

>intelligentenergy. | 04 newsreview

News review of the Intelligent Energy – Europe programme, N°4 – December 2008

Intelligent Energy  Europe

> In the spotlight

Energy-efficient buildings



Renewable energy



11

*New4Old
New technology for old buildings*



Transport



15

*Starbus
Choosing the greenest bus*



Integrated initiatives



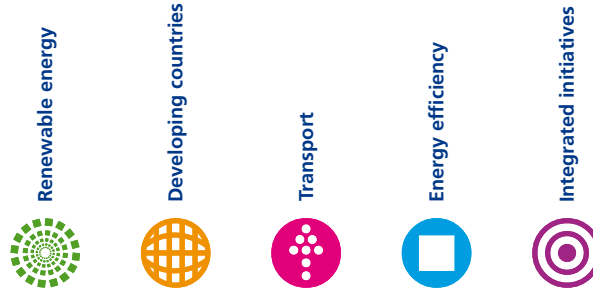
16

*Active Learning
Passing on the message*

MONEY MATTERS

21

2009 call for proposals



CONTENTS



Photos: Pages 2, 5, 9 © EACI,
p. 7 & 8 © David Hills/iStockphoto.com,
p. 9 © minikli/iStockphoto.com,
p. 10 © BartColli/iStockphoto.com,
p. 13 © fpml/iStockphoto.com,
p. 14 © John Bloor/iStockphoto.com,
p. 15 © Serdar Yagcili/iStockphoto.com,
p. 16 © Bart Coenders/iStockphoto.com,
p. 18 © Robert Churchill/iStockphoto.com.

Editorial	1
EU Sustainable Energy Week 2009: showing the way	2
Covenant of Mayors: Europe's cities break new ground	2
Enterprise Europe Network: making the business case for intelligent energy	3
Be inspired: IEE projects and intelligent energy guides at your fingertips	3
In the spotlight: energy-efficient buildings	4
High marks for Europe's low-energy houses	4
Waking a sleeping giant: energy savings in social housing	5
News from the field	6
Energy-efficient buildings	6
Energy efficiency in industry	7
Energy-efficient equipment and products	8
Renewable electricity, heating and cooling	10
Alternative fuels	13
Energy-intelligent transport	14
Energy education	16
Monitoring and evaluation	16
Financing mechanisms and incentives	17
Sustainable energy communities	17
Sustainable energy in developing countries	18
Editorial information	20
Money matters	21
Sixty new IEE projects to kick off this year	21
Sustainable freight transport: applying for Marco Polo funding in 2009	21
Fresh funding for intelligent energy projects: the 2009 call for proposals	22



04

Dear reader,

What a start to 2009! The oil price has come down spectacularly; financial turmoil has brought the world to the brink of global recession; and the Russia-Ukraine gas dispute led to supply cuts just at the time of a severe cold snap.

All of these developments have important consequences on our energy systems. There are fears that the financial crisis will bump climate change down the list of priorities in favour of more immediate concerns, and that cheaper oil will make investments in intelligent energy solutions less attractive.

But greater energy efficiency and a growing share of renewable energy are at the same time a strong antidote to the slowing global economy with many beneficial effects: cost savings for producers and consumers, increased profits for companies, new jobs, reduced vulnerability to fossil fuel supply cuts and price hikes, and continued success on the growing global markets for green energy technologies.

The political will to apply the 'intelligent energy cure' and turn Europe into the leading dynamic low-carbon economy of the 21st century is there. Last December, EU leaders reached agreement over Europe's new energy and climate change package with ambitious greenhouse gas emissions and renewable energy objectives. And the work programme of the current Czech EU Presidency stresses the need to reduce Europe's hunger for energy, invest in modern efficiency technologies, and make more use of renewable energy sources.

Yet the recent gas supply cuts in many eastern European countries are a painful reminder that much remains to be done in a short space of time if we are to reach these goals. The Intelligent Energy – Europe programme is needed more than ever – to play its role as a catalyst and speed up this process.

Happy reading and best regards,

Patrick Lambert

Patrick Lambert

Director, EACI

> www.eusew.eu

EU Sustainable Energy Week 2009: showing the way



An EUSEW event not to be missed; the IEE European Info Day 2009 is being organised by the EACI in Brussels on Thursday 12 February. The Info Day will help you apply successfully for Intelligent Energy – Europe funding next year and will highlight the programme's achievements to date.

