billion in the years 1999-2003. The EIB's six-point Renewable Energy (RE) Action Plan, adopted in 2004, aims to:

- increase its lending for RE by up to 50% of its financing for electricity generation in the EU by 2010. On current trends, this new target will represent some EUR 700 million a year for RE generation by 2010;
- enhance support for RE investment in developing countries and emerging markets in support of the EU's Energy Initiative and EU plans for the "Patient Capital Initiative". This Initiative will be a public-private fund to increase access to risk capital to RE projects;



- promote the EU "Environmental Technologies Action Plan";
- allocate EUR 500 million between 2004-2007 to finance CO<sup>2</sup> reduction projects through the EIB's Climate Change Financing Facility related to the EU's Emissions Trading Scheme, which also covers projects outside the EU;
- provide EUR 10 million for a new EIB Climate Change Technical Assistance Facility for grants towards carbon trading transaction costs;
- continue to explore with other multilateral financing institutions the establishment of a new Carbon Credit Fund.

On 20<sup>th</sup> March 2007, the EIB and the World Bank launched the Carbon Fund for Europe. The CFE, a trust fund, is designed to help European countries meet their commitments to the Kyoto Protocol and the European Union's Emissions Trading Scheme (EU ETS).

The fund will purchase greenhouse gas emission reductions through the Kyoto Protocol's Clean Development Mechanism (CDM) and Joint Implementation (JI) from climate-friendly investment projects from either bank's portfolio as well as self-standing projects.

Four governments and one company make up the Euro 50 million carbon fund. They include: Ireland, Luxembourg, Portugal, Flemish Region and Statkraft Carbon Invest AS (Norway).

The EIB is planning for the establishment of a Carbon Fund, that will produce Carbon Emission Rights ("carbon credits") after the expiry of the current Kyoto Protocol in 2012.

### **NEWS FROM EGEC**

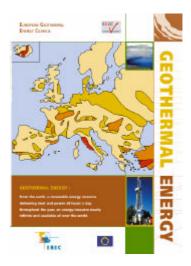
#### **New EGEC Members:**

We are pleased to announce that since our last newsletter in March 2007, three new partners joined us in EGEC: Progettazione & Consulenza (Italy), IDISOL ENERGIA S.L (Spain) and our first member in Czech Republic: MND Servisní, a.s.



#### **New EGEC brochure**

The European Geothermal Energy Council published a new brochure about the presentation of the Council and its work in the field of Geothermal energy. An electronic version (pdf) of this brochure can be found on the website of EGEC ( <a href="www.egec.org">www.egec.org</a>) in the section Publications; for printed copies please contact our office in Brussels at com@egec.org.



#### EGEC board meeting - and date for AGM 2007

An EGEC board meeting was held on May 31, 2007, in Unterhaching, Germany. The members of the board of EGEC took the opportunity of the European Geothermal Congress 2007 in Unterhaching near Munich to hold the board meeting in the town hall of Unterhaching. We like to thank the mayor for the hospitality. A major decision concerned the Annual General Meeting 2007 of EGEC. The date meanwhile is finally fixed for Friday, November 16, in the Renewable Energy House in Brussels. The AGM will be combined with a workshop on financing geothermal energy. **Please reserve 16.11.2007 in your agenda – more info will follow!** 



#### **Project K4RES-H**

#### 8 Mtoe in 2020 of Geothermal Heating and Cooling:

To conclude this project, EGEC participated in 4 events to disseminate its Geothermal Heating & Cooling Action Plan for Europe : In Bratislava on February

19; in Rome on May 25; in Riga on May 31; and in Perpignan on 1<sup>st</sup> of June. While at the event in Bratislava EGEC president Burkhard Sanner could speak, presence at the events in Rome and Perpignan had to be secured by EGEC member associations (UGI and ADEME, respectively). In Riga the colleagues of EREC presented the action plan also for geothermal energy, as the date was exactly parallel to the EGEC Business Seminar 2007 in Unterhaching. The project and the action plan also where a topic at said EGEC Business Seminar on 31.05.2007, with EGEC past president Christian Boissavy delivering the speech.

