

A Word from the EGEC President

As regards the policy sector, the last month was rather quiet for the geothermal scene, while activity in real-life geothermal projects is on-going and, to my feeling, even with increasing pace.

We hear of new projects all over the world for geothermal power production. The search for reliable, flexible power sources outside the fossil and nuclear realm is in full swing, and geothermal power is among the most attractive alternatives. In particular the discussion is on-going in Japan – with Japanese companies contributing the lion’s share to geothermal power equipment, but the country itself being only 8th in the world both in installed geothermal power and in annual production (WGC 2010 numbers). For the European industry, the chances are good for export of geothermal technology as well as for geothermal power projects in Europe itself.



Burkhard Sanner

As for the shallow geothermal sector, activity is strong in some parts of Europe (with first information available on a project for >1000 BHE in Romania), and fledgling in other parts. The UK industry suffers from the reality of the Renewable Heating Incentive (RHI) as actually implemented, compared to the expectations raised with the first communications on RHI. In Germany, the GSHP industry has to cope with extremely strict regulations in some states, and with a general deterioration in plant economy, combined with rising prices for electricity and falling prices for natural gas.

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Another incident as contributed to the situation, with damage to houses after drilling for a borehole heat exchanger happened end of July in Germany (Leonberg near Stuttgart), and highlighted that under certain geological conditions an immanent risk has to be coped with (in the cases in Southwest Germany within evaporitic rocks of Mesozoic age). However, in this case, the reaction of the state authorities of Baden-Wuerttemberg, by limiting drilling throughout all of the state for shallow geothermal, cannot be seen as appropriate. There is either a

local geological risk associated with the drilling – then all drilling should be limited, not just for geothermal, and only in areas with the relevant geological strata, or incorrect work of the drillers can be proven to be the reason, and then better education and closer supervision is the solution.

For both of these alternatives, a better knowledge of the local situation both by drillers and authorities is the key and better education of drillers to do their work properly. The project Geotrained had addressed these issues, and a meeting for follow-up of the activities has been scheduled for mid-October; EGEC will provide further info in due course.

For now, we are looking at some autumn months with lot of activity in policy, conferences, and not least in practical project work. The last page off this newsletter gives you an idea what conferences are coming up on the horizon.

I hope to see you at one of these events, and wish you an interesting read.

Burkhard Sanner

GeoPower Europe 2011

Milan, Italy. 6th & 7th December.

Registration now open.

Register online and guarantee your place now!



LAST REMINDER

Call for Presentations for GeoPower 2011

Open until 9th September!

Guidelines @EGEC.org

Policy Update

Find out about the policy issues EGEC is involved in while promoting the Geothermal sector!

Recommendations for the Energy Roadmap 2050:

As the European Commission moves to present the Energy Roadmap 2050, EGEC has been involved in looking ahead to the release of this plan, and proposing recommendations for the optimal inclusion of geothermal energy.

Heat sector can be entirely decarbonised by 2050

The Energy Roadmap 2050 is an important initiative to achieve the full decarbonisation of the European heat sector by 2050. This goal can be reached by the combination of energy efficiency and renewable heat, as underlined by the Re-thinking 2050 scenario (EREC 2010) and supported by the European Renewable Heating and Cooling associations (AEBIOM, EGEC, EUBIA and ESTIF) of the biomass, geothermal and solar thermal sectors. The full reaction from this coalition of organisations is available [online](#).

Flexible Renewable Resources are Key for Optimal Electricity Mix 2050

In Summer 2011, the geothermal, hydropower and biomass industry outlined their [recommendations](#) for the elaboration of the Energy Roadmap 2050. The decarbonisation of the electricity sector will only be possible with a large additional contribution from the flexible renewable energy sources (RES) in order to replace base load production from coal, gas and nuclear. The geothermal, biomass and hydropower industries present their scenario which is not only economically attractive but also gives a significant contribution to security of supply, grid management and CO2 emission avoidance. In the end this scenario demonstrates how the interconnected renewable portfolios can meet all demands of a modern low-carbon energy system.

New name for the future EU FP8: Horizon 2020

Commission for Research, Innovation and Science Máire Geoghegan-Quinn commented that 'Horizon 2020 is not just a new name for the same Framework Programme. It is the name for the new, integrated funding system that will cover all research and innovation funding currently provided through the Framework Programme for Research and Technical Development, the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). These different types of funding will be brought together in a coherent and flexible manner.'

