EGEC NEWS

Issue No. 16

THE VOICE OF GEOTHERMAL ENERGY IN EUROPE

A Word from the EGEC President

Dear members of EGEC and readers,

As anticipated in my last comments, September started with a plethora of events and activities. And so I decided not to have a photo of my person here with this text, but to share an impression of one of the various working meetings within the past weeks.

EGEC manager Philippe Dumas at the 1st Geoelec workshop, London, 26.9.2011

On the 2nd of September, the Geothermal Panel of the European Technology Platform for Renewable Heating and Cooling and the Platform for Geothermal Electricity met in Brussels for the final discussion of the Strategic Research Agenda (SRA) for Geothermal Energy. With some editing to be done in October, the final version for the SRA will be released before the end of the year, and it will also be an input to the joined SRA of the renewable heating and cooling sector. The Geothermal Panel also had appointed a new Steering Committee in a selection process in August, and the Steering Committee on 2nd September re-elected Javier Urchueguía as chairman, and elected Ruggero Bertani and myself as vice chairmen.

In this ISSUE NO 16:

To highlight just one other event: the first Geoelec workshop on September 26th brought together experts from North-Western Europe for a discussion of the deep geothermal potential data for Iceland, Ireland and the UK. Convening within earshot of the chimes of Big Ben, we had a chance to hear of data collection and compilation campaigns of the past and of the current data stock available for deep geothermal energy. The discussions focussed on the availability of these data for the project and for the public, and on what needs to be done further in order to close regional data gaps etc.

The final goal EGEC has with the Geoelec project is to provide national and European associations, authorities and decision-makers with a fact-based understanding of what geothermal energy can contribute to the European power sector. As a flexible, renewable power source geothermal electricity has an important role to play within a RES-based power scenario. I was reminded in the need of more numbers to go with our expectations at the end of September, when I had a chance to speak with parliamentarians from the EP and various national parliaments during the EUFORES Inter-Parliamentary meeting in the building of Sveriges Riksdag in Stockholm.

Please read more on what happened and what is laying ahead here in this newsletter, and on the EGEC website.

I 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!

Policy Update

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

Proposed Energy Efficiency Directive discussed in the Parliament

Discussion over the new Directive on energy efficiency is gaining momentum. The legislative proposal aiming at repealing the Cogeneration Directive and Energy Services Directive was put forward by the Commission in June and presented to the ITRE Committee on 9 September 2011. While recent Commission estimates suggest that the EU is on course to achieve only half of the 20% energy savings objective, the Commission proposed a set of binding measures, mainly focusing on the energy supply side. The appointed rapporteur, Green MEP Claude Turmes, is to present his draft report in October 2011. EGEC wishes to see more synergy between energy efficiency and RES, notably in relation to retrofitting, as well as more clarity on priority grid access in order to prevent conventional energy from benefitting a guaranteed access to the grid.

New European Energy Efficiency Fund launched

On 1 July 2011, the European Commission launched the European Energy Efficiency Fund (EEE-F) as part of the European Energy Programme for Recovery (EEPR). The new facility aims at providing market-based financing for commercially viable public energy efficiency and renewable energy projects within multi-annual strategies. The initial fund volume amounts to €265 million. A brief guide to the EEE-F and its procedures is available on the EGEC members corner.

Commission sets out new approach to the external dimension of the EU energy policy

On 7 September 2011, the Commission adopted a Communication on security of energy supply and international cooperation. The appeal for the EU to speak with a common voice with regard to external energy relations was taken on board. The strategy defines four priorities to be translated into 43 concrete actions, among which the proposal of a regional EU-Southern Mediterranean Energy Partnership initially focused on electricity and renewable energy market development. A note to the Communication is available on the new "Policy Updates" section of the EGEC members corner.

Countdown to the Energy Roadmap 2050

Following the Roadmap for moving to a low-carbon economy in 2050 issued in March 2011, the European Commission will put forward its Energy Roadmap 2050. The latter will focus on how energy security and competitiveness can be improved throughout the transition to a low-carbon energy system and will present different pathways to reach this objective. Originally foreseen for late November 2011, the roadmap will come to light by mid-December. Regrettably, the High-RES scenario, which is the most optimistic regarding renewable energy development, does not present a pathway towards a 100% renewable energy system as proposed by EREC in its Re-thinking 2050 scenario, but only a 75% share out of the overall energy consumption in 2050.

