

A Word from the EGEC President

Dear members of EGEC and readers,

last December has brought both encouraging and annoying events. The highly encouraging event was the GeoPower Europe 2011 in Milano, where the on-going momentum of geothermal industry development could be experienced. You can find some impressions from Milano at the [GreenPower Conferences website](#).



The annoying event came swiftly on December 15th, when Commissioner Oettinger presented the European Commission's long-awaited, authoritative communication on the future energy scenario, the "Energy Roadmap 2050". It would be hard to conceal my disappointment with this document, which is rather technocratic, basing all visions on a few scenarios calculated with the PRIMES-model, under clearly limited assumptions. And indeed, in all assumptions the roadmap relies heavily either on old technology (mainly nuclear), or on yet unproven emission mitigation technology (CCS) instead of proven emission avoidance technology (RES).

A more detailed response (and free of the bias by personal opinion I express here) was prepared by EGEC; the link is given inside this newsletter, and I like to quote from that response to the roadmap: "In addition, EGEC regrets that this document underestimates the tangible development of geothermal electricity technologies and that it provides inadequate and misleading analysis of the heating sector, where geothermal energy will become a key player."

The importance of the heating sector, and the on-going negligence of politicians towards decarbonising this sector, becomes visible in my home country, Germany. A recent article in "Berliner Zeitung" summarised the facts under the title "Decision in the heating room: Use of green heat sources stagnating, jeopardising new energy deal". The share of RES in the heating sector in Germany decreased from 10.2 % in 2010 to 10.1 % in 2011 – despite all legal and regulatory measures and financial incentives! I still count on the European level to rescue the RES heating sector, not only in Germany, but Europe-wide, by enforcing the RES Directive.

For the new year 2012, interesting events are upcoming.

More workshops within the Geoelec project will convene regional experts in Utrecht NL in January and in Offenburg DE in February (read more on page 7).

The geothermal trade fair and conference GeoTherm 2012 in Offenburg on the 1st and 2nd of March will be a perfect opportunity to see the latest industry development and to meet the geothermal scene.

For now, let me wish a happy and prosperous year 2012 to all of you!

I wish you an interesting reading,

Burkhard Sanner

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GeoTHERM
expo & congress

EGEC is partnering with the GeoTHERM Expo & Congress 2012.

Members of EGEC get a special discount. [See here for more.](#)

Check out the [GeoTHERM website](#) for full details on this exciting and engaging event.

Policy Update

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

European Commission publishes its “Energy Roadmap 2050”

On 15 December 2011, after months of discussions, the European Commission presented the “[Energy Roadmap 2050](#)”, exploring five decarbonisation scenarios to achieve an 85% domestic energy related CO2 emissions reduction by 2050. EGEC, together with its umbrella organisation [EREC](#), welcomes the EU’s commitment to decarbonise the energy sector and the acknowledgment that renewables will be moving to the centre of the energy mix in Europe.

Bearing in mind the mere illustrative nature of the scenario analysis undertaken, EGEC expresses some concerns over certain unclear assumptions therein, which lead to contradicting outcomes. EGEC particularly regrets that the Energy Roadmap underestimates the tangible development of geothermal electricity technologies and that provides inadequate analysis of the heating sector, where geothermal energy will certainly become a key player. The policy framework for RES beyond 2020 should be assessed in the light of improved modelling. EGEC, therefore, urges further investigation and calls for a true and consistent EU heating and cooling policy. Read the [EGEC reaction](#) to the Roadmap. For more info visit the [Commission’s website](#).

Commission investigates on Materials Roadmap for Geothermal

The European Commission published, on 13 December 2011, a new Staff Working Document investigating [Materials Roadmap Enabling Low Carbon Energy Technologies](#). The Materials Roadmap puts forward key materials research activities to advance energy technologies in the next ten years. EGEC welcomes the Commission’s document which recognises geothermal as being a “promising renewable energy source able to provide naturally a continuous baseload power”. In order to further develop EGS and to make it economically viable, the Materials Roadmap points out that “innovative materials solutions and an improved understanding of the long-term interaction between the materials and their harsh environment is of key importance”.

EGEC supports the proposal to launch technology pilots to improve EGS technology and stimulation materials and to establish research wells at supercritical conditions and in over-pressured reservoirs. EGEC, therefore, wishes the Commission to take on board such a proposal in the next calls.

For further information visit the Policy Updates section of the [EGEC members corner](#).