All reports can be downloaded from the project website, see EGEC website > projects. *K4RES-H is a project funded by EC through IEEA in the ALTENER programme* 

#### **Project GROUNDREACH**

The GroundReach project provides information about :

- the current status of the market for space conditioning using ground as heat source and sink in the residential sector in Europe,
- the GroundReach model to determine the change of environmental impact due to replacements of heating systems on the European market,
- and an Inventory of European Legislation on Ground Coupled Heat Pumps (GCHPs)

More information: www.groundreach.eu > deliverables

EGEC was present at three Groundreach workshops during the second quarter of 2007 and contributed to the information on and promotion of ground source heat pumps:

- 27.4.2007 Workshop with officers of the European Commission in Brussels
- 21.5.2007 Promotional Workshop in Setubal, Portugal
- 29.6.2007 Promotional Workshop in Gleisdorf, Austria

The documents from all of these workshops can be found at: <a href="www.groundreach.eu">www.groundreach.eu</a> > events GROUNDREACH is a project funded by EC through IEEA in the ALTENER programme

#### **Project RESTMAC**

EGEC will soon publish brochures for its Technology Marketing Campaign within project RESTMAC, promoting Geothermal Energy; the topics covered will comprise:



- Geothermal Heat Pumps,
- Geothermal Power and Combined Heat & Power,
- Geothermal Desalination,
- Geothermal Energy in Agriculture,
- Geothermal District Heating, and
- Geothermal Snow-Melting and De-Icing.

A workshop on "Innovative Geothermal Applications: snow-melting and de-icing" will be organised in Malmö – Sweden, October 2<sup>nd</sup>, 2007 (more information soon on www.egec.org)

Within this project, EGEC could also arrange the presence for geothermal energy promotion at several events throughout Europe, amongst them:

- 19.6.2007: Presentation at Euro Heat and Power Conference, Copenhagen
- 28.6.2007: Presentation at Renewable Energy Europe Conference, Madrid

RESTMAC is a project funded by EC through DG-TREN in framework programme 6 (FP6)





#### EGEC has conducted its first geothermal event at an international trade fair

In the framework of a new trade fair for renewable energy in Budapest, Hungary, a geothermal conference was organized with the target to provide an overview of geothermal technology and application in Hungary and neighbour countries. This conference was arranged by EGEC in co-operation with REECO GmbH, a German-based fair organiser (and EGEC member). It was the first common project of REECO and EGEC; however, EGEC's German member association GtV-BV has a decade of successful joint activities with REECO on a German regional scale.

The conference was held on April 20, 2007, in the conference centre of the Hungexpo Budapest Trade Fair Centre (Vásárközpont). The program of the conference was oriented on issues concerning the geothermal energy use in Central and Eastern Europe, and the goal was to bring together people form

East, South and West to discuss the possibilities of geothermal energy for electric power, heating and cooling.

The documents from the different presentations are available as pdf-files, for download from the member's corner of the EGEC website <a href="https://www.egec.org">www.egec.org</a>, or through a direct link which is available to the conference participants (if you are a conference participants and do not have received the link yet, please contact EGEC at info@egec.org).









Impressions from the Conference for Geothermal Energy in Eastern Europe, 20.4.2007: View into the lecture hall (upper right), Hungarian speakers Gábor Szita (above left) and György Patzay (above centre), and EGEC president Burkhard Sanner with Romanian colleagues during the coffee break

#### EGEC Business Seminar 2007 at EGC 2007 in Unterhaching, Germany

The small city of Unterhaching, at the Southern outskirts of Munich, Germany, was the venue of the European Geothermal Congress 2007 from May 30 – June 1, 2007. This event, under the auspices of the European Branch of the International Geothermal Association IGA, was organised jointly by the German geothermal association GtV-BV, the Swiss geothermal association Geothermie.CH, and EGEC. It was accompanied by the international exhibition GEOEnergia Europe 2007, where EGEC was present with a booth and could distribute brochures and the geothermal heating and cooling action plan for Europe.

Within the congress program, the EGEC Business Seminar 2007 was integrated and offered a platform for the discussion of economic and policy issues, as well as for presentation of R&D-projects funded by the European Union. The Business seminar started, after the EGC 2007 opening session, with a panel discussion among geothermal actors on the European scene and the auditorium. Panelists were Elisa Boelman from the European Commission DG-TREN, Beata Kepinska from Poland for the IGA European Branch and to represent the new member states, Alexander Richter from Glitnir Bank, Iceland, for



investors in the geothermal field, Patrick Ledru from BRGM, France, for the ENGINE consortium and to represent the R&D-community, and Gareth Ll. Jones from Ireland for the European Federation of Geologists (EFG).







