EGEC NEWS

Issue No. 12, April 2011

THE VOICE OF GEOTHERMAL ENERGY IN EUROPE

A Word from the EGEC President

(Photo: 3 March 2011, TSB, FH Bingen)

Dear Members of EGEC & Readers of Our Newsletter,

The need for a clean and safe base-load power source is more evident than ever. Technologies enthusiastically touted as possible solutions for low-carbon power production have seen severe setbacks in the last weeks:

- Carbon Capture using amines in Norway is delayed due to health problems
- The possibility for the occurrence of severe risks in nuclear power generation is extremely improbable - but has materialised nevertheless

On the contrary to these alternatives, geothermal power production, even in its most advanced form of EGS, is intrinsically safe.

So I sincerely hope that the maximum funding of 4 EGS projects under the NER300 scheme will be won by the applicants (8 EGS project proposals have been submitted), and I am fully confident that such projects can prove the viability and reliability of geothermal power production. And EGS, in combination with low-temperature power plants and transport of electricity from high-enthalpy areas (Iceland is seriously studying transmission lines to other European countries), has the potential to provide huge amounts of clean and safe base load electricity.

I wish you all an interesting read,

Burkhard Sanner

In this ISSUE NO 12:

Highlights

New EGEC Website

RHC Platform Conference, with additional International Geothermal Workshop

Budapest, Hungary; 5th & 6th May 2011

REGISTER NOW!

POLICY

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

EGECs Evaluation of the NREAPs; Geothermal Underestimated and Undervalued

An evaluation has been undertaken by EGEC and its members, and aims at presenting the positive aspects contained in the NREAPs in addition to some of the inaccuracies, and most notably to assess the measures as presented.

If it is to be argued that in general the Plans propose more ambitious targets for RES electricity than for RES H&C, this is not true for geothermal. The potential of geothermal power is quasi ignored; however some Member States do support the development of geothermal direct uses and geothermal heat pumps.

EGECs evaluation is available here.

European Parliament Report Assesses Potential of Geothermal

The ITRE Committee of the European Parliament recently hosted an array of experts in Renewable Energy, representing three selected dynamic sectors (ocean, geothermal and solar energy). MEPs, policy makers, industry representatives and researchers gathered to launch a study entitled *"The Assessment of potential and promotion of new generation of renewable technologies",* which looks at the potential of development and deployment of new renewable energy technologies in the European Union. The Geothermal sector was introduced by Ruggero Bertani of ENEL Green Power.

Against the current background of fresh public debate on the future of Europe's energy supply, European associations working with these sectors **(EUREC Agency, EGEC, ESTELA and EU-OEA)** called for **leadership from MEPs** in taking the urgent steps to prioritise investment and innovation in the European Renewable Energy Technologies.

Read the reaction of EGEC and other associations here.

8 EGS Projects for the NER300

The NER300 call for proposals has attracted much interest from the geothermal sector: 8 projects have been submitted to the member states. All 4 EGS sub-categories are covered by 1 or more than 1 project. For more information on the topic, visit the dedicated page on the DG Climate Action website, where the Summary of reports on number of project proposals submitted to Member States has been published.

Smart Cities Consultation Launched, Open Until May 13th 2011

DG Energy has launched the Smart Cities Consultation, on-line via an interactive questionnaire. The deadline for contributions is 13th May 2011 and the questionnaire is available at the Europa website.

EGEC is unhappy with the design of the consultation and has complained to the European Commission on the omission of 'deep geothermal' from the relevant options provided in the questionnaire. The nature of the consultation relies heavily on making preference of chosen technologies, so we are encouraging respondents to *check the boxes with 'geothermal'*. In addition, when making input, it is important respondents highlight the potential of geothermal at every available opportunity.

Feasibility Study for Europe-Wide CO2 Infrastructures

The EC commissioned in December 2009 a feasibility study for Europe-wide CO2 infrastructures. The purpose of the study was to develop a complete and integrated database of European CO2 sinks and sources and identify the main outline of a CO2 transport infrastructure for different scenarios. EGEC is happy with the conclusions of this study: 'abundant onshore storage could be precluded by public concern or conflicts of resource utilization with hydrocarbons or geothermal heat'.

POLICY

Report Predicts Little Sensitivity of Geothermal to Effects of Climate Change

A report commissioned by DG Energy of the European Commission on the '***Investment needs for future adaptation measures in EU nuclear power plants and other electricity generation technologies due to effects of climate change'*** was today published, with a conclusion of geothermal being one of the only energies that has minor sensitivities to Climate Change.