Market Development & News

Germany

German Parliament Adopts New FiT for Geothermal

Amendment of the Renewable Electricity Law in Germany (Feed-in Tariff). The new tariff for geothermal power is given in § 28:

- 0,25 Euro per kWh for all geothermal power (no further limitation)
- 0,05 Euro per kWh additional price for EGS (after German petrathermal definition)

The start of annual reduction of 5 % (for new plants going on the grid) has been postponed to 2018.

After the last reading and final decision on the law in the Parliament (Bundestag), the 2nd chamber (Bundesrat, delegates of the Laender) today passed the law without objection. The new values shall take effect from 1 January 2012 on.

Munich Re to Insure German Geothermal Plant

Munich Re, the world's biggest reinsurer, agreed to insure a 60-million euro geothermal power plant in Bavaria that will begin drilling operations in September. Grunwald Equity Geothermie GmbH is developing the project in Traunreut, Upper Bavaria, as Germany shifts its energy mix from nuclear to renewable sources following the nuclear disaster in Japan. Munich Re is insuring the drilling part of the project that could supply up to 5 megawatts of electrical and 12 megawatts of thermal in addition to district-heating power from two wells about 5,000 meters (16,400 feet) deep. It's the third geothermal project it has insured.

Greece

Tenders for small geothermal firms more flexible

A new energy law in Greece provides significant changes and greater flexibility regarding the use of medium-sized geothermal fields. Specifically, the new law provides quick launch of tenders for the use of potential geothermal fields. Ongoing tenders include Central Macedonic and North Aegea, with proposals for exploration for potential high-enthalpy geothermal fields in Kaval, Korinth and the Sperchios river. According to the government, there are 42 geothermal fields of low, medium and high enthalpy in Greece.

United Kingdom

UK Renewable Heat Premium Payment Scheme launched

The Department of Energy and Climate Change officially launched the UK's £15million Renewable Heat Premium Payment scheme on July 21st. The scheme, which will open for applications on August 1st until March 2012, will support up to 25,000 domestic installations. It is expected to provide a welcome boost for the ground source heat pump (GSHP) market. Householders across the UK could receive up to £1,250 of government funding to help towards the cost of installing renewable heating systems. This scheme will be followed by the Renewable Heat Incentive Scheme, due to start in October 2012. The £860 million RHI Scheme is expected to increase green capital investment by £4.5 billion up to 2020.

United States

Geothermal heat pump shipments to double in volume by 2017

According to a new report from Pike Research, geothermal heat pump sales will experience strong growth rates in the next several years, with annual unit shipments in the United States increasing from just fewer than 150,000 in 2011 to more than 326,000 units by 2017. The cleantech market intelligence firm forecasts that the total worldwide capacity for geothermal direct use applications will increase by 179% during the same period. Pike Research anticipates that heat pumps will represent a significant majority of the global market for such direct use applications, accounting for 84% of total capacity. Other key segments include bathing and swimming applications and space (district) heating.

Enel Green Power— North America (EGPNA) to proceed with hybrid geothermal-solar project

Final approval has been received for EGPNA to proceed with the installation of its Solar PV project at its Stillwater Geothermal Plant in Churchill County, Nevada. More than 81,000 polycrystalline photovoltaic (PV) panels will be installed adjacent to EGP's existing Stillwater geothermal plant, which was commissioned in 2009. The solar field will be constructed on a 240-acre parcel

News from EGEC Members

Schlumberger releases new ESP system for steam-assisted recovery operations

Schlumberger has announced the release of its third-generation REDA HotlineSA3 high-temperature electric submersible pump, or ESP, system for steam-assisted recovery operations and geothermal applications. "The REDA HotlineSA3 system can reliably produce from wells with bottom hole temperatures of up to 250 degC," said Gus Melbourne, president, Schlumberger Artificial Lift. "This enables the installation of the ESP at the earliest stages of the development of the steam-assisted gravity drainage (SAGD) chamber, when pressure and temperature are highest. The ability to monitor winding temperature directly, and in real time, gives operators control of the REDA HotlineSA3 system during unexpected production instabilities without increasing the risks of exceeding system capabilities."

Seismic sondes checking out UK Eden Project's Deep Geothermal Project, operated by EGS Energy LTD

Seismic sondes made by DJB Instruments are being put to work at The Eden Project's Deep Geothermal Development. The Development is building one of the UK's first geothermal power plants, producing heat and generating electricity. The highly sensitive array of seismic sondes will be deployed to monitor any natural or induced seismic activity during the opening up of the natural fractures in the rock, which is done by injecting water.

