

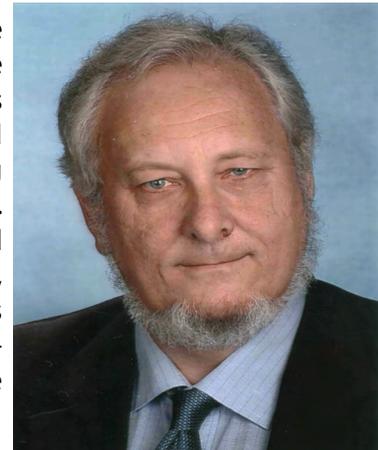
Dear members of EGEC,
dear readers of this newsletter,

The event of this month for the European geothermal sector was, no doubt, GeoPower 2014 in Istanbul on 3-4 December. The leaders from the (deep) geothermal industry, from suppliers, consultants, producers, convened in the exuberant city of Istanbul, at the link between Europe and Asia, in sight of the Bosphorus, to discuss the status, prospects and challenges the geothermal sector is facing. The exchange of experience inside the conference hall offered new views and insights, the discussions were lively and interesting. The small, but high-level exhibition was a showcase for the industry, and the numerous networking opportunities during breaks and in the lobby were seemingly welcomed by participants. I like to take this opportunity to thank Greenpower conferences and the EGEC staff for the excellent organisation, the speakers and panellists for their valuable contributions, and all participants for their enthusiasm!

In Brussels, the calls for the next round in Horizon 2020 are open and published now. EGEC organised a seminar on the EGS call on 9.12., and a webinar for shallow geothermal opportunities on 16.12. We are determined to assist our members with information and support for drafting excellent proposal – as only the truly excellent ones may have a chance in the competition for the funds from Horizon 2020.

Another competition is on: entries are requested for the European Geothermal Innovation Award 2015. As the date of Geotherm 2015 in Offenburg, where we will announce the winner, is later than in the past years (5-6 March 2015), we can postpone the deadline for submission to mid-January. This will allow all those who are considering filing an entry, to have some spare time around Christmas, and finish the nomination

by 16 January 2015, the new deadline. Please remember: the jury needs sufficient justification and documentation for evaluating the merits of a nomination. Entries not substantiated by such documentation, unfounded claims and ideas have no chance of being short-listed for the award. See more here.



I am sure we will be able to highlight again, with this award, a premier example of geothermal innovation in Europe!

While writing this I sit in a room in Ferrara, with a view to the Castello Estense and the Duomo. On 12 December, the LEGEND project has its final conference here; the project looked at geothermal heat pumps for public buildings, and produced a number of interesting examples around the Adriatic. Details on the project, including data from the demo sites, can be found here.

Ferrara is not only a world heritage city; for EGEC, it is the site of the first EGEC Business Seminar, held on April 30, 1999, in the foyer of the theatre just beside Castello Estense. The targets described in our "Ferrara Declaration" from fifteen years ago meanwhile have materialised at least partly, and it is good to be back at this place and remember the times when EGEC made the first public appearance on the geothermal scene.

On behalf of all of the EGEC team, I wish you an enjoyable Christmas break.

Burkhard Sanner

EGEC puts forward recommendations for a secure, competitive, sustainable Energy Union

In the framework of the debate over the EU Energy Union, the European geothermal industry puts forward a number of recommendations for each of its future pillars. The new course of the EU energy policy should be built on a level-playing field, include a true EU heating and cooling policy, and create the conditions to empower consumers, cities, and local authorities. This in order to ensure, in the short, medium, and long-term, all of the following: affordability of energy, security of energy supply and availability, as well as the sustainability and the decarbonisation of our economy.

Read the full document [here](#).

Poland to pay heavy fine for not transposing the RES Directive

According to an Advocate General to the European Court of Justice, Poland should pay a daily penalty fee of €61,380 for failing to fully transpose EU Directive 2009/28 on renewable energy (see opinion [here](#)).

As it is over four years since the deadline by which the country should have transposed the RES Directive into national legislation, the penalty would amount €22m a year. The EU court will issue a final ruling on this case in early 2015.

The Polish government has been working on a new renewable energy law for years, but with little success. According to the GeoDH project, the drafts under discussion would not create better conditions for the deployment of renewable heat, including geothermal technologies, as the focus is mainly on RES electricity (biomass, wind) and biofuels. See GeoDH report [here](#).