Qualitative link between technologies and climate change effect

Technology	Δ air temp.	Δ water temp.	Δ precip.	Δ wind speeds	Δ sea level	Flood	Heat waves	Storms
Nuclear	1	2		-	-	3	1	-
Hydro	-	-	2	-		3	-	1
Wind (onshore)	-	-	-	1	-	-	-	1
Wind (offshore)	-	-	-	1	3	-	-	1
Biomass	1	2	-	-	-	3	1	-
PV	-	-	-	-	-		1	1
CSP	-	-	-	-	-	1	-	1
Geothermal	-	-	-	-	-	1	-	-
Natural gas	1	2	-	-	-	3	1	-
Coal	1	2	-	-	-	3	1	-
Oil	1	2	-	-	-	3	1	-
Grids	3	-	-	-		1	1	3

Note: 3 = Severe impact, 2 = Medium impact, 1 = Small impact, - = No Significant impact;

Once again, geothermal has been recognised as one of the technologies that can be relied upon to provide energy for Europe, as it is concluded that geothermal is one of the technologies that will be least affected. This means that concretely, geothermal will require less investment for prevention and precaution than other technologies.

Geothermal will be less affected, because it is completely independent of climate change. However, in spite of this fact and of the ever increasing development of the geothermal market, it is regrettable that the 2030-2050 scenario presented in the report underestimates the potential contribution of geothermal.

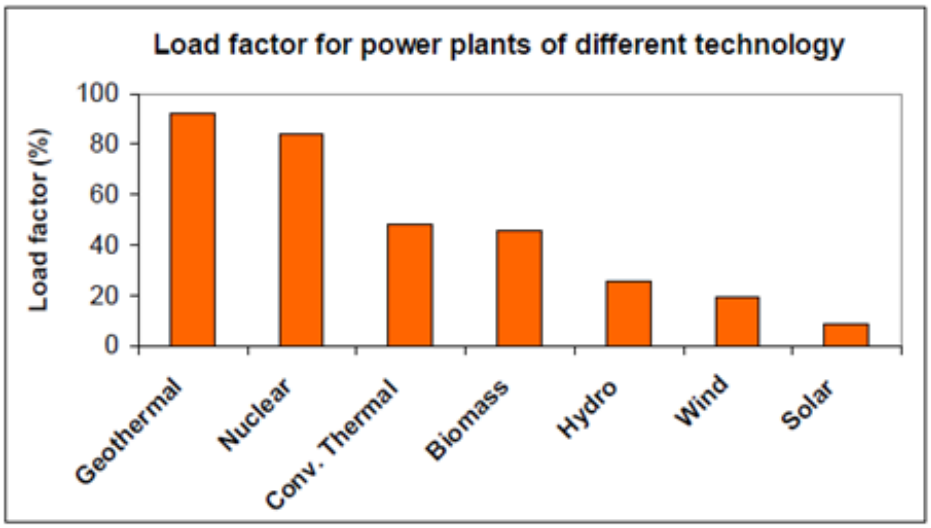
In addition, an inaccuracy can be noticed in Table 18, which wrongly puts the capacity of geothermal at 70 per cent, when it stands at over 90 per cent, as indicated in the official Eurostat figures below (2007).

Overall the report concluded that:

'The relatively new... geothermal only show(s) minor climate change sensitivities, namely towards some extreme events.' (p. 11)

The Report in full is available from the DG Energy website.

Load factor of power plants in EU-27 (Eurostat figures, 2007)



POLICY

Commission Proposes EU priority on Energy Infrastructure

On 17 November 2010, the European Commission has adopted the Communication "Energy infrastructure priorities for 2020 and beyond - A Blueprint for an integrated European energy network" In the Communication, the Commission defines EU priority corridors for the transport of electricity, gas and oil. Being a Renewable Base load, geothermal energy is only considered for local electricity grids and district heating systems. It means also geothermal will not be affected by these huge external costs, rendering it even more competitive versus all over energy technologies. We regret a connection to Iceland has not been proposed in order to receive a large amount of base load geothermal electricity at really low costs (5-7 € ct/kWh).

EGEC´s Response to the EC Public Consultation on "Roadmap for a low carbon economy by 2050"

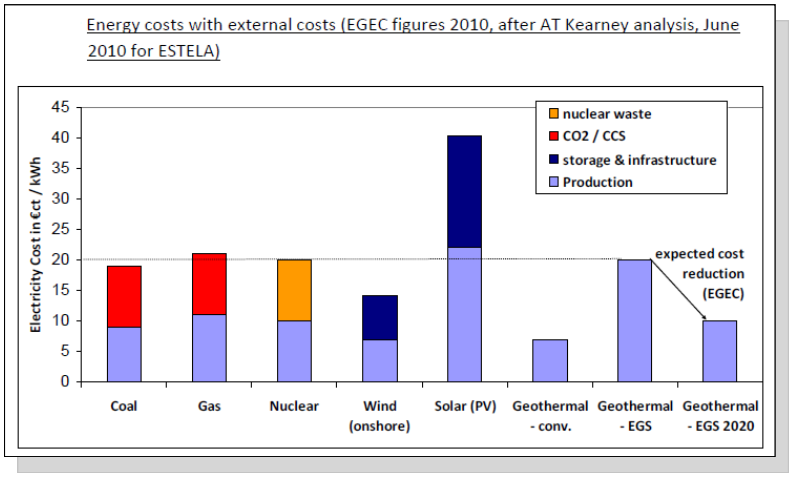
EGEC welcomes the intention and initiative of the European Commission to show the path towards a secure, sustainable and competitive European energy system. EGEC is committing itself to actively support a transition into an energy economy which is fair to all EU citizens, provides a level playing field for all actors on the EU scene, and aims at the goals of efficiency, sustainability, security and conservation of the local and world-wide environment.
EGECs Answer
ERECs Answer