EU Sustainable Energy Week: 9–13/2/2009

Have you already booked your place at the EU Sustainable Energy Week 2009 (EUSEW) – the key event in Europe's sustainable energy league?

More than 10 000 delegates will gather from 9 to 13 February 2009 at dozens of conferences, workshops, seminars and media events to discuss and show the way to a more sustainable energy future.

Some 140 events in 17 countries are scheduled, including high-level conferences in Brussels and many other cities around Europe. A rich palette of themes will cater for all interests, ranging from state-of-the-art buildings and low-energy technologies for industry to local grass-roots initiatives and innovative transport models.

EUSEW 2009 forms the backbone of the European Commission's Sustainable Energy Europe Campaign, which has now been extended until 2011 to help deliver on Europe's ambitious energy agenda.

Over 600 public and private organisations are already signed up and taking an active role in it.

More details and online registration for all EUSEW events:

> www.eusew.eu

> http://ec.europa.eu/energy/sustainable/covenant_mayors_en.htm

Covenant of Mayors: Europe's cities break new ground

Tackling our energy challenges means making progress and changing things on the ground. The good news is that growing numbers of European city leaders are prepared to work together and lead the way in this field.

By January 2009, a total of 300 cities had signed up to the 'Covenant of Mayors', including Turin, San Sebastian, Dunkirk, Heidelberg, Coventry, Riga and Porto. They all now share a commitment to reduce their CO₂ emissions by more than 20%, as well as to create and put into practice local action plans for sustainable energy. The European Commission, which took the initiative to establish the Covenant in the first place, plans to provide financial support for this in addition to checking whether progress is made.

Mayors from all participating cities are expected to attend a prestigious signature ceremony. This will take place on 10 February during 2009 EU Sustainable Energy Week.

> www.enterprise-europe-network.ec.europa.eu

Enterprise Europe Network: making the business case for intelligent energy

Ever heard the phrase, 'My company is a model when it comes to energy savings'? Let's be honest, hardly any business could claim to be that perfect. Yet scores of companies could improve their profits by cutting down on unnecessary energy use. This raises the question: are enough European companies gearing up for the growing markets for energy services, energy-efficient products, and renewable energy technologies – to name but a few of the emerging businesses in this area?

The members of the 'Intelligent Energy' Sector Group of the Enterprise Europe Network met in November 2008 in Bilbao, Spain, to step up their support in this field for SME clients and research institutes. The group has 60 members from 21 countries, and expects to grow to some 200 in the future. Its members provide small and medium-sized companies with information on EU legislation, help them make the most of EU funding opportunities, and put them in touch with partners for business and technology cooperation, technology transfer, business agreements and collaborative research projects.

The exchanges at the Bilbao meeting were enriched by contributions from the European Commission and on the EU's Intelligent Energy – Europe programme and the ManagEnergy initiative. The meeting was held during the GEO2 sustainable development fair and was accompanied by a brokerage event on sustainable development and renewable energies.

Sonja Angloher-Reichelt

Chair of the Intelligent Energy Sector Group

EU Cooperation Unit of Bayern Innovativ, Germany

+49 911 20671 315

angloher@bayern-innovativ.de

Be inspired: IEE projects and intelligent energy guides at your fingertips

Would you like to find out how IEE-supported projects can help you and others create a more energy-intelligent future? Then have a look at the following:

> <http://ec.europa.eu/energy/intelligent/projects>

New IEE projects database

You can browse through all projects supported by the IEE programme and find those most relevant to you.

> http://ec.europa.eu/energy/intelligent/library/publications_en.htm

New IEE project brochures

Four brochures on renewable electricity, energy-efficient products, energy-efficient buildings, and biofuels present a total of 108 innovative projects. They are available in English, French and German.

> <http://www.iee-library.eu>

New Intelligent Energy Europe e-library

A web inventory of tools and guidebooks developed under the IEE and other programmes. It covers the following themes: energy efficiency in industry, local and regional energy management, renewable energy, and transport.



Reaping the rewards

"Thanks to the Amethyst project, which is supported by the Intelligent Energy – Europe programme, the operators of around 200 winemakers will be trained to become more aware of their energy and water consumption and how to take measures to reduce that consumption. This is very important: lower production costs will make them more competitive and they will also reduce their impact on the environment. In business, we would call this a win-win situation."