Proposal for a new Directive on the award of Concessions unveiled

Last 20 December 2011, the European Commission came up with a [proposal for a Directive on the award of Concession Contracts](#). To date, such a matter is being guided, at EU level, only by the general principles of transparency and equal treatment of the Treaty. According to the Commission, however, there would be a loophole rising potential distortions of the Internal Market, for instance in the case of direct concessions, and that generates considerable inefficiencies. The new rules are intended to facilitate the conclusions of concessions and encouraging new investments but without forcing public authorities to outsource the provision of general economic interest.

The new Directive will have no retroactive effect. However, the Commission points out that an extension of their duration may qualify as a new concession and therefore will have to comply with the new rules, once the latter come into force. EGEC will provide its members with more information on the implication of this proposal on geothermal PPP projects.

Durban 2011: parties agree to launch a post-Kyoto Protocol by 2015

World’s governments have committed themselves to launch a process, the *Durban Platform for Enhanced Action*, to develop a post-Kyoto Protocol. At the 17th Conference of Parties (COP 17), it was agreed for the first time that the new Protocol or any other legal agreement will be applicable to all Parties, including developing countries. The new legal instrument should be adopted by 2015 and implemented from 2020. The Durban Package also includes a second commitment period for the Kyoto Protocol, which will be running as of the 1st of January 2013. This is to avoid a gap at the end of the first commitment period expiring in 2012.

The enthusiasm following the agreement was, however, cooled off by the Canadian government which, only a few days later, formally withdrew from the Kyoto Protocol.

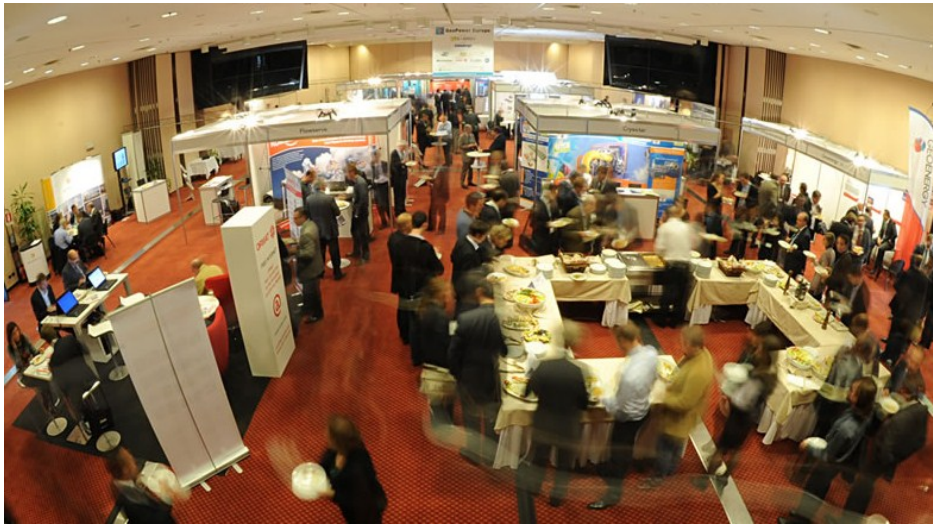


GeoPower Europe 2011: A Great Success!

Looking to 2012...

The GeoPower Europe conference 2011 was held on 6th and 7th December in Milan, Italy and this third edition proved to be the biggest edition yet! With 200 delegates from all over the geothermal and renewable energy sector, there was active and lively debate, discussion and networking throughout the event.

Planning for GeoPower 2012 is already underway, so stay tuned for more information on the 4th edition in this series!



Delegates at the GeoPower Europe 2011 conference in Milan. (Copyright Photo: Green-Power Conferences)

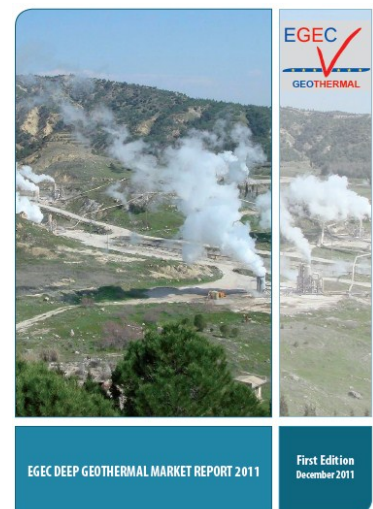
EGEC Deep Geothermal Market Report 2011

Geothermal on the Up!

At the GeoPower Europe 2011 conference in Milan, EGEc launched the much anticipated Deep Geothermal Market Report, which is an authoritative and concise account and analysis of the state of sector in Europe.

The launch presentations give an overview of the report, and are available online.