EGEC Statistical Report – 2010 on Deep Geothermal

EGEC publishes its first statistical report on deep geothermal installations in Europe: both geothermal power plants and district heating systems. report on electricity - geothermal DH

Geothermal will be Key for an Optimal Energy Mix

During GeoPower Europe 2010 Conference, EGEC has released a Press Release As one of the sources with very high potential and zero emissions, geothermal energy nevertheless received poor attention in the National Renewable Energy Action Plans of the EU-27 Member States, and in the two last EC Communications on 'Energy Strategy 2020' and 'Energy infrastructure priorities'. During this EGEC conference, a main finding was that geothermal energy can and will be a major contributor to a 2050 energy scenario with the less costly energy mix.
EGEC Press Release 8 December 2010



EGEC´s Response to the EC Public Consultation on the Green Paper: "EU development policy in support of inclusive growth and sustainable development - Increasing the impact of EU development policy"

EGEC welcomes the intention and initiative of the European Commission to show the path towards a sustainable development policy of the European Union. EGEC is committing itself to actively support a transition into an energy economy which is fair to all citizens, provides a level playing field for all actors on the global scene, and aims at the goals of efficiency, sustainability, security and conservation of the local and world-wide environment.

Concerning the green paper on "EU development policy in support of inclusive growth and sustainable development - Increasing the impact of EU development policy", EGEC agrees with the idea proposed by the EC and especially in the chapter 4.2. Energy and development. However, we really regret this document does not mention geothermal energy. In developing countries, geothermal represents a very interesting technology to have access to a sustainable energy at an affordable price. Many countries have already geothermal as a key player in the energy mix: Indonesia, The Philippines, Chile, Kenya etc.

EGEC paper.

Market Development

Many New Projects Announced!

AUSTRIA

Drilling of the largest geothermal project in Austria
A geothermal DH project is currently being developed for the municipality of Ried. The total investment for the development and the distribution of the district heating, in the first Expansion phase, will amount to around 30 million Euro. The goal is to produce firstly around 55 GWh per year, and later a full expansion of around 90 GWh of heat.

BELARUS

Partners looked for geothermal projects in Belarus
The private investment company EnterInvest (located in Belarus), is involved as a project manager in geothermal energy projects development in Belarus. They are looking right now for an engineering & consulting company, which will participate in project development and future execution. And for manufacturers of geothermal equipments (heat pumps, heat exchangers, expansion systems etc.)
More precise information can be found in the attached document and by contacting com@egec.org

BELGIUM

BNP Paribas Fortis opts for geothermal
The Bank BNP Paribas Fortis is currently renovating, rebuilding and refurbishing the Chancellery complex (80,000 m2) in Brussels. The opening is planned for mid-2011. The renovated building complex will use a ground heat exchanger. This project won the 2007 Bentley Empowered Award of Excellence for Sustainable Design.
The 20 boreholes (double U tube) have a 100 m depth. The Heat pump (CIAT) has a capacity of 140 kW. They will heat one of the building: W16 (9 045 m²) in this Chancellery complex.

DENMARK

A New company to develop geothermal DH in Denmark
The Danish District Heating Association (DDHA) has now set up a company specifically to develop geothermal energy as a source of heat supply for district heating. District heating in Denmark covers a little more than half the national demand for space heat and hot tap water in all buildings but supplies 62 % of all households in the country. Already a number of geothermal installations feed energy into district heating and a number of projects are under development. But some 32 other potential locations have been identified.

The state owned energy company DONGenergy earlier this year returned all its concessions for geothermal energy to the Danish state, as the company would focus on other business areas. The company has been partner in most of the current projects. DDHA sees a need to ensure that existing knowledge is retained and kept available to the Danish district heating sector. The association therefore sets up the new company in January 2011. Manager of international affairs in DDHA says: “It’s exciting for us to be able to promote what is clearly seen as one import future source of energy for building comfort. We already have an extensive horizontal distribution system, and now we acquire the competence to assist district heating companies in extracting this renewable and dependable energy.”

DDHA is a non-profit association organizing the more than 400 district heating utilities, mostly municipal or cooperative, that delivers around 99 % of all district heating in Denmark.

