

ScienceDaily® Your source for the latest research news

Red Bull JOVA REMIX SESSION

E VOLA A NEW YORK CON LORENZO AI RED BULL STUDIOS

UPLOAD YOUR MIX

News Articles Videos Images Books Search ... Go

Health & Medicine Mind & Brain Plants & Animals Earth & Climate Space & Time Matter & Energy Computers & Math Fossils & Ruins

Science News

... from universities, journals, and other research organizations

Save Email Print Share

Geothermal Energy: Intelligent Use Of The Earth's Heat

Feb. 27, 2009 — Geothermal energy is increasingly contributing to the power supply world wide. Iceland is world-leader in expanding development of geothermal utilization: in recent years the annual power supply here doubled to more than 500 MW alone in the supply of electricity. And also in Germany, a dynamic development is to be seen: over 100 MW of heat are currently being provided through geothermal energy.

Share This:

Like 18

Tweet 0

+1 0

Share 39

Alone in the region of Travale, in the pioneering country Italy, a team of European scientists have localized geothermal reservoirs, holding a potential comparable to the effectiveness of 1.000 wind power plants. This is one of the results presented at the international final conference of the project "I-GET" (Integrated Geophysical Exploration Technologies for deep fractured geothermal systems) in Potsdam. The aim of this European Union project, in which seven European nations participated, was the development of cutting-edge geophysical methods with which potential geothermal reservoirs can be safely explored and directly tapped.

"The new methods deliver important decision-support for the selection of sites for future geothermal projects. With this we can considerably reduce the risk of expensive misdrills," explains Dr. Ernst Huenges, Head of Geothermal Research at the host institute GFZ - German Research Centre for Geosciences.

The newly developed approaches have been tested at four European geothermal locations with different geological and thermodynamic conditions: high-temperature reservoirs have been examined in Travale/Italien (metamorphic rocks) and in Hengill/Island (volcanic rocks), two deposits with medium-temperature in deep sediment rocks are Groß-Schönebeck/Germany and Skierniewice/Poland. The methodology is based on the measurement of seismic velocities and electrical conductivity in the underground which deliver information on the rock-physical characteristics at depth. Different methods have, hereby, been combined, in addition to borehole measurements and rock-analysis.

I-GET experiments have been carried out using a case study in the surrounding of the GFZ research borehole at Groß Schönebeck, northwest of Berlin. And here, extensive knowledge from experimental investigations in the in situ geothermal-laboratory in Groß Schönebeck is already available. The geological conditions prevailing in the North German Basin are representative for further parts of central Europe, and thus the research results are also of high interest beyond Germany's borders.

The GFZ, member of the Helmholtz-Association of German Research Centres, had the leading role in I-GET and was able to contribute with its acquired knowledge in the field of low-temperature geothermal reservoirs.

The results of I-GET emanate worldwide: experts from Indonesia, New Zealand, Australia, Japan and the USA were among the 120 scientists and industry representatives from the 20 countries who participated at the meeting.

"Reliable geothermal technologies are in demand worldwide. Even countries with a long experience in geothermal energy such as Indonesia and New Zealand are interested in the results acquired in I-GET," says Dr. Ernst Huenges. Therefore, the GFZ is further developing its geothermal research and is currently setting up an International Centre for Geothermal Research, which will, in particular, carry out application-oriented large-scale projects on a national and international level.

Share this story on Facebook, Twitter, and Google:

Like 18 Tweet 0 +1 0

Other social bookmarking and sharing tools:

Share 39



Testing at Groß Schönebeck, 2003. (Credit: Copyright GFZ Potsdam)

Related Topics

- Matter & Energy**
  - Energy Technology
  - Energy and Resources
  - Energy Policy
- Earth & Climate**
  - Energy and the Environment
  - Renewable Energy
  - Geography
- Articles**
  - Geothermal power
  - Power station
  - Heat pump
  - Desalination
  - Biomass
  - Renewable energy

Iveco STRALIS

www.iveco.com/Stralis

Il lavoro pesante diventa leggero. Registrati e scopri le promozioni!

Thermal heat test

FLIR.com/Applications/Testing

Thermal Cameras for Quality Test Procedures. Order Free Brochure!

Clienti per Fotovoltaico

www.ClientiPerTe.com

Ti forniamo richieste da clienti che vogliono impianti fotovoltaici

Related Stories

Mining for Heat: Abandoned Mine Tunnels Might Ferry Geothermal Energy from Deep Underground (May 2, 2012) — Abandoned mine tunnels might ferry geothermal energy from deep underground to help heat homes and ... > read more

Geothermal Mapping Report Confirms Vast Coast-To-Coast Clean Energy Source in U.S. (Oct. 25, 2011) — New research documents significant geothermal resources across the United States capable of producing more than three million megawatts of green power — 10 times the installed capacity of coal power ... > read more

Geothermal Industry to Get Boost from New Research (July 10, 2011) — An ambitious project to understand and characterize geothermal potential at nearly 500 sites throughout the Great Basin in the western U.S. is yielding a bounty of information for the geothermal ... > read more

Mines Could Provide Geothermal Energy (July 31, 2009) — Mine shafts on the point of being closed down could be used to provide geothermal energy to local towns. The method engineers have developed makes it possible to estimate the amount of heat that a ... > read more

Interested in ad-free access? If you'd like to read ScienceDaily without ads, let us know!

