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# **Book tips:**

#### • Greg Pahl: "POWER FROM THE PEOPLE

: Greg Pahl's Power from the People is an inspirational guide to the burgeoning community-power movement. His case studies of people who are making a difference are often tales of endurance and survival, but also powerful testaments to the human spirit.: Language: English)

• Franz Alt: "Global Cooling – Strategies for Climate Protection ". (The reader is provided with an overview of recent developments and failings in and successful instruments for fighting climate change and global warming. Language: German and English)

• Michail Gorbatschow: "Alles zu seiner Zeit: Mein Leben ". (The amazing autobiography of a great statesman and a touching

love story. Language: German)

#### VIS NOVA Nr. 10 September 2013



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# **EUROPEAN UNION EUROPEAN REGIONAL** DEVELOPMENT FUND





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**Project Partner news** 

## Partnermeeting and international conference in Szekszard (Hungary) from 18 November to 20 November 2013

The partners of the VIS NOVA project will meet on Monday, November 18, and discuss project issues. The international conference is planned on Tuesday. A detailed program will be available briefly.

On the third day, November 20, an energy symposium will take place. Details will be as well available in brief.

## Exchange of experts and energy symposium in Schwäbisch Hall (Germany) on the 04. and 05. December 2013

At the beginning of December a one-day energy symposium and exchange of experts will take place. Subjects from the VIS NOVA project are presented mainly on the first day at the energy symposium. Besides the presentation of the heatcadastre of the rural district of Schwäbisch Hall. which are collected in the context of the project, predominantly best-practice examples from the rural district of Schwäbisch Hall will be presented.

# 2 monthly international NEWSLETTER VIS NOVA



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The green electricity storage in Gaildorf will be among the presented projects. It is about to be the first project of this kind in the whole world. The distinctive feature of the planned creation is the simultaneously working of four wind turbine systems, which adopt the function of an Obersee at a pumped storage hydro power station. As far as 160.000 m<sup>3</sup> water are stored at the towers of the wind energy systems. This water runs back in the valley and produces electric power. The particularly excessive power produced by the use of wind power serves for pumping up the water in the towers again.

On the second day several presentations about renewable energy are offered mornings. In the afternoon several systems and plants will be visited. A detailed program will be published soon.





# **Project Partner news**

# Heat-cadastre is being developed by the rural district of Schwäbisch Hall

The rual district of Schwäbisch Hall initiates to develop a heat-cadastre in the context of the project VIS NOVA. "In the first place, in fact it should be created an own solar-cadastre," reported Heinz Kastenholz, project leader of VIS NOVA "but then the county of Baden-Württemberg fortunately bet us to the draw and we could save the money." Thus, the solarcadastre of the county can be used for free now and could be completed with a heat-cadastre. Each citizen in the county is able to check with a few mouse clicks whether his roof top can handle a photovoltaic system. In contrast, the administration gains more information about the heat requirement with the heat-cadastre. These information serve as a basis for climate protection and energy concepts. Furthermore, heat sinks, which are possibly interesting to some owners of local heat distribution networks, can be localized. The bureaus for limited calls for tender are currently selected. In December the results of the energy symposium shall be presented.

# **National news**

#### Renewable energy generates 17 billion € in 2012

In 2012, the increasing use of wind, sun and biomass led to a record level of 17 billion € nationwide creation of value. This is a result of a current study for Greenpeace realized by the institution for economic research (IÖW).

The cities and municipalities benefit with two-thirds of the creation of value. "The renewable energies push the economy in structurally weak rural areas", told Andree Böhling, expert for energy in Greenpeace. This engine may not be killed carelessly by the German government with its reform.



Beschäftigungseffekte durch den Ausbau Erneuerbarer Energien

http://www.greenpeace.de/fileadmin/gpd /user\_upload/themen/energie/20130902 -Greenpeace-Studie-Wertschoepfung.pdf



# Study proves extensive reduction of CO2 by waste heat recovery

Until 2010, approximately 100 million tons of CO2 emissions are economized by using waste heat recovery systems. By an increasing use of modern air-handling systems plus cooling and climate systems with waste heat recovery function in the sector of nonresidential buildings, in 2025 possible extra savings of 50 million tons of CO2, in compari-

son to the year 2010, are predicted.