FRANCE

French aid for geothermal EGS project - Roquette authorised

On the 12th of January, the European Commission authorised France to grant aid of €25.3 million for the construction of a heat boiler using geothermal energy in Alsace. The aid will be given to a joint venture between Roquette Frères, Electricité de Strasbourg and Caisse des Dépôts et Consignations. The project also involves the construction of a 24 mega watt (MW) geothermal boiler, the construction of a 15-kilometer pipeline to bring the heat from the underground geothermal source to the Beinheim site. The use of geothermal energy, a renewable energy source, will result in a reduction of CO2 emissions by 39,000 tonnes a year compared to the same volume of heat produced from natural gas.

HUNGARY

Italian companies invest in geothermal in Hungary

According to the Italian Chamber of Commerce in Hungary, "Eni and Edison are contemplating geothermal energy projects in Hungary. The Italian government is supporting these companies that would invest in green energy production and have the necessary expertise that could be deployed in Hungarian projects".

IRELAND

The Emerald Isle starts exploring its geothermal potential

SLR Consulting, leading environmental firm, will analyse deep geothermal resources in the Republic of Ireland with support from the Sustainable Energy Authority Ireland (SEAI). The project is designed to advance the exploitation of geothermal energy to generate renewable electricity. SLR will carry out a Play Fairway Analysis which will assess the geothermal exploration risk by analysing the various attributes of the subsurface of Ireland to a depth of 5000 m. The contract has been funded by SEAI under its Renewable energy Research, Development & Demonstration Programme, the National Development Plan (of Ireland) and the European Union.

The first geothermal power plant authorised in Ireland will be put into service at the end of 2012 in Dublin. The plant, whose cost is estimated at 30 million euros for an electricity capacity of 4.5 MW, will be developed by Ireland -based GT Energy at Greenogue, close to Newcastle (County Dublin). Construction is scheduled to begin in the coming weeks with the drilling of two wells about 4,000 metres deep, which will be used for the extraction and re-injection of geothermal fluid. The plant is planned to be put into service and grid-connected by the end of 2012. Based on tests carried out since 2007, GT Energy estimates that at Greenogue three plants can be developed, with a total capacity of 100 thermal MW.

ITALY

Develop geothermal energy in the Mezzogiorno

The Italian Minister of Economic Development and the National Research Centre (CNR) has signed an agreement to harness the geothermal energy in some regions of southern Italy. This agreement means at identifying and implementing actions to expand the potential of geothermal energy in Campania, Calabria, Puglia and Sicily. This VIGOR project has a budget of 8 Mio € for 2 years. Project results will be disseminated online through a website, which will also be a help desk for the public and private companies wishing to explore the possibility of investing in geothermal projects.

Deep geothermal exploration studies in Italy

The Italian ministry for economic development is funding a project coordinated by NCR-IGG in Pisa. This 2-years project (8 million euro) aims at evaluating the geothermal potential of southern Italy, and to propose 8 plants (possibly 3 for power generation and 5 for direct uses).

KENYA

Kenya invites investors for geothermal power plants,
Kenya's main power producer KenGen is already producing more than 200 MW of electricity from geothermal sources in the Rift Valley, and plans to add 280 MW of geothermal power at a cost of $1.3 billion by 2013. They intend to shift the power supply source, with geothermal energy providing 50 percent in the future, compared with the current 11 percent said. KenGen, as the company is known, is exploring various financing options such as joint ventures, debt sales and vendor financing and build and operate contracts.

SLOVAKIA

Slovakia gives green light for first geothermal plant

The ministry of economy of Slovakia has granted permits for construction of the first geothermal power plant in the country. The green light has been given for the construction of a 3.5MW geothermal power plant, as according to the Slovak legislation, investors cannot start construction of an energy project without a certificate from the ministry.

TURKEY

New financing for geothermal projects in Turkey
Turkish legislation guaranteeing prices and incentives for energy from renewable resources may pave the way for new geothermal power investments as the country seeks to meet rising electricity demand. Lawmakers ratified the law on 2nd of January 2011. The law sets guaranteed prices of 7.3 U.S. cents per kilowatt-hour for wind and hydroelectric energy from licensed plants, 13.3 cents for solar and biomass and 10.5 cents for geothermal. Additional incentives for using local equipment may add 0.4 cents to 2.4 cents to the price for five years.

Moreover, the European Bank for Reconstruction and Development (EBRD) has launched a new financing facility to support Turkey’s investments in renewable energy and energy efficiency projects to increase energy savings and decrease carbon emissions. In the new Mid-size Sustainable Energy Financing Facility (MidSEFF), the EBRD will offer a total of EUR 400 million in loans to Turkish banks for lending to private sector companies to undertake mid-size renewable energy, waste-to-energy and industrial energy efficiency investments.

Turkey orders Pratt’s power units
Pratt & Whitney Power Systems has gotten orders from Turkey for three more of its special low-heat electricity conversion systems. Pratt said the orders launch it into the Turkish renewable energy market. Turkey's Jeoden Electricity production plant in Denizli, near Izmir, Turkey, is scheduled to be operational in April using three PureCycle modules to generate up to 780 kilowatts of net energy from a naturally occurring geothermal formation. The project will be installed, owned and operated by Jeoden Geothermal, a joint venture between NRG Enerji and MDO Group.