DJB Instruments' seismic sondes comprise special qualities which make them ideal for this kind of work. They can be deployed to a depth of 400m, they do not need a clamping mechanism and the small diameter gives makes them ideal for deploying small diameter boreholes. Importantly, the large accelerometers and low noise amplifiers give a very high output and make them able to detect very small signals. This gives very high levels of accuracy without any deterioration of signal quality over time.

Mannvit and ISOR, with other partners, to be involved with assessment and feasibility activities in Kenya

The Icelandic consulting firms Mannvit, ISOR, Vatnaskil and Verkís recently signed an agreement with Kenya Electricity (KenGen) for a capacity assessment and feasibility study of the Olkaria geothermal fields. The Olkaria geothermal field is located in Kenya's Rift Valley, which is northwest of Nairobi and south of Lake Naivasha. Utilization of the area began more than three decades ago and included consultation from Icelandic scientists and engineers. Currently there are three power plants producing a total of 200 MWe. Plans for two 140 MW power plants are underway and KenGen anticipates that the harnessing capacity of the area is approximately 1000 MWe.

News: EGEC

Geoelec Project



In London, on 26th September 2011, the first of a series of regional workshops organised in the context of the Geoelec project will take place. The purpose of these meetings will be to compile available data and gather expertise on the potential for geothermal in a variety of specific regions. The first workshop will focus on the UK, Ireland and Iceland, and the invite has been extended to experts and actors from this region. Below you will see the calendar of data compilation workshops.

Geoelec Regional Data Compilation Workshops		
Region	Date	Location
United Kingdom, Republic of Ireland, Iceland	26 th September	London
Spain and Portugal	10 th November 2011	Valencia
France, Italy, Slovenia and the Balkans	5 th December 2011	Milan
Greece, Cyprus, Malta, Bulgaria, Romania and Turkey	15 th December	Athens
The Netherlands, Belgium, Luxembourg, Denmark and Sweden	24 th January 2012	Utrecht
Germany, Poland, Slovakia, Czech Republic, Hungary, Austria	January 2012	TBD
Finland, Latvia, Lithuania, Estonia	March 2012	Vilnius



Geotrainet Workshop: SAVE THE DATE!

While the Geotrainet project has drawn to a close, the activities that it has initiated have continued. Training of drillers and designers remains an integral part of developing the geothermal market, and to this end EGEC and EFG are inviting interested parties to meet on October 14th 2011 in Brussels, to assess how to capitalise on the results of the project, and further develop activities. If you are interested in attending this workshop, contact us at com@egec.org.

Date: 14.10.2011

Venue: European Federation of Geologists, C/O Service géologique de Belgique, Rue Jenner 13, B-1000 Brussels .

Agenda: TBC



Intermediate Project Conference 6th & 7th October 2011 Marseille, France

The GROUND-MED project demonstrates the next generation of geothermal heat pump (GSHP) systems for heating and cooling in 8 demonstration sites of South Europe. For a full summary of project activities, visit website: groundmed.eu! The intermediate conference will address the progress of the project, as well as discussing current market and policy conditions for GSHP actors in Europe. The conference programme is **online** (*subject to confirmation of speakers*).

- Register at the project [website](#).

Events



CanGEO's Annual Conference 14th & 15th September, Toronto, Canada [Website](#)

September 2011

EGEC Annual General Meeting, 1st September, Brussels, Belgium

Geothermal Operations and Plant Optimisation Conference,
15-16 September, California, USA

[Website](#)

GeoPower Turkey 20th & 21st September, Istanbul, Turkey

[Website](#)

October 2011

Ground-Med Conference, 6th—7th October, Marseille, France

[Website](#)

Global Geothermal Energy Summit, 12th & 13th October, Reykjavik, Iceland

[Website](#)

First Dutch Geothermal Congress, 13th & 14th October, Utrecht, The Netherlands

[Website](#)

November 2011

EAGE event: SES11 Conference, 8th -11th November, Valencia, Spain

[Website](#)

Geothermal Congress 'DGK2011', 15th -17th November, Bochum, Germany

[Website](#)

Geothermal Energy at the RENEXPO® Austria 2011, 24th—26th November, Salzburg, Austria

[Website](#)

December 2011

GeoPower Europe, 5th –7th December, Milan, Italy

[Website](#)

Les Journées de la Géothermie 2011, 13th -15th December, Paris, France

[Website](#)

March 2012

GeoTherm Expo & Congress, 1st & 2nd March, Offenburg, Germany.

[Website](#)