In 2025 the annual possible savings of primary energy in non-residential buildings are thereby estimated with round about 2.630 Petajoule. This is a result of a study of the college in Trier which was published in June 2013. In fact only 8% of the whole existing buildings in Germany persist of non-residential buildings like bureau and administrative buildings, commercial buildings or hospitals. But they mark two-thirds of the energy requirement.

http://www.daikin.de/news/publikumspresse/20 13/waermerueckgewinnung.jsp

ply. In future, the electrical power supply of Germany leans more and more on producers due to the development of renewable energies. From wind plants at the coast and inner land across biogas systems in agricultural regions till solar roofs: eco-friendly energy made out of renewable sources often originates from rural regions, which even generate an increasing overrun of energy. These overruns may be transported to regions with higher needs through power supply systems. Besides the development of renewable energies, the stabilization of the power supply systems occupies an important position. Schleswig-Holstein plays for both a key role as a region, like the agency for renewable energies (AEE) mentioned in a press conference in Kiel on Wednesday. http://www.unendlich-viel-

Renewable Energy from rural district is well received

Seminal investments in systems and networks enable a clean electrical power sup-

gie.de/de/detailansicht/article/4/erneuerbare -energie-vom-land-kommt-an.html

# Congresses & exhibitions

#### 17.09.2013-19.09.2013/ Stuttgart, Germany <u>HYBR</u>ID Expo

http://www.messestuttgart.de/de/besucher/vera nstaltungsdetalls/termin/824/a/showev ent/c/Fair/

#### 24.09.2013-25.09.2013/ Kassel, Germany

5th Congress "100% Renewable-Energy-Regions" (more information at: <u>http://www.100-eekongress.de/englishinformation/</u>)

#### 25.09.2013/ Budapest

Energy Portfolio Manager Seminar (further information at: <u>http://www.iir-</u> <u>hunga-</u> ry.hu/rendezvenynaptar?i d=1440&nap=1)

#### 25.09.2013 - 27.09.2013/ Budapest, Hungary

ÖKOINDUSTRIA – International Environmental Industry, Energy Efficiency and Renewable Energy Source Trade http://okoindustria.hu/en

#### 26.09.2013 - 29.09.2013/ Augsburg, Germany Fair:

The 14th International Energy Trade Fair REN-EXPO®. http://www.renexpo.de/



### International news

#### Largest ice sheet in the world sensitive to global warming

The East Antarctic Ice Sheet seems to be more vulnerable to the effects of cli-mate change than previously thought. For the first time, an international re-search team from the Universities of Durham and Zurich has studied the long-term development of outlet glaciers using satellite images, revealing that the advance and retreat of the 175 glaciers studied are closely linked to climatic changes.



http://www.mediadesk.uzh.ch/articles/2013/ausla ssaletscher en.html

#### Policy Support for Renewable Energy **Continues to Grow and Evolve**

New Worldwatch Institute trend examines global support for renewable energy production.

Throughout much of the world, support policies for renewable energy technologies have increased dramatically over the last decade. Historically, policy design has evolved from supporting research and development in the 1970s and 1980s to today's focus on technology deployment and market development. Starting in the mid-2000s, deploymentfocused policies have been enacted at a rapid pace, growing from 48 countries with policies in place by mid-2005 to a total of 127 countries as of early 2013. http://vitalsigns.worldwatch.org/vstrend/policy-support-renewable-energycontinues-grow-and-evolve

#### Innotech Solar modules replace traditional greenhouse roofs

High temperature performance produces greater energy yield. The solar modules produced by Scandinavian-German manufacturer Innotech Solar AS (ITS) are particularly suitable for warm regions, as they demonstrate an outstanding temperature coefficient, meaning that they retain their excellent level of performance even in high ambient temperatures. A typical application where this performance can bring significant benefits is in commercial greenhouses. By constructing the roof with solar modules instead of glass green power can be generated as well as improving the light and temperature conditions for



plants, without the need for additional shading systems.



http://www.innotechsolar.com/en/news/single/ artikel/its-modules-replace-traditionalgreenhouse-roofs.html

#### Planning and Installing Photovoltaic Systems

A Guide for Installers, Architects and Engineers. 3rd Edition.

New third edition of the bestselling manual from the German Solar Energy Society (DGS), showing you the essential steps to plan and install a solar photovoltaic system. With a global focus, it has been updated to include sections on new technology and concepts, new legislation and the current PV market. http://www.routledge.com/books/details/97818 49713436/

ciency. nications".



http://www.empa.ch/plugin/template/empa/3/ 139085/---/l=2

The positive sides of doping Empa scientists boost CdTe solar cell effi-

Flexible thin film solar cells that can be produced by roll-to-roll manufacturing are a highly promising route to cheap solar electricity. Now scientists from Empa, the Swiss Federal Laboratories for Materials Science and Technology, have made significant progress in paving the way for the industrialization of flexible, light-weight and low-cost cadmium telluride (CdTe) solar cells on metal foils. They succeeded in increasing their efficiency from below eight to 11.5 percent by doping the cells with copper, as they report in the current issue of "Nature Commu-



# Congresses & exhibitions

#### 30.09.2013-04.10.2013 Paris. France

28th European Photovoltaic Solar Energy Conference and Exhibition (28th EU PVSEC)

# 07.09.2013-09.09.2013 Innsbruck, Austria **Hvdro 2013**

#### 09.10.2013-10.10.2013 Budapest, Hungary **CEB®** Clean Energy **Building Expo**

18.11.2013-20.11.2013 Berlin, Germany 8th International Renewable Energy Storage Conference and Exhibition (IRES 2013)

28.11.2013-30.11.2013 Salzburg, Austria RENEXPO® PV