United Kingdom

Parliamentary motion to support deep geothermal

A Motion has been tabled in the UK Parliament to make the case for greater investment in deep geothermal development. The motion has sponsors from MPs of all parties. Cornwall is currently leading the way with two hot rocks projects underway from two different companies – EGS Energy and Geothermal Engineering. The motion regrets that DECC's Deep Geothermal Challenge Fund has been cut in half in 2010 and that current financial support under the Renewables Obligation is inadequate. Deep geothermal energy is also not currently included in the Renewable Heat Incentive or the Feed-In Tariff scheme. The motion urges the government to introduce early legislation to support deep geothermal exploration licences and to ensure early inclusion of deep geothermal heat and power in mainstream renewables support.

Three winners get hot £1.1m prize in Geothermal UK competition

Three geothermal projects run by Keele University, Newcastle and Durham University and Cofely District Energy in Southampton have won a total of £1.1 million in funding from the Government's Deep Geothermal Challenge Fund's second round. The first round concentrated on deep geothermal power, and the two successful Cornwall-based projects continue to move ahead.

Cornwall Council granted EGS Energy planning permission for its geothermal plant. Work on drilling is expected to start in the second half of next year, with electricity to be produced towards the end of 2013. The plant, which will be situated on the north side of the Eden Project site, is due to produce up to 4MW of electrical capacity for use by the attraction. The surplus, which will supply approximately 5,000 homes, will go to the National Grid. This second round has concentrated on heat-only projects.

The funding has been allocated as follows:
** £500,000 to Keele University, to drill a 1200m borehole to provide geothermal heat for their proposed sustainable campus;*
** £400,000 to a Newcastle/Durham University project to fund the drilling, hydraulic testing and geophysical logging of a 2km deep borehole at 'Science Central', a large development in central Newcastle;*
** £200,000 to Cofely District Energy Limited, to part fund the refit of the Southampton deep geothermal well.*

New Project at Stanhope

Cluff Geothermal Ltd has signed an exclusive agreement with Lafarge to generate electricity by geothermal means at Eastgate, near Stanhope, which will be a 3rd geothermal power project for the UK. There are already two 1 km deep boreholes which have proved it to be one of the country's best spots for natural heat generation. The boreholes will be extended to 3km, a depth where the water temperature is expected to exceed 120C.

New development for Southampton Geothermal DH Project

COFELY District Energy has secured GBP200,000 from Department of Energy and Climate Change's (DECC) Deep Geothermal Challenge Fund to part-fund the refit of the Southampton District Energy Scheme's deep geothermal well. The Southampton District Energy Scheme has been in operation since 1986. It utilises heat from a 1.7km deep geothermal spring – supplemented by large scale combined heat and power (CHP), biomass and conventional boilers – to generate electrical power, hot water and chilled water (tri-generation).

Europe's largest geothermal heat pump is up and running in London

The London shopping centre 'One New Change' has officially begun use end January 2011 of the largest geothermal heat pump in Europe. Drilling to a depth of 150 metres, Land Securities has installed a ground source energy system which is the largest commercial application of the technology in Europe: drilling to a depth of 150 metres and installation of pipework which spans 60km in length. According to the owner of the shopping centre the system will save around £300,000 on heating bills each year.

A Renewable Heat Incentive (RHI) Scheme launched in the UK

The UK Government announced the details of the Renewable Heat Incentive policy to revolutionise the way heat is generated and used in buildings and homes. This is the first financial support scheme for renewable heat of its kind in the world. Full details on the RHI scheme are available online.

NEWS of 2011

Canadian Company Magma Energy is Awarded Two Concessions in Italy

Canadian company, Magma Energy Corp., has announced that its Italian subsidiary has been awarded two geothermal exploration concessions in Italy, known as PR Mensano ("Mensano") and PR Roccastrada ("Roccastrada").

Both Mensano and Roccastrada are in western Tuscany near the town of Larderello, a renowned geothermal power production region. The 21,256 hectare Mensano concession lies to the east of Larderello, while the 27,190 hectare Roccastrada concession is to the south of the town. Both Mensano and Roccastrada exhibit the area's typical sedimentary and metamorphic rock formations and overlie a large inferred heat source that powers the major regional geothermal system.

Dr. Catherine Hickson, Magma's Vice-President Exploration and Chief Geologist, said, "Magma is very pleased to have won these concessions. This is one of the world's largest geothermal power regions and we are confident there is abundant potential for the discovery of additional resources. Italy also has excellent incentives in place for green energy, with power prices as high as €180/MWh."

Geothermal Plants Operate as Normal in Japan

Assessments of Japans geothermal infrastructure in the aftermath of the powerful earthquake have reported the geothermal power plants within the zone effected by the seismic activity, Oku-Haizu in Fukushima; Sumikawa and Ohnuma in Akita, are all operating within normal parameters.