EGEC Members can download their copy free of charge from the Members Corner ! Other interested parties can receive this report by making a contribution of 250 euros. For more info and to order the report email com@egec.org



Market Developments & News

Europe

Belgium

Belgian Development Agency to explore geothermal energy in Rwanda

The Belgian Development Agency plans to spend 55 million euros over three years to explore the potential of geothermal energy in Rwanda. The Brussels-based agency hopes to attract investors to the East African country by conducting drilling to prove that about 300 megawatts of energy can be extracted from Rwanda's part of the East African Rift, a geothermal hot-spot that spans 11 African countries. The Rusumo Falls project may generate as much as 30 megawatts for Rwanda, with construction scheduled to begin in early 2012, he said. The African Development Bank is expected to fund 40 percent of the project, with bilateral organizations funding 15 percent. The governments are seeking financing for the remaining 55 percent.

Bulgaria

Rompetrol expands operations in Hungary and Bulgaria

Rompetrol Well Services, member of the Rompetrol Group, has extended its special well services in neighboring Hungary and Bulgaria, with contracts totaling USD 800,000. The company started the cementing and tubing of two geothermal wells, two months ago, in the vicinity of Mokolocs and Mako, Hungary, based on the experience gained through projects that were delivered in Romania and Kazakhstan. In Bulgaria, Rompetrol works at two oil wells with a depth exceeding 3000 meters, close to Pleven locality.

Germany

Flowserve Corp to provide new deep-well submersible pump and motor

Flowserve Corp is to provide a new deep-well submersible pump and motor to the Geothermische Kraftwerksgesellschaft Traunreut geothermal power plant in Germany. Developed in conjunction with the German government, the high-energy submersible motor took approximately four years to commercialise and is designed to help Germany meet its renewable energy goals. With a motor size of 850 kW and a flow rate of 130 l/s, this highly-engineered, vertical pump and oil-filled motor is designed to be installed at a depth of 600 m and used to pump water with temperatures up to 140°C.

Siemens AG to enter geothermal market

Siemens AG, Europe's largest engineering company, unveiled a 60-megawatt steam turbine designed for geothermal power plants today at a Geothermal Energy Association conference in California. With a rating of up to 60 megawatts, the new SST-400 GEO steam turbine for geothermal applications combines the proven casing and turbine-generator package (gearbox, generator and base frame) of the Siemens SST-400 steam turbine with the steam path technologies developed, tested and applied by the steam turbine service provider TurboCare. The SST-400 GEO steam turbine can be deployed in geothermal power plants with different thermal fluids.

Iceland

Mannvit and Verkís Contracted to Design Two New Geothermal Plants in Northeast Iceland

Earlier this month, Landsvirkjun and Þeistareykir ehf. signed a contract with the engineering companies Mannvit and Verkís for design and consulting services for two new geothermal power plants in Northeast Iceland. The total contract value is approximately \$25 million USD (2.9 billion Icelandic kronur).

Icelandic State to Reclaim HS Orka from Magma Energy

Under legislation in the Icelandic parliament, the state treasury will hold the authority to acquire land from the municipality Reykjanesbaer on Reykjanes peninsula in the southwest which come with geothermal energy resources. With the acquisition the state will come into ownership of all resources used by the energy company HS Orka for the Reykjanesvirkjun power plant, which the company rents from Reykjanesbaer. The acquisition is said to be part of the government's efforts to reclaim ownership of HS Orka from the Canadian company Magma Energy. The acquisition price is ISK 1,230 billion (USD 10 billion, EUR 8 billion) and approximately 70 percent thereof is in the form of the write-off of Reykjanesbaer's debts to the state treasury.

Norway

Grant to explore geothermal in Norway

The Research Council of Norway has granted NOK 24 million to the four-year project NEXT-Drill, in which scientists and industry will develop the technology and tools needed to produce geothermal heat from the earth. With its strong oil industry, Norway is in a unique position to capture geothermal heat, and drilling technology has evolved significantly in the course of the past ten years, as oil and gas deposits become more and more difficult to access. NEXT-Drill does not primarily concern deep drilling, but will form the basis for it in the future. The focus is rather on more efficient drilling and new methods of drilling in hard rock.

NEXT-Drill is a industrial competence project and it will offer a basis for close cooperation between the participating research institutes and universities. The industrial consortium includes energy companies Statoil and Statnett, Atlas Copco Scoroc, the leading Swedish manufacturer of equipment for drilling in hard rock, and a number of Norwegian entrepreneur and technology companies such as Resonator, Norhard, Pen-Rock and Rock Energy. SINTEF is coordinating the project.

United Kingdom

Southampton celebrates 25 years of District Heating

Southampton's District Energy Scheme is celebrating its 25th birthday. The geothermal system provides heating for 45 major city centre buildings, including WestQuay Shopping Centre and the Royal South Hants Hospital. The Combined Heat and Power system also provides hot and chilled water for heating, air conditioning and electricity.