Just In: Polar Ecosystems Vulnerable to Tipping Points > more breaking science news

Social Networks

Follow ScienceDaily on Facebook, Twitter, and Google:

Facebook Twitter Google+

Recommend ScienceDaily on Facebook, Twitter, and Google +1:

Like 65k Tweet 27K +1 8.7k

Other social bookmarking and sharing tools:

Share 93,5K

Breaking News ... from NewsDaily.com

- Restored Star Trek ship Galileo arrives in Houston
- Chemist hopes to be Germany's first black lawmaker
- Masses of plastic particles found in Great Lakes
- 'Comet of the Century' already may have fizzled out
- Monogamy may sound sweet, but why it evolved isn't
- Pigs smart as dogs? Activists pose the question
- Russian cargo ship docks with space station
- New NASA telescope scours sun in 'grand opening'
- more science news

In Other News ...

- Turkey police fire tear gas to disperse protesters
- Brazil invests in Sao Paulo bus services that set off protests
- Egypt orders camps cleared, protesters buckle down

Need Power? Think GlobTek!

- AC/DC Power
- Batteries and Chargers
- ITE and Industrial Power
- Medical Power

www.globtek.com

**Story Source:**

The above story is based on materials provided by [Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences](#).

*Note: Materials may be edited for content and length. For further information, please contact the source cited above.*



### New Geothermal Heat Extraction Process To Deliver Clean Power Generation

(July 20, 2009) — A new method for capturing significantly more heat from low-temperature geothermal resources holds promise for generating virtually pollution-free electrical energy. Scientists will determine if ... [> read more](#)

- ▶ 989 killed in Iraq in July, most since 2008: govt
- ▶ Berlusconi lawyers asks supreme court to acquit him of tax fraud
- ▶ In Tunisian protest square, barriers reflect deeper divide
- ▶ Mexican President Pena Nieto has successful thyroid surgery
- ▶ Mexican president's thyroid surgery successful
- ▶ [more top news](#)

Need to cite this story in your essay, paper, or report? Use one of the following formats:

- APA Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences (2009, February 27). Geothermal Energy: Intelligent Use Of The Earth's Heat. *ScienceDaily*. Retrieved August 1, 2013, from <http://www.sciencedaily.com/releases/2009/02/090227072650.htm>
- MLA

*Note: If no author is given, the source is cited instead.*

### Box Doccia da 54,90 €

[www.docciabox.com](http://www.docciabox.com)

Personalizza misure e colori Spedizioni in un giorno lavorativo



### Gas Condominio e Aziende

[www.gasfacile.it/Aziende\\_Gas](http://www.gasfacile.it/Aziende_Gas)

Perché Spendere di più per il Gas? Fino 10% Meno. Confronta e Risparmia



### Cetona di Iampone

[WeightWorld.it/RaspberryKetone](http://WeightWorld.it/RaspberryKetone)

100% estratto di chetone di Iampone II miglior dimagrante naturale



AdChoices

## Search ScienceDaily

Number of stories in archives: 140,539

Find with keyword(s):

Search

Enter a keyword or phrase to search ScienceDaily's archives for related news topics, the latest news stories, reference articles, science videos, images, and books.

Recommend ScienceDaily on **Facebook**, **Twitter**, and **Google**:



Other social bookmarking and sharing services:



## Science Video News



### Bringing Sunlight Inside

Photovoltaic panels have a new design: concentric circles that focus the sun's rays on miniaturized modules. Having the panels automatically sense. ... [> full story](#)

- ▶ Biological Engineers Generate Natural Gas with Bacteria
- ▶ Mechanical Engineers' Device Helps Electricity Conservation
- ▶ Engineers Test Ventilated Seats And Thermal-Acoustic System To Make A/C Energy-Efficient
- ▶ [more science videos](#)

## Strange Science News

- ▶ Bird Brains Predate Birds Themselves: 'Flight-Ready' Brain Was Present in Some Non-Avian Dinosaurs, CT Scans Indicate
- ▶ Robots Strike Fear in the Hearts of Fish: Anxious Zebrafish Help Researchers Understand How Alcohol Affects Fear
- ▶ Researchers Successfully Spoof an Million Yacht at Sea
- ▶ Guided Growth of Nanowires Leads to Self-Integrated Circuits
- ▶ Hide, Ambush, Kill, Eat: The Giant Water Bug Lethocerus Patruelis Kills a Fish
- ▶ [more strange science news](#)

## Free Subscriptions

... from ScienceDaily

Get the latest science news with our free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader.

- ▶ [Email Newsletters](#)
- ▶ [RSS Newsfeeds](#)

## Feedback

... we want to hear from you!

Tell us what you think of ScienceDaily – we welcome both positive and negative comments. Have any problems using the site? Questions?

- ▶ [Leave Feedback](#)

Save Email Print Share

About ScienceDaily® | Editorial Staff | Awards & Reviews | Contribute News | Advertise With Us | Contact Us | Privacy Policy | Terms of Use  
 Copyright 2013 by ScienceDaily, LLC or by third-party sources, where indicated. All rights controlled by their respective owners.  
 Content on this website is for informational purposes only. It is not intended to provide medical or other professional advice.  
 Views expressed on this website do not necessarily reflect those of ScienceDaily, its staff, or its partners.