EGEC Business Seminar at EGC 2007: Speakers Christian Boissavy (left) and Miklos Antics (centre) and view into the auditorium in the Unterhaching Sports Centre (right)





Panel discussion during the EGEC Business Seminar 2007; from left: Gareth Ll. Jones (EFG), Patrick Ledru (BRGM/Engine), Alexander Richter (Glitnir Bank), Beata Kepinska (IGA EBF), Elisa Boelman (EC DG-TREN); in the right photo Elisa Boelman and EGEC president Burkhard Sanner, moderator of the panel





Left: During the second EGEC session, on EU-funded R&D projects; session chairman Ernst Huenges (GFZ Potsdam) introduced Patrick Ledru (BRGM) for a speech on the ENGINE project. Right: The EGEC booth at the accompanying exhibition



#### Solution for Climate change create jobs in Europe and France

One of our members from France ADEME made a research in the field of climate change connected to the market of jobs. The result of this research are amazing: ADEME predicts if the reduction of emission in Europe will be 30 % till 2010 it will create something about + 12 % - 50 000 jobs in the area of electricity production, +14% 2.5 millions employee in the area and +30% 500 000 new jobs in the field of transport.

Hypothesis of ADEME of creation of installation in the field of geothermal energy in France till 2010 show that new 400 000 installations could create something around 10 000 jobs opportunities. More information about this research could be found on the website: www.specifique.com

#### The Sustainable Energy Europe Campaign

The Sustainable Energy Europe Campaign is a communication initiative run by the European Commission.

It aims to raise awareness of decision-makers at local, regional, national and European level, spread best-practice and ensure a strong level of understanding among the general public. Another objective is to stimulate the necessary trends towards an increase in private investment in sustainable energy technologies.



The European Commission wants to support you as a European actor committed to sustainable energy by providing your project with a highly-visible and prestigious mark of European excellence.

Are you involved in any of these activities?

Promotion of renewable energy installations and projects

Market transformation activities

Communication and educational actions

Sustainable energy communities

Actions in the buildings sector

Actions in the transport sector

Cooperation with developing countries

#### Sustainable Energy Europe Awards Competition 2008: Submit a project and make one of them yours

Does your organization receive sufficient recognition and praise for its endeavours in the field of sustainable energy or energy efficiency? Imagine the opportunity of being showcased across Europe as a pioneer in the field of sustainable energy innovation.

The Sustainable Energy Europe 2005-2008 Campaign of the European Commission DG for Energy and Transport is a major initiative, promoting, showcasing and rewarding outstanding projects and programmes in the field.

Based on the success of the first edition, the SEE Awards Competition 2008 is now officially launched. We invite you to become part of this exciting Campaign. Join as a Partner before 19 October 2007 and you will be automatically entered into the prestigious annual awards competition, to be held in Brussels on 29 January 2008.

Join the Campaign!

For more details on joining the Campaign and submitting your project in this year's competition, visit: www.sustenergy.org

Contact person: Àngela Corbalán / ac@pracsis.be / Tel. +32 (0) 2 340 30 61



### **NEWS FROM EGEC MEMBERS**

#### The Swiss Geothermal Society has a new homepage:

The website under <u>www.geothermie.ch</u> provides a lot of interesting information. The homepage is currently available in German and French, an Italian version is in preparation.

#### New DIN standards committee for Borehole Heat Exchangers in Germany

In February 2007 a new DIN standards committee "NABau NA 005-05-21 AA" with the working titel "Geothermiesonden" was constituted in Germany and Prof. Dr. Ingo Sass (Darmstadt University of Technology) has been elected as chairman.

Currently, there is a strong annual increase of borehole heat exchangers (BHE). Construction and installation in Germany is governed by guideline VDI 4640, however, no specific standard exists yet. Therefore, different constructions with very different qualities are used, hindering the determination of defects. The creation of a new DIN standard was decided which aims to lead the execution of construction work to the state of the art. Several groups were established to speed up the work: General, dimensioning and location demands, Drilling technology, BHE: material and production, Grouting and grouting materials, Site supervision and documentation, Acceptance, examinations, labour and field tests, Qualifications (planning and realisation), Glossary, links and literature

#### Romanian Geoexchange Society received the Energy Globe price



Never before has the Hemicycle of the European Parliament in Brussels been the location for a television gala. For the first time this hall, the democratic centre of Europe, was venue for the ENERGY GLOBE Awards' presentation ceremony underlining the enormous international significance of this environmental prize.