ESB Novusmodus Leads £12m Investment Round in Geothermal International

The investment in Geothermal International was made through ESB Novusmodus, a clean-tech funder set up to invest EUR 200 million on behalf of the ESB (the leading Irish utility). The venture fund has put up £8.6 million (EUR 10.3 million) of a total £12 million (EUR 14.4 million) investment in Geothermal International. The other investors in the Coventry-based firm include SSE Ventures, the investment wing of Scottish & Southern Energy, which owns the Airtricity business in Ireland. Geothermal International plans to use the funds to finance the acquisition of an American company, Endurant Energy, and to expand in Britain and other international markets. Based in Coventry, Geothermal International is Europe's largest designer and installer of Ground Source Heat Pump systems.

Renewable Heat Incentive Launched in UK

In November 2011, the £860m Renewable Heat Incentive (RHI) was launched with the aim of making it more financially attractive for industry and businesses to install low carbon heating systems like heat pumps, biomass boilers or solar thermal panels. The scheme, which is the first of its type in the world, pays a tariff for each kWh of renewable heat produced over a 20-year period. The first recipients of the RHI are both using heat pumps: umbrella supplier Booth Brothers has installed a 24 kW water source heat pump to run an underfloor heating system for its offices in a former corn mill; meanwhile, a 4.3kW ground source heat pump is being used at Broadgate Farm Cottages in Beverley to provide heating and hot water for a set of holiday cottages.

Europe

European Commission launches initiative to help cutting-edge green technologies reach the market

The European Commission is launching a new instrument to help companies that are developing innovative environmental technologies. The Environmental Technology Verification (ETV) pilot programme will provide independent verification of the performance of new environmental technologies. This will help manufacturers prove the reliability of performance claims, and help technology purchasers identify innovations that suit their needs.

The ETV pilot programme, which is entirely voluntary, will initially cover three areas: water treatment and monitoring; materials, waste and resources; and energy technologies. The aim is to reduce the risks and increase confidence of the first purchasers or investors in a new technology by providing reliable, science-based information on its performance. This will take the form of a Statement of Verification for use in business-to-business relations. ETV services are intended in particular for Small and Medium-sized Enterprises, which may find it more difficult to prove the performance of new technologies than larger manufacturers. ETV should reduce the need to multiply demonstration sites or to repeat test campaigns for different markets. It could also facilitate exports to non-EU markets such as North America and Asia, where the ETV approach is progressively recognised.

[More information is available online.](#)



EGEC ASBL, Renewable Energy House, Rue d'arlon 63-67, Brussels 1040, Belgium

News from EGEC Members

Official Start of the Geothermal Project Aspern

On 9th November 2011, the official start was celebrated of the deep geothermal project in Aspern near Vienna, Austria. Drilling to a depth of ca. 5 km is planned, with an expected target temperature of 150 °C. Geothermal energy shall deliver about 40 MW of heat to the district heating network, in particular for the new development area "Seestadt Aspern". For the geothermal operation a daughter company of Wien Energie Fernwärme (80%) and Wirtschaftsagentur Wien (Vienna Business Agency, 20%) was founded in 2007, the Geothermiezentrum Aspern GmbH. EGEC welcomed Geothermiezentrum Aspern as a member in 2011.

On the occasion of the inauguration ceremony, the Managing Director of Wien Energie Fernwärme, Gerhard Fida, said:

"With this pilot plant we embark towards a future in which the very best use of sustainable energy sources will play a crucial role. An investment of about 45 Million Euro will allow us to increase the renewable energy share in the district heating network substantially through geothermal energy."

Michael Kotschan, Managing Director of Geothermiezentrum Aspern, added: *"The favourable geology of the Vienna Basin allows for applying a very smooth form of energy use, hydro-geothermal heat. The whole project has been checked scientifically in a diligent manner. The appropriate installation and operation will be monitored continuously by experts from Vienna University of Technology, including measurements on site."*

The drilling contract for the first well was awarded to Daldrup & Söhne AG, a well-known German drilling company with impressive geothermal track record. More info on the Aspern geothermal project at: www.wienenergie.at/geothermie



Photo: Starting ceremony at the drilling site, 9 November 2011, from left: Michael Kotschan (Geothermiezentrum Aspern GmbH), Gerhard Hirczi (Vienna Business Agency), Gerhard Fida (Wien Energie Fernwärme), Renate Brauner (Vice Mayor Vienna), Susanna Zapreva (Wien Energie), Helmut Miksits (Wiener Stadtwerke Holding AG); source: Wien Energie/Foto by Hofer



Het Interregionale Samenwerkingsverband voor de IVC wordt gefinancierd door het regionale ontwikkelingsplan van de Interreg-IVC in het Europees gebied van innovatie, ondernemerschap, milieu en inclusie. Er is 302 miljoen euro beschikbaar voor samenwerking, met een beperking dat een deel van een bedrag is toegestaan voor regionale samenwerking.