Commission unveils work programme 2015

On 16th December the European Commission unveiled its work programme 2015. The WP concentrates on a limited set of concrete initiatives – only where EU action is more effective – such as the EU 315bn investment plan (EGEC members have received more detailed information on this dossier) and the European Energy Union.

Legislation no longer considered fit for purpose will be reviewed. This is the case, for instance, for the proposal to tighten national emission ceilings which will be linked with the legislative proposals on the 2030 climate and energy package.

Lastly, a number of pending legislative proposals will be withdrawn such the one for a revised Energy Taxation Directive. This proposal, supported by EGEC, aimed to take into account both the carbon and the energy content of fuels, including heating fuels.

Financial and technical support for geothermal projects through the new EU Investment Plan

Following the launch of the new EU Investment Plan on 26th November, a list of projects which could be implemented over the next three years have been identified in a report to the European Council issued last week. This report was prepared by a task force set up by the EC and the EIB, together with EU member states. Some deep geothermal projects/ programmes were identified in UK, NL, BE, PL, and SK. Shallow geothermal projects may fall within a number of energy efficiency/ building renovation programmes. Check out the list [here](#).

A cluster of projects can be financed as well, including addressing the geological risk. EGEC is collecting project proposals from its members to be submitted to the relevant European authorities. We are dedicated to lobbying on behalf of our members for the sector, and are closely following this dossier. For your information, we have already contacted President Juncker ([see our letter](#)).

Should you need further information please contact EGEC or visit the dedicated website

World Bank's Global Geothermal Development Plan: 235 mio USD mobilised in developing countries, projects under preparation in eleven states.

In the last 18 months, the multi-donor initiative led by the World Bank's Energy Sector Management Assistance Program (ESMAP) has mobilized \$235 million through the Clean Technology Fund. Projects have been identified and are now under preparation in Turkey, Armenia, Indonesia, Kenya, Ethiopia, Djibouti, Mexico, Chile, Nicaragua, Dominica and St Lucia.

The project focuses on removing barriers in the risky and capital intensive exploration stage Anita Marangoly George, the senior director at the World, recognising geothermal's role as a local, clean and reliable source said "to succeed, development partners and governments will need to work together to mitigate exploratory risks and help pave the way for scale up by the private sector." during the second roundtable in Copenhagen.

KenGen seeks bids for design and construction of 210 MW geothermal power projects

Kenya Electricity Generating Co (KenGen) is seeking bids for the design and construction of two geothermal power plants. The first to be built will be the 140MW Olkaria V power plant, for which financing talks are underway with development institutions. The second plant will be 70MW.

Pilot heat project launched in Espoo, Finland.

A pilot plant, which should be completed in 2016, is being developed jointly by Fortnum and St1. The 40MWth capacity plant will supply heat to district heating network in Espoo, covering c. 10% of the region's heat needs.

A construction site is currently being sought near the Otaniemi or Kivenlahti heat plants

Launch of the Geothermal Development Facility for Latin America

The new EU Commissioner for Climate Action and Energy, Miguel Arias Cañete, delivered his first

keynote speech on Geothermal at the Launch of the Geothermal Development Facility (GDF) for Latin America, a side event of the COP20 conference in Lima.

Established by the Central American Development Bank (CAF) and the German development bank KfW, the GDF intends to mitigate risks for geothermal development in Bolivia, Chile, Colombia, Ecuador and Peru. It will provide 6mio EUR in grant based mitigation instruments and more than 800 mio EUR in tailored financing measures, with the goal of incentivising 350MW of capacity.

More investment in Geothermal in Oradea, Romania

Oradea municipality announced that c. €4Mio has been secured for a heat project in the city of Oradea. 85% of the funds come from the Norway funds, and the rest from the Environment Fund Administration. Three more investments will be done for extending the networks until spring 2016.

Work begins at Efeler project, Turkey.

Having secured c. 17,7Mio EUR in Equity, work has begun on the 162MW project in EFELER, Turkey. C. 605 Mio EUR in Debt financing, but it is understood that a group of banks are preparing to provide this. GÜRIŞ will construct two 47.4 MW Dual Flash Units and three 22.5 MW Binary Cycle Units as part of the project. The first phase should be completed in August 2015, with final completion in December 2017

News about the EGS project in southeast Hungary.

The EGS project sponsored by Hungary's EU-FIRE and Mannvit should have a total budget of €116 mln for the construction of the geothermal power plant near Battonya in southeast Hungary. The project is carried out through the European NER300 program (€39.3 mln European Union grant) and with the cooperation of the National Development Ministry and the National Economy Ministry. The power plant, to be completed by the end of 2018, will have a capacity of 12MW of electricity and 60MW of heat energy. EU-FIRE holds 95% of the project company for the plant. Mannvit owns 5%.