Market Development & News

Europe

Bulgaria

Japanese investors will invest in a geothermal plant in Bulgaria, in Sapareva Banya. Kihachiro Nishiura, president of the **Aqua Farm Limited** together with the Mayor of Sapareva Banya have entered into an agreement to build the geothermal plant. The center will be built in less than three years and will supply local consumers with hot mineral water for balneology and spa treatments.

Germany

Romanian drilling company **Dafora**, controlled by investor Gheorghe Calburean, has won a EUR 15 million contract to drill for geothermal waters in Germany, for GeothermSolarpark Nordhastedt GmbH. The contract expands over two years, with the possibility to extend it and is Dafora's first contract in Germany.

Greece

Greece opened bidding for companies to explore four areas for geothermal energy as it seeks to become an exporter of renewable power. Research and investigation will require about 100 million euros ($141 million) of initial investment, according to a statement from the Ministry for Environment, Energy and Climate Change. The geothermal plants could cost at least 50 million euros per unit, it said. Greece announced bids it received in another geothermal power exploration tender in March. The four areas to be researched for geothermal potential are Kavala, the Spercheios basin, Sousaki and Ikaria Island.

Norway

Norwegian **Green Energy Group** (GEG) has secured private-equity backing for the mobile, modular plant system it claims can lower the cost of geothermal power production. Funding comes from London based WHEB-partners. Oslo-based GEG is developing modular, portable plants designed to provide faster access to geothermal resources at a lower cost than conventional equipment. The geothermal turbine modules, each of 5MW capacity, can be deployed at individual well-heads as soon as they are ready, says GEG. This removes the need to drill multiple wells and build up a critical mass of steam production before installing larger, conventional geothermal plant equipment. The three-year-old company says its technology, which was developed by its engineers in Iceland, can be fine-tuned to the output of individual wells, so boosting efficiency, and quickly moved to another location if a well fails. GEG is currently completing its first full-scale pilot plant in Kenya and claims to have a "significant pipeline" of future projects.

Spain

Government Awards Subsidies for Canary Islands Geothermal Exploration

The "GeotherCan" project in Spain to develop 3D models for characterizing geothermal resources has been awarded around $1.07 M in federal government subsidies. Led by Petratherm España, the project is located in the Canary Islands and is expected to yield a better understanding of the subsurface system on the islands of Tenerife and Gran Canaria. "This funding support from the Spanish government not only supports the GeotherCan project, but it will also provide substantial additional information to Petratherm – at a fraction of the normal research costs – which will assist our other projects in the region," said Terry Kallis, Petratherm's managing director.

Turkey

Turkey also hosts an example of positive diversification from oil to geothermal. **Turkish Petroleum International Company (TPIC)** was established in 1988 as a subsidiary of Turkish Petroleum Corporation (TPAO) to operate in all branches of oil industry. Besides the oil well drilling services, TPIC has conducted geothermal drilling activities and is very active in geothermal services In Turkey, with almost 72,000 meters well (1600-2954 meters) drilling having been completed successfully by the end of June 2011. Deepest well drilled in Menderes Graben, located in Aydın - Denizli region, is 2705 meters and the deepest one in Gediz Graben, located in Manisa - Salihli Region, is 2954 meters were drilled by TPIC. Drilling and mud services of Turkey's first 5 deepest geothermal wells were given by TPIC.

Market Development & News

Europe

Turkey

Wasabi Energy has announced the establishment of a subsidiary company in Turkey, Imparator Enerji, to pursue Kalina Cycle project development opportunities as an independent power producer (IPP), in Turkey. Imparator Enerji's business model involves the strategic application of the Kalina Cycle technology to create greater value from traditionally low temperature heat sources, particularly in the geothermal and industrial energy efficiency sectors. Turkey is forecasting increased activity in energy production. The increased activity in the sector is underpinned by Turkey's forecast requirement for an additional 30,000 megawatts of power generation capacity by 2020.

Atlas Copco's Gas and Process division has won an order to deliver equipment to a turnkey geothermal power plant in Turkey's Aydin province. The order includes two turbo expander generator trains which will be able to deliver a total 45 MW of clean energy when the plant goes into operation in the fourth quarter of 2012. The plant, using Organic Rankine Cycle technology, will be built in the geothermal field at Pamukoren, a high-potential growth region for geothermal energy. Compared to natural-gas driven power generation producing the same amount of energy, this project will reduce CO2 emissions by 238 000 tons a year at its peak production.