All the other geothermal plants in Japan are producing more or less the same output as before the earthquake, although they had to close briefly on a number of occasions, for emergency precautionary measures.

Creation of an EGS Global Group

Two EGEC members (GPC IP in France and EGS Ltd in the UK) have just announced an industrial alliance with 2 other companies for promoting EGS technology globally. The founding companies of this EGS Global Group include Hot Dry Rock from Australia; EGS Energy Limited from UK; Germany-based BESTEC GmbH; and, GPC Instrumentation Process from France.

Iceland Plans Energy Cable to Europe

Iceland is considering building the world's longest sub-sea electric cable to allow it to sell its geothermal energy to Europe. Industry Minister Katrin Juliusdottir said Iceland is undertaking a feasibility study for a cable between Iceland and Scotland.

The Landsvirkjun spokeswoman, Ragna Sara Jonsdottir, further confirmed this by stating that Iceland is considering building the world's longest sub-sea electric cable to sell its geothermal energy to Britain, Norway, Holland and Germany. Depending on the destination country, the cable would be between 1,200 and 1,900 kilometres (745-1,180 miles) long.

At the same time the European Commission is launching an energy infrastructure package to determine priorities for future energy infrastructure. The EC produced a report at the end of 2010, which is currently under consideration by the European Parliament. EGEC supports the idea that this project should be considered as a project of European interest.

Geothermal: an innovative solutions for snow-melting

During the past winter, several airports closed, trains have been delayed and roads have been blocked due to the snow. Geothermal is an innovative solutions for snow-melting and de-icing of transport infrastructures.
Find more information in our EGEC brochure.

Looking Beyond Europe for Best Practice for RES

The Indonesian government will soon issue a ministerial decree ordering state electricity company PT PLN to buy power produced by geothermal power plants across the nation to reduce the company's energy procurement costs amid surging global oil prices. The decree will pave the way for the resumption of several geothermal projects that have been delayed for a long time by disagreement over their proposed electricity prices.

TubeFuse Technologies, new high-integrity tubular solutions

TubeFuse is part of Shell Technology Ventures Fund 1 B.V., which is managed by Kenda Capital, an independently-owned company. The fund is focused at reducing the cost of energy by accelerating the development and deployment of new technologies.

Shell and TubeFuse spent many years developing a breakthrough technology for deploying down hole completions (casing strings) without the need for thread connections. This new technology utilizes a Shielded Active Gas forge-welding (SAG-FW) process which produces a gas tight and highly reliable connection that is as strong as the main tubular with a near flush ID and OD. If you want more information, please visit the TubeFuse Website.

Launch of a new technological platform for geoscientists

Sustainable Earth Sciences (SES) 2011 is a unique new event organized by EAGE in cooperation with CO2GeoNet, IEAGHG, IGA (European Regional Branch) and House of Geoscience. The aim of these organizations is to create a platform for geoscientists to meet, learn and discuss about technologies for sustainable use of the deep sub-surface. This has resulted in organizing the 1st Sustainable Earth Conference & Exhibition, which will provide an exciting new platform for geoscientists working in this area.

The main objective of the meeting is to exchange knowledge and technology among the geoscientists within the different disciplines (CO2 storage, Deep-Hearth storage, Geothermal energy).

For more information, please visit the EAGE website or contact ses@eage.org.

Feasibility Study for Europe-Wide CO2 Infrastructures

The EC commissioned in December 2009 a feasibility study for Europe-wide CO2 infrastructures. The purpose of the study was to develop a complete and integrated database of European CO2 sinks and sources and identify the main outline of a CO2 transport infrastructure for different scenarios. EGEC is happy with the conclusions of this study: 'abundant onshore storage could be precluded by public concern or conflicts of resource utilization with hydrocarbons or geothermal heat'.

Geothermal training by BRGM & ADEME: « Introduction to geothermal energy»

Two training sessions on GSHP will be organised from the 15th to 17th of June 2011 in Paris, and from 17th to 19th October 2011 in Orléans. More

NEWS: EGEC

Launch of New EGEC Website imminent; visit http://egec.info for a PREVIEW!

2nd Annual Conference of the European Technology Platform on Renewable Heating and Cooling
Budapest, Hungary; 5th & 6th May 2011

Registration for the conference is now open online!

IN ADDITION, participants can sign-up for an International Geothermal Workshop following the RHC-Platform Conference, from 14.00-17.00 of Friday 6th May as part of the 5th RENEXPO® CENTRAL EUROPE, presented by EGEC in collaboration with REECO Hungary Kft entitled:

'Geothermal Markets in the Pannonian Basin'

If you would like to participate in the Workshop please use this online form, signalling the title in the message.