Subsequently this event also emphasizes the sustained efforts of the European Parliament to achieve its ambitious goals in regard to energy efficiency and climate change.

One of the EGEC members is national winner of the Energy Globe price for Romania: The Romanian Geoexchange Society, represented by Dorina Cucueteanu (above left when receiving the price document), got this price for the project "Romania – a clean country for a clean Europe".

#### **Bleiswijk Geothermal Project**

The first 'deep' geothermal project in the Netherlands has migrated into the second phase. The horticultural firm A+G van den Bosch, a high standing tomato grower in Bleiswijk, completed the first phase of its geothermal project in April. The drilling activities, started in the  $4^{th}$  quarter of 2006, had reached the desired sandstone formation (Berkel Sandston) at a depth of 1750 meter. Total length of the borehole is approximately 2350 meter as the optimal spot was located somewhat South of the Van den Bosch Greenhouses.



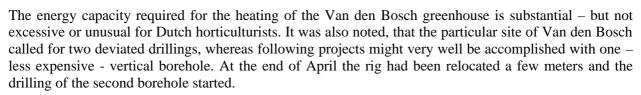
In April 2007 the geothermal community in The Netherlands watched and waited impatiently for the results of the well test. In the second half of April the long time awaited response came forward: both volume and temperature of the geothermal water were according to expectations.

Some project history: Drilling had been started with a fairly light rig, later to be pursued by a heavier installation for the deeper sections. Sandstone was struck at the expected depth of 1750 meter. At this location two consecutive and potentially productive formations/layers were expected – the Berkel and Rijswijk Sandstones. In April 2007 the well tests were performed and the provisional conclusion was that the well could produce water in the predicted range of 100 to 150 m<sup>3</sup>.

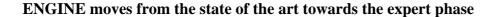
On April 26 these results and the experiences during the drilling activities were communicated to a gathering of 30 to 40 participants of the Dutch Platform for Geothermal Energy, followed by short presentations of some other ongoing initiatives for developing deep geothermal energy.

In the same week the entrepreneur, Rik van den Bosch received the prestigious Creative Energy Award from the Minister of Economic Affairs, Mrs Maria van der Hoeven. The project is expected to draw a

considerable amount of interest from the horticultural sector in The Netherlands.



More information: Victor van Heekeren, Dutch Geothermal Energy Platform, www.geothermie.nl/



ENGINE (Enhanced Geothermal Innovative Network for Europe) European coordination action started at the end of 2005. The <u>Mid-Term Conference</u> held in Potsdam, Germany last January (see also EGEC News No. 4) was a successful meeting where more than 130 experts from 28 countries debated for the promotion of Enhanced Geothermal Systems.



The first half of the project was dedicated to stating the art during fruitful specialized workshops. The second phase will lead experts to define the best practices and priorities for research investment. In the meantime, a bottom-up and federative strategy will continue through specialised workshops.

After <u>Exploring high-temperature reservoir</u> (Volterra, Italy, last April), the ENGINE participants will discuss about <u>High-temperature drilling</u> (Reykjavik, Iceland, July – see below), <u>Policy makers and public implications</u> (Athens, Greece, September – see events section) and <u>Risk analysis</u> (Utrecht, The Netherlands, November). The <u>ENGINE Final Conference</u> is scheduled for February 2008 in Vilnius, Lithuania.

More information is available on the ENGINE Web site: http://engine.brgm.fr

# $\begin{tabular}{ll} \textbf{Drilling cost effectiveness and feasibility of high-temperature drilling - Reykjavik, Iceland, Workshop 4 \end{tabular}$

The Workshop 4 "Drilling cost effectiveness and feasibility of high-temperature drilling" of the ENGINE project was hosted by ISOR and held in Reykjavik, from 2 to 5 July 2007, with supplementary excursion on 4 July and optional excursion on 5 July.

All information can be found on: <a href="http://conferences-engine.brgm.fr/conferenceDisplay.py?confId=5">http://conferences-engine.brgm.fr/conferenceDisplay.py?confId=5</a>



# Creating an experimental site in Orléans, France, for geothermal heat pumps and their underground heat exchangers

BRGM and the Council for the Centre Region, France, as part of the French Contract for State/Centre Region Projects, 2007-2013, have created a joint venture for setting up an experimental site for the testing of geothermal heat pumps and their underground heat exchangers.