Steady development for Geothermal in 2014- but markets still to reach full potential

The changes in the European Geothermal heat and electricity markets over the last 12 months have been detailed in the 'EGEC 2014 Market Report Update', launched at Geopower Global conference, Istanbul. It can be found on the [publications page](#).

Geothermal District Heating continues to show dynamic development in Europe, with eight new systems having an installed capacity of 76.2 MWth, becoming operational in 2014, and 204 projects now under development- 10 more projects than last year. The total installed capacity in from the 247 plants in Europe is now 4.5 GWth. 162 of these plants are in the European Union, producing 4256 GWh.

Political changes will continue to drive the development of the geothermal district heat sector, as governments increasingly look for energy supplies which are local, secure and steady- demands met by geothermal. This is particularly notable in Central and Eastern Europe areas with extremely good potential- although the potential right across the continent is being increasingly recognised. Issues such as lack or appropriate financing models and unfair competition with fossil fuels have held back the sectors development in the past, but these barriers are increasingly being removed. "Whilst Central and Eastern Europe will see rapid progress, we can also expect to see interest in areas where potential has not been fully recognised in the past" said Philippe Dumas, Secretary General of EGEC.

The power sector also continued to grow, but at a much slower pace than is possible. Eight new plants came online in 2014, with a newly installed capacity of 170 MWe. There are now 77 power plants in Europe, representing a total installed capacity of 2 GWe. 51 of these plants, with a total installed capacity of 950 MWe are in the EU-28, producing 5.56 TWh annually.

The fast development of the Turkish market, and the 128 projects currently being explored will

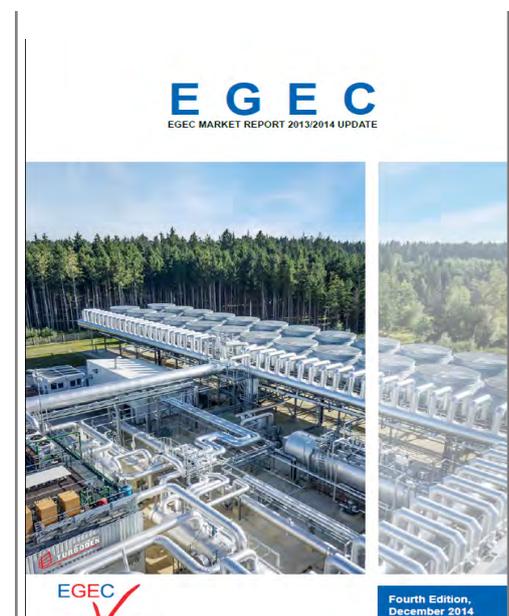
be key in the expected growth from a European installed capacity of ca. 2 GWe in 2014 to ca. 3.5 GWe in 2018. "The European Geothermal Electricity market is struggling for three main reasons", explained Dumas, "underestimation of potential, a lack of financial support and associated public policy measures, and insufficient recognition of the role of geothermal to balance the grid, being baseload and flexible"

The development of the shallow marked is steady, although it is still underperforming given the potential. Sweden, Germany, France and Switzerland continue to be the main players, accounting for 64% of the market, although high growth rates can be seen in Italy, Poland and the Czech Republic. The shallow market faces a number of challenges. Lack of awareness about the advantages of the technology persists. Regulated gas prices, a lack of a level playing field in the heat market and low renovation and construction rates remain problems for the sector.

The EGEC Market Report 2013/2014: The only full assessment of the entire geothermal sector.

€250 Free for EGEC members.
Click [here](#) to find out more

2014 Update published at GeoPower 2014, available on the EGEC website





FROnT Project website Launched

What is FROnT?

The project aims at promoting a level playing field for Renewable Heating and Cooling (RHC) in Europe and to develop both strategies for RHC deployment, and improved understanding of the costs of RHC vs fossil fuel use. It analyses both existing support schemes and end user decision factors, in order to help establish strategic policy priorities for RES-H&C.

It will help establish a framework for more efficient and effective support schemes, and enhance clear and transparent communication with European consumers.

The work involves stakeholders from industry and public authorities from several EU members states including ES, PT, UK, PL, NL and AT. It is led by a consortium gathering representatives from industry and national energy agencies, assisted by partners providing specific expertise. The partners will assess recent and innovative support mechanisms to identify key success factors regarding designing, setting up, and operating integrated support schemes for RHC, based on the value of the energy produced and involving different applications (residential, non-residential and industry).