Background of the RHC-Platform Conference

Facing the need to define research priorities, timeframes and budgets on a number of strategically important issues with high relevance on biomass, geothermal and solar thermal energy technologies, the RHC European Technology Platform confronts the complex scientific and technological challenges to support the growth of the European renewable energy industry, which is a task beyond the capacity of governments, companies or research centres acting on their own. The European Technology Platform on Renewable Heating and Cooling (RHC-Platform) has emerged as the reference decision making forum for hundreds of stakeholders, representing 23 EU Member States.

Endorsed by the Hungarian Government as official event under the auspices of the Hungarian Presidency of the EU, and organised with the financial support of the European Commission, this event will provide the opportunity for industry executives and leading scientists to engage in an effective dialogue with the participation of high-level officers from the EU, national and local administrations.

GeoPower Europe 2010 Conference

More than 200 company representatives from 20 countries attended the GeoPower Europe 2010 Conference, « Turning up the heat on geothermal energy in Europe », organized 8th –9th December in Paris. This key geothermal event gathered investors, project developers, regulators, manufacturers, utilities, oil majors and drilling companies. This was THE crucial event to get involved in this rapidly developing market, and the next Conference will be organized in Milan, Italy on the 5th to 7th December 2011.

Find more information on **GeoPower Europe 2011 Conference** here.

Geotrainet Week, 24th -27th January 2011

Training & Conference on GSHP

Geotrainet Week took place from 24th to 27th January 2011 in Brussels. The Geotrainet project (supported by the program Intelligent Energy Europe - Altener) aims at developing European Education programme for Geothermal HP designers and drillers as an important step towards the certification of geothermal installers, required by the RES Directive from 2012.

There were two main events:

The 8th Training courses for designers and drillers in Ground Source Heat Pumps (GSHP) systems: took place, encompassing two different types of training :

- a training course for GSHP designers
- a training course for GSHP drillers.

The Geotrainet Final Conference took place on January 27th and was divided into a number of sections:

- Geotrainet results: Education and training for Shallow Geothermal Specialists
- Certification - Implementation of the Directive on Renewal Energy Sources, towards the certification of GSHP installers

Information on the outcomes of the Geotrainet Project can be found on the Geotrainet Website.

Qualicert Project

The Qualicert project, which started in July 2009. aims at contributing to the development, by December 2011, of a European **set of common "key success criteria"** for certification or equivalent qualification schemes for installers of building -integrated biomass stoves and boilers, shallow geothermal energy systems, heat pumps, photovoltaics and solar thermal systems so that they can be mutually recognisable. The first phase of the project has been implemented and a manual has been published, and is available on the Qualicert website.

ThermoMap Project

Erlangen, Germany and Bucharest, Romania have hosted the first two meetings of partners of the ThermoMap project, with work well and truly commenced. ThermoMap stands for "Area mapping of superficial geothermic resources by soil and groundwater data" and started in September 2010. By September 2013, ThermoMap aims at fostering the environment information in order to develop shallow geothermal systems across Europe.

Much geographical data exists in the European Member States that is not accessible for the public. ThermoMap will develop a solution to combine the existing datasets for an area visualisation of geothermic resources by soil and groundwater data.

ThermoMap intends to visualize geothermal resources in superficial zones of the earth crust to
10 m depth by maps of medium to larger scales

Objectives of the project are :

- Exploitation of digital content by citizens, governments and businesses (overall target of the programme) ;
- Provide a target group specific ICT system ;
- Increase the use of spatial data by public and private sector organisations and citizens especially in the field of superficial geothermal resources ;
- Harmonisation of geographical information for superficial geothermal resources across Europe
- Involvement of European stakeholders
- Widespread dissemination.

EGEC is responsible for the dissemination aspect of the project, and to this end the ThermoMap website has been launched on the 15th of December.

NEWS: EGEC Members

EGS Energy forms alliance with Slovakian deep drilling technology pioneers Geothermal Anywhere

EGS Energy and Geothermal Anywhere intend to work together in coming months on applications for European grants under the EU's Framework Programme 7 in the Nanosciences, Nanotechnologies, Materials and new Production Technologies Calls, amongst others. Geothermal Anywhere is a drilling technology company located in Bratislava, Slovakia, that is developing a new deep drilling technology for the geothermal and oil/gas sectors based on non-contact methods of rock disintegration. An innovative patented concept has been created by a proven team of engineers and entrepreneurs, which amounts to a breakthrough in this specialty. This deep drilling approach is a rock crushing technology based on bringing together an electrical discharge, pulsed plasma and a jet of water in appropriate combination. Geothermal Anywhere believes that it will be able to integrate its proven technologies in high temperature and pressure environments. One of the main issues for the deep geothermal industry is the cost of drilling to the required depths as a result of the time that this takes. Geothermal Any where's radical method of drilling avoids the inherent limitations of conventional rotary drilling and associated transport of the drilling spoil. The possibility of reducing the drilling time significantly using this technology is a very attractive prospect for EGS Energy.