The aim is to arrive at an overall evaluation of the performance of heating systems that work with geothermal heat pumps, based on the three constituent elements that are the subsurface, the geothermal heat pump, and the building to be heated. The activities will fall into three categories: research & development into development of new products, qualification of the performance of underground heat exchangers, and the evaluation of their impact on the subsurface; evaluation and/or certification of systems; and the setting up of a demonstration network for the validation of newly developed concepts and technologies. This site will also provide opportunities for synergetic actions of staff training and publicizing professional activities that will be developed as part of the overall development project of the Centre Region.

#### Augsburg shows the way for renewable energy - Renexpo 2007

The renewable energy sector is advancing again. Europe wide we see the launch of new projects and the support for the renewable energy sector being strengthened. In Germany funds of 230 Million Euro were made available on 1st of May. The industry is developing further and thus becoming the job engine of the whole region. Meet the players from the year long established sector meeting place.



From the 27th to the 30th of September 2007 the <u>RENEXPO® 2007</u> international trade fair and conference for renewable energy is taking place in Augsburg, Germany. Year on year visitors from the whole world convene at this event in the Bavarian renewable energy centre. 2006 saw over 300 exhibitors, 1,400 conference participants and 12,000 visitors (from which 62% were trade visitors) coming together in Augsburg – a very good indication for 2007! The latest information for exhibitors, conference participants and visitors is available on the new website <a href="www.renexpo.com">www.renexpo.com</a>.

### <u>EVENTS</u>

# Increasing policy makers' awareness and the public acceptance – ENGINE Workshop 6 Athens, Greece, 13-14 September 2007

It is widely known that the geothermal energy is a versatile renewable energy source that is among the cleanest of the commercially viable technologies available today. Towards this direction, there has been a lot of literature attestation. However there has not been the predictable development in this field. An important reason is that many geothermal projects face strong opposition from politicians, neighbouring communities or environmental



pressure groups. This is why there is a global tendency for geothermal companies to develop their policy and their social responsibility. The aim of the workshop "Increasing policy makers' awareness and public acceptance" is to make policy makers' aware of the need of a strategy and examine the policy that should be followed in order to eliminate any social opposition.

All information on: http://conferences-engine.brgm.fr/conferenceDisplay.py?confId=7



### Innovative Geothermal Applications: snow-melting and de-icing, Malmö, Sweden, 2 October 2007

A workshop within project RESTMAC, organised by EGEC; more information soon on www.egec.org





#### The ISLENET conference will be held in Brussels on 9-10 October 2007

For more information about this event please consult the webpage: www.islenet.net/

### XII International Congress on Energy and Mineral Resources in Oviedo, Spain, 7-11 October 2007

The National Association of Mining Engineers of Spain, the Supreme Council of Colleges and the Official College of Mining Engineers of the Northwest of Spain are pleased to announce the **XII** 





INTERNATIONAL CONGRESS ON ENERGY AND MINERAL RESOURCES, which, under the slogan "Raw materials, Water and Sustainable Energy... the Challenge for the future", will be held in the Congress Hall-Prince Felipe Auditorium, from the 7th to the 11th of October 2007. It is the aim of this Congress to open a forum for the debate on the most important aspects of topics set out in the slogan, and which are specified in the areas of the technical programme. As a complement to the working sessions there will be an exhibition of stands and others, at which companies and organisms could show their services and products. Please consult the website: www.congresoenerminas.es

## International Conference "Renewable energy in EU in prospect of 2020. Chances and problems of the new member states" in Warsaw, Poland, 10-11 October, 2007

Organised by the Polish Economic Chamber of Renewable Energy in Novotel Hotel, Warsaw. More information about the conference, program and submitting of papers which should be presented on the conference please contact justyna.jarych@pigeo.pl



# European Meeting Point: Energy for Development 2007. Beja, Alentejo, Portugal 10-12 October 2007

Download the event brochure and check for details at: http://www.energyanddevelopment-2007.net

The activity is divided into 6 domains:

- Domain 1 Bio-energy cluster > bio-resources management; multi-fuel production routes; bio-fuels economics.
- Domain 2 Energy services > contracting strategies; regulative framework; technology integration.
- Domain 3 Sustainable energy communities > project financing; architectural proposals; urban sustainable management.
- Domain 4 New energies economy > monitoring technologies; market strategies; accounting, labelling and certification.
- Domain 5 Energy citizenship > sustainable communities; enabling and communication strategies; funding mechanisms.
- Domain 6 Energy and regional development > regional innovation and clusters; multi-regional energy initiatives; new and renewable energy projects.