VITO leads the GEO.POWER Project

EGEC Member from Belgium, [VITO](http://www.vito.be), is a partner in a European funded INTERREG project called GEO.POWER. This project aims to stimulate the application of geothermal heat in Europe by exchanging expertise between Member States and therefore facilitating a long-term investment strategy. For more on this project, read the [project newsletter](#) (FR/NL)!

Workshop on Geothermal Energy in Belgium

VITO, in the framework of the GEO.POWER project, will host a workshop gathering on the geothermal energy in Belgium, dealing with its current state of play and future challenges. This workshop wants to bring together stakeholders, government representatives and researchers from Flanders and Wallonia around the topic of shallow and deep geothermal applications in Belgium. This will be held in Brussels on 13th March 2012.

See the full invitation [here](#).



Regional Data Compilation Workshops: 2012 editions on the way!

The GEOELEC project continues to gather pace, as partners prepare for the next round of regional data compilation workshops in Utrecht and Offenburg. These workshops are part of achieving a central objective of the GEOELEC project, which is to bring together experts in geothermal in Europe, to assess the existing resources and therefore potential for producing geothermal power. For more information, contact com@egec.org.

Target Group	Date	Location
The Netherlands, Belgium, Luxembourg, Denmark, Norway, Sweden	24 th January 2012	Utrecht, The Netherlands
Germany, Poland, Slovakia, Czech Republic, Hungary, Austria, Switzerland	29 th February 2012	Offenburg, Germany
Finland, Latvia, Lithuania, Estonia	Mid March 2012	Vilnius, Lithuania



GEOELEC.EU is live!

Read the first GEOELEC newsletter!



**2012 ANNUAL CONFERENCE
TEAMING UP FOR
RENEWABLE
HEATING
AND COOLING
26-27 APRIL 2012 @ COPENHAGEN**



This year, the [RHC-Platform](#) are pleased to announce their partnership with Euroheat & Power to hold a joint annual conference under the auspices of the Danish Presidency of the EU and with support of the European Commission.

The conference will be held from 26-27 April 2012 in Copenhagen, Denmark.

Sessions and roundtable discussions will not only show-case best practice, but also allow participants to learn about latest developments in financing, market and technology developments, as well as legal framework conditions. It is a conference for everyone, providing space for dialogue between manufacturers, utilities, city planners, architects, policymakers and citizens. In short, a unique meeting point for all those interested in creating a sustainable energy future!

[Registration is open! Visit the conference website for more information!](#)

Smart Cities Stakeholder Platform

The European Commission has launched a Stakeholder Platform as a support to the Smart Cities Initiative under the European Strategic Energy Technology Plan (SET-Plan). The Platform, which will be inaugurated in the first trimester of 2012, will bring together stakeholders from across Europe to develop concrete solutions to help the implementation of the developed strategy.

Catch up on all the news of the RHC-Platform by reading the Newsletter.

[Click Here](#)

Events

Featured Event:



EGEC is partnering with the GeoTHERM Expo & Congress 2012. Members of EGEC get a special discount. [See here for more.](#) Check out the [GeoTHERM website](#) for full details on this exciting and engaging event.

January 2012

GEA Geothermal Energy Finance Forum, 18 January, San Francisco, USA.

March 2012

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

[Website](#)

EU-Japan-Iceland Geothermal Seminar, 8 March, Brussels, Belgium

April 2012

Geothermal Asia Conference, 11 & 13 April, Jakarta, Indonesia.

European Geosciences Union General Assembly, 22—27 April, Vienna, Austria.

[Website](#)

RHC– Platform and Euroheat & Power Conference, 26 & 27 April, Copenhagen, Denmark

[Website](#)

May 2012

InnoStock 2012, 16-18 May, Llieda, Spain

[Website](#)

June 2012

Renewable Energy World Conference, 12—14 June, Cologne, Germany.

[Website](#)

European Sustainable Energy Week, 18—22 June, Brussels, Belgium.

[Website](#)

August 2012

GEA National Geothermal Summit , 7-8 August, Sacramento, USA.

[Website N/A](#)

September 2012

GRC Annual Meeting, 30 September—3 October, Reno, USA

[Website](#)