Visit www.front-rhc.eu

Results

- To promote the implementation, at national and European level, of strategic policy priorities that can contribute to efficiently and cost-effectively implementing the NREAPs.
- To facilitate the setting-up of improved and sustainable RHC integrated support schemes, stressing the value of the energy provided.
- To support a better insight of the value of the energy supplied by RHC systems, promoting transparency and clarity for end-users and other stakeholders.
- To devise a common methodology for estimating the value of energy supplied by RHC systems and an assessment of Levelised costs for heating and cooling (renewable and conventional).

GeoTHERM – expo & congress – 5. + 6. March 2015 in Offenburg, Germany

GeoTHERM

expo & congress

The ninth GeoTHERM will be taking place in its successfully established form on 5th + 6th March 2015. Exhibitors as well as visitors are convinced of the international level of trade fair and congress, where the dynamics and quality standards of the geothermal industry can enjoy a perfect setting

In 2014 191 exhibitors, as well as 3,513 visitors from 38 countries, benefited from the opportunity to make valuable contacts. The extremely high level of visitor expertise is particularly worthy of mention here. That quality makes this event the ideal setting in which to meet new business partners and explore further market potential. This is confirmed by an excellent satisfaction score given by exhibitors during the exhibitor survey.

Accompanied by a high-quality congress program covering the areas of shallow and deep geothermal energy,

Europe's largest trade fair offers well-founded knowledge for research and practice as well as a perfect platform for the exchange of experience and networking. You will find the congress program at http://www.geotherm-germany.com/en/geothermal_congress

Partners from politics, science, and industry are also actively supporting the development of GeoTHERM. GeoTHERM is growing fast in all relevant areas and has become firmly established as high international authority for the sector.

Another international highlight at the event will be the European Geothermal Innovation Award. Initiated by the European Geothermal Energy Council in collaboration with Messe Offenburg, organisers of the GeoTHERM, the Award acknowledges exceptional contributions towards the field of geothermal energy.

Deadline extended to 16th January 2015

About the Award

The European Geothermal Innovation Award is given to companies which have made an outstanding contribution towards the field of geothermal energy in the form of innovative products, scientific research or project initiatives.

A jury of five assesses submissions on grounds of originality, innovation, reliability, reduction of emissions and improvements in energy output.

Instructions

Self-nomination is possible, and unsuccessful applications will be eligible for nomination at future awards.

If you would like to make a nomination, please read [the competition rules](#) and send your nomination to the EGEC secretariat at egia@egec.org. Visit www.egec.info/events/egia/

European Geothermal Innovation Award



At the end of January, a five shortlisted candidates will be announced as endorsed nominations, with the overall winner announced during the award ceremony at GeoTHERM.

Endorsed nominations and the award winner will be recognised for their outstanding work and impact on a growing and dynamic industry. The award will be an opportunity for industry peers to acknowledge excellence, and for the most exciting ideas to be widely publicised.

6th European Geothermal PhD Day: 25-27 February 2015, TU Delft The Netherlands

A broad range of topics is covered at the EGPD including resource assessment, exploration, reservoir engineering and monitoring, tool and code development, process engineering, sustainability aspects, groundwater studies, geology and structure studies, storage, supply and demand matching and thermodynamics. Furthermore, the scale of the

projects ranges from whole continents, nations and regions to specific geothermal fields, reservoirs or even micro-structures.

The EGPD aims to provide the growing number of young geothermal scientists with an informal platform to share knowledge, stimulate collaboration, and to offer career and networking opportunities. Participants at any stage of their PhD studies, who are interested in presenting their work and getting feedback from fellow PhD or who would like to explore future directions in their research and careers are welcome to join the 6th EGPD.

Events Calendar

EC event on Renewables in the EU and EC event on heating and cooling in the European energy transition	3rd February 25-27 February	Brussels, Belgium	Website
6th European Geothermal PhD day	25-27 February	Delft, The Netherlands	Website
GeoTHERM	5-6 March 2015	Offenburg, Germany	Website
World Geothermal Congress 2015	19-25 April 2015	Australia & New Zealand	Website
37th Euroheat & Power Congress	27-28 April 2015	Tallin, Estonia	Website



More than 130 members from 28 countries (including private companies, national associations, consultants, research centres, geological surveys, and public authorities) make EGECE a strong and powerful network, uniting and representing the entire sector.