In Turkey, **Izmir Special Provincial Administration** Unit is seeking bids for 26 geothermal areas in tender to be held on October 5th, 2011. The areas are expected to be utilized for power generation, heating, greenhouses and tourism. See ThinkGeoEnergy for a list of areas under tender.

Turkey & Western Balkans

The European Bank for Reconstruction and Development (EBRD) is setting up a new fund – the first of its type – which will expand the capacity of Turkey and neighbouring countries in the Western Balkans and the Caucasus to tap into cleaner energy resources. The EBRD is making a EUR40 million equity contribution to establish the Clean Energy Transition Fund (CETF) which has a target size of EUR200 million. A specific feature of the Fund is that it will increase the availability of much-needed equity capital and thus expand the market to meet the growing investment needs in energy projects in the region.

World

USA

The US Energy Department (DOE) is providing $38m in funding over three years for projects to accelerate development of promising geothermal energy technologies and help diversify America's sources of clean, renewable energy. The 32 innovative projects in 14 states will develop and test new ways to locate geothermal resources and improve resource characterization, drilling, and reservoir engineering techniques.

The investment in clean energy development is part of the Department's comprehensive effort to reduce the cost of geothermal energy, making it more competitive with conventional sources of baseload electricity. Projects will perform feasibility studies before advancing to prototyping and validation, which will be conducted through vigorous laboratory-based research and field testing. They will support DOE's goals of lowering cost and financial risk associated with confirming and characterizing geothermal resources, and will help to overcome key technical challenges to the reservoir creation and sustainability of enhanced geothermal systems.

ThinkGeoEnergy Launches Job-Portal

ThinkGeoEnergy, the online geothermal news resource for the industry, has launched a Job-Portal, where employers can post their open job positions or contract work, while jobseekers are able to post their resumes. This is an invaluable tool for the geothermal industry and will act as a hub for actors in the field, to become the focus for matching employers and potential employees. For visit: http://jobs.thinkgeoenergy.com/.

News: EGEC

The first in a series of Data Compilation Workshops was held in London, on 26th September. This workshop invited experts in geology and geothermal project development, to come together and discuss the potential for deep geothermal in the region (UK, Ireland and Iceland). Presentations from the workshop are online.

Next Regional Data Compilation Workshop: Spain & Portugal

In Valencia, Spain on Thursday 10th November 2011. Participation by invitation only, so if you are interested in contributing, contact com@egec.org.

COMING SOON: *Launch of the Geoelec.eu website, with information on upcoming project activities, as well as giving a background to the project. Over the course of the project, we intend to build this website into a focal point for information on geothermal electricity production in Europe. To attract a diverse audience, from policymakers to investors, we will include a wide range of information and resources.*

Supported by INTELLIGENT ENERGY EUROPE

The **European Technology Platform on Renewable Heating and Cooling**, officially endorsed by the European Commission, aims at playing a decisive role in maximising synergies and strengthening efforts towards research, development and technological innovation which will consolidate Europe's leading position in the sector.

The Geothermal Panel brings together experts in both shallow and deep geothermal. Recently, on **2nd September** in Brussels, experts from shallow and deep geothermal gathered to discuss the **Strategic Research Agenda (SRA),** a document that will be published in late 2011, which outlines and explains the research priorities and supports required by the field of geothermal renewable heating and cooling. The SRA is available for public consultation until the end of September. Visit the EGEC website for more information.

Geotrainet + Workshop

The GEOTRAINET project, supported by the European Commission's IEE programme (Altener), aimed to develop a European-wide educational programme as an important step towards the certification of geothermal installations. The official activities of this project have come to an end, but the time is ripe to capitalise on the results and knowledge harnessed by this project. More information on the project can be found at Geotrainet.eu.

To this end, EGEC and the European Federation of Geologists will host a workshop on the 14th of October 2011 in Brussels, in order to bring together interested parties to discuss how to capitalise upon the efforts of the Geotrainet project in training drillers and designers of shallow geothermal systems. Participants are welcome from all fields of activity and research related to shallow geothermal. The programme and registration info is available here .

Newsletter 2 is now available!

Visit Thermomap-project.eu today!

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

5th to 7th December, Milan, Italy

Registration is Now Open Online!

October 2011

Green Power Congress Poland, 5th -6th October, Warsaw, Poland
Website

Ground-Med Conference, 6th & 7th October, Marseille, France
Website

European Future Energy Forum, 10th—12th October, Geneva, Switzerland
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