Start-up of new ENEL GREEN POWER geothermal power plant in Italy

Today saw the start-up of the new Radicondoli 2 geothermal power plant in the town of the same name in the province of Siena. With its 20 MW of capacity, the new unit adds to the 40 MW produced by the existing power plant, giving the facility a total of 60 MW of installed capacity. Once operating at full output, the plant will be able to produce more than 140 million kilowatt hours of electricity, equivalent to the consumption of 55,000 households, and avoid the emission of 200,000 tonnes of CO2, in addition to saving 55,000 TOE (tonnes of oil equivalent) of fossil fuels per year. The project also includes the drilling of three new wells and the deepening of an existing well, work that is still under way.

Mannvit Awarded Contract for Renewable Energy Consulting in Serbia

Mannvit as a member of a Consortium lead by the Spanish consulting firm Eptisa has recently been awarded a new contract in the Republic of Serbia. The European Union has allocated 1.5 million Euro for a project entitled "Promotion of Renewable Energy Sources and Energy Efficiency" that aims to contribute to sustainable development in Serbia. This consulting project is being conducted for the Serbian Ministry of Mining and Energy, to explore renewable energy sources, specifically geothermal energy and combined heat and power (CHP) potential. Mannvit will, for the next 18 months, act as project coordinator in the mapping of geothermal energy resources in Serbia with the consortium partners, select the three most favorable areas in cooperation with the ministry and conduct pre-feasibility studies for geothermal utilization at the three sites. Mannvit will also contribute to the study of the CHP market in Serbia.

AXPO enters the geothermal market

The Swiss energy company Axpo, new member of EGEC, established a competence center for geothermal energy in Glattbrugg. The first project the company is getting involved in is a participation at a promising and drill ready project in Taufkirchen in Bavaria/ Germany. Axpo plans to operate its own long-term geothermal power plants at suitable locations in Switzerland. "Geothermal Energy has a strong technical potential in Switzerland with a long term energy generation of up to 17 TWh", declared CEO Heinz Karrer of Axpo Holding AG.

PannErgy closes acquisition of geothermal energy company

Alternative energy company PannErgy said it closed the acquisition of geothermal peer Berekfördő Energia. The company, which generates 320 kW of electricity and 450 kW of heat energy, has capacity to generate HUF 55 – 65 million of EBITDA a year, PannErgy said.

Earlier, PannErgy said the company was worth about HUF 200 million. A second good news for Pannergy after the positive decision of the EIB for approving the credit facility (EUR 110 million) of PannErgy Plc. to carry out geothermal projects.

PannErgy Geothermal Power Plants Announces win of HUF 316 million State Grant

PannErgy Geothermal Power Plants said its project company Miskolci Geotermia won a HUF 316 million state grant. PannErgy's unit won the grant in the first part of a two-part tender to meet demand for heat with renewable energy sources. PannErgy will apply for a grant in the second part of the tender, which supports the drilling of wells and installation of equipment, in the first half of 2011. The company could win up to HUF 1 billion in the second part of the tender.

Geothermal Engineering plans to make a a formal funding announcement for a geothermal plant in Redruth, Cornwall

Ryan Law, managing director of Geothermal Engineering, said the firm has been holding extensive meetings with an unnamed potential investor from the oil and gas sector for its proposed £40m geothermal plant in Redruth, Cornwall. The company is planning to make a formal funding announcement in the coming months and then expects to start drilling the first well by October this year. The 4.5km-deep well is expected to access rocks that reach temperatures of up 200°C and is intended to be followed by two further wells. Geothermal Engineering has already raised the £10.5m needed to complete the first well and test the viability of the site through a mix of private sector backers and a £1.5m grant awarded by the Department of Energy and Climate Change in 2009. But the company now needs to raise a further £30m to complete the project, if it is to achieve its goal of bringing the plant online in 2013.

An exploration team in Newcastle plan to drill through old mining tunnels to search for geothermal energy under the city centre. Researchers from Newcastle University who are leading the project hope it could initially provide up to 5MW of thermal energy, with potentially more heat and electricity from future boreholes. Drilling is expected to begin next week, pending a number of official permissions, on an exploratory 2km borehole.

EVENTS

April 2011

EGU 2011 Annual Meeting, 3rd -8th April 2011, Vienna, Austria.
Website

IIR International Conferences
Sources/Sinks alternative to the outside Air for Heat Pump and Air-Conditioning Techniques (Alternative Sources - AS) & International Sorption Heat Pump Conference, 5th -8th April 2011, Padova, Italy
Website

EUSEW 2011 / European Union Sustainable Energy Week, 11th—15th April.
Website

Renewable Energy & Energy Efficiency Congress for South East Europe, 13th-15th April 2011, Sofia, Bulgaria
Website

May 2011

RHC-Platform Conference, 5th & 6th May 2011m Budapest, Hungary
Website

EREC 2011: Europe's Renewable Energy Policy Conference, 23rd & 24th May 2011, Brussels, Belgium
Website

June 2011

Renewable Energy World Conference & Expo: Europe, 7th-9th June 2011, Milan, Italy
Website