# "The Athens Summit - Global Climate and Energy Security", Athens, Greece, 14-16 October 2007

For this event at the Hilton Hotel, Athens, see: www.athens-summit.com





#### Executive Study Trip: Deep Geothermal Energy in Iceland, 15-18 October 2007

Detailed information on the trip: www.ened.com



#### "First European Geothermal Review" in Mainz, Germany, 29-31 October 2007

For more information about this event please visit: <a href="www.bestec-for-nature.com/fegr2007/">www.bestec-for-nature.com/fegr2007/</a>

#### Der Geothermiekongress 2007 of GtV-BV e.V. in Bochum, Germany, 30-31 October 2007

Please see details on this event (in German) at: www.dergeothermiekongress.de/



#### BRUSSELS INNOVA ENERGY, Brussels 22 -27 November 2007

If you are interested please do not hesitate to visit: <a href="www.innova-energy.com">www.innova-energy.com</a> or contact directly info@innova-energy.com

#### World Sustainable Energy Days 2008, Wels, Austria, 5-7 March 2008

Seven conferences and seminars on green energy and energy efficiency, Call for papers is open now, deadline: 10 October 2007 For more information please visit <a href="www.wsed.at">www.wsed.at</a>

Information on Renewable Heating & Cooling Congress 2007 by Jonathan Ballantine

**RES**<sup>HC</sup> 2007

Renewable Heating & Cooling Congress 2007

20<sup>th</sup> & 21<sup>st</sup> November 2007 - Brussels

Overcoming Policy Uncertainty; Investment in Technology & Infrastructure; And Optimising Built Environment Adoption to Accelerate Sustainable Development for Bio, Geo and Solar thermal Markets

Supported by:

**EREC** and member associations

continued on next page



Welcome to the **Inaugural Renewable Heating & Cooling Congress** which will bring together leading experts, decision and policy makers from around the world to discuss the market acceleration of renewable heating and cooling technologies.

#### Hear insights from over 35 Leading Industry Experts

For the first time the thoughts of policy makers and leading experts in geothermal, solar, & biomass will be challenged / complemented by leading professional groups such as Property Investment companies, Building Owners, Constructions companies and acclaimed Architects.

#### Share ideas with New People

**RES**<sup>HC</sup> **2007** is the first congress that brings together policy makers, technology experts, and built environment professional groups under the one roof.

The Congress is the most effective opportunity to meet, network and be fully updated on all the key trends ranging *from policy decisions to built environment adoption* – and will provide a solid base for informed decisions and developing future strategies for the sustainable market development of **RES**<sup>HC</sup>.

Don't forget to bring extra business cards as you will definitely meet some new faces...

#### 35 Speakers Confirmed:

Roberto Vigotti, *Chair of the Renewable Energy Working Party*, **International Energy Agency IEA**Britta Thomsen, **Member European Parliament** 

Burkhard Sanner, President, European Geothermal Energy Council EGEC

Gerhard Rabensteiner, President, European Solar Thermal Industry Federation ESTIF

Heinz Kopetz, President, European Biomass Association AEBIOM

Pierre Ungemach, Geoproduction Consultants

Guus Willemsen, IF Technology

Charles Bradshaw-Smith, Head of Innovation, E.ON

Juan Manuel Mieres, R&D Director, Acciona

#### Plus:

DG TREN, German Federal Environment Ministry (BMU), French Environment & Energy Management Agency (ADEME), Upper Austrian Renewable Energy Agency, Hermes Real Estate, ART & BUILD, CECODHAS, European Construction Industry Federation, S.O.L.I.D, Statoil, ...

#### Who will you meet?

- Geothermal companies or Heat Pump Manufacturers
- Solar Thermal Manufacturers & Suppliers
- Biomass Manufacturers & Suppliers
- Energy Retailers (and distributors)
- Research Agencies, Energy Agencies, Industry Associations
- Finance (Investment banks & Property Investment Management)
- Property Management & Occupiers
- Construction Companies
- Architects
- Federal Ministry Departments
- EU Parliament & Commission members
- Regional Government Authorities
- Building Service Professionals
- Energy Management Professionals
- Facility Management Professionals

To receive a copy of the agenda – please email Jonathan Ballantine – jonathan.ballantine@greenpowerconferences.com or visit <a href="www.greenpowerconferences.com">www.greenpowerconferences.com</a>

Special pricing for active EGEC members – contact Jonathan on +34 637 046 669

### Renewable Heating & Cooling\*