Mauro Roglieri from Ecofys Italia coordinates the AMETHYST project

Europe's winemakers can cut their energy use by more than 20% thereby increasing their profits. The AMETHYST project has developed benchmarking tools to help companies in France, Spain, Italy and Germany to assess and reduce their energy and water use. Altogether, these countries account for nearly 80% of EU wine production and more than half of the global production.

> Buildings account for around 40% of Europe's energy consumption.

In the spotlight: energy-efficient buildings

We spend the majority of our lives in buildings – whether at home, work or play. And we use more energy in buildings than anywhere else. In fact, buildings account for around 40% of Europe's energy consumption. They also offer the greatest potential for energy-efficiency improvements, to help offset the burden of growing energy costs and reduce greenhouse gas emissions.

The EU is therefore making a real effort to improve the energy efficiency of Europe's buildings. It is currently revising its legislation to prompt faster improvements in more buildings and to reinforce the role of energy-performance certificates in this respect.

This new context is spurring greater interest in the 70 projects for more energy-efficient buildings funded so far by the Intelligent Energy – Europe programme. Here are two examples.

> www.europeanpassivehouses.org

High marks for Europe's low-energy houses The PEP project

Passive houses
use only
around
10%
of the energy
consumed
in a conventional
building.

Every year, a small part of Europe's old building stock is refurbished from top to bottom or replaced by new constructions. This effort offers a unique opportunity to build according to the most advanced energy-efficiency standards.

Passive houses (based on the 'Passivhaus' concept that began in Germany in 1990) offer a workable and affordable solution for achieving such savings. These buildings are highly insulated and airtight. For heating, they use mostly passive elements – the home's inhabitants, appliances, lighting, and sunlight – together with a ventilation system to provide fresh air and recover the heat from outgoing air.

Passive houses use only around 10% of the energy consumed in a conventional building and offer better indoor comfort than most conventional houses. Moreover, with monthly heating costs of just €10–25, they make sweating over energy bills a thing of the past.

In theory, any architect can design a passive house. But specific expertise and great care are still required during the planning, design and construction stages of these buildings, as their standards


differ from those in force for traditional ones. The PEP project therefore set itself the task of passing on the know-how and experience the partners have gained, going beyond small groups of experts to reach a wider community of building professionals.

The project has a website which has already provided advice to some two million visitors on passive house solutions, in seven languages. It has also drawn up guides for architects, planners, energy designers, structural designers and developers, and organised conferences, presentations and forums across Europe which reached out to thousands of participants.

Thanks to PEP and other initiatives, passive house buildings are quickly gaining ground in Europe. From a few examples just a few years ago, their number has grown exponentially and is now approaching the 20 000 mark.

Henk Kaan

ECN Energy Research Centre of the Netherlands

 +31 224 564500

 kaan@ecn.nl



Waking a sleeping giant: energy savings in social housing

The EPISOHO and ESAM projects

"We find the idea of making our buildings more energy efficient very interesting," says Hans Fürst, from the Nassauische Heimstätte group in Germany. "It is good for the tenants and for the environment, and it will increase the value of our portfolio. But we must be able to analyse our 66 000 apartments for the lowest possible cost and identify energy investments which offer the best return for us."

Hans Fürst is not alone, of course. Many social-housing managers across Europe face the question of whether and how to modernise their dwellings – which often number in their thousands – in cost-efficient and profitable ways.

This is an important consideration, since most of the 20 million social-housing units in Europe were built according to standards that are now outdated. Upgrading them to modern standards will reduce their energy consumption and thus their greenhouse gas emissions by 50% or more. Tenants too would benefit, as they would enjoy a more comfortable home and be better protected from energy price hikes.

Nassauische Heimstätte is one of several social-housing operators from Austria, the Czech Republic, France, Estonia, Germany and the Netherlands taking part in the European ESAM and EPI-SOHO projects. Reinforced by research bodies and energy agencies, these projects have developed methodologies and information systems to support cost-efficient energy diagnoses, energy certification, and energy-modernisation strategies for large social-housing portfolios.

The new methods have been tested in some 28 000 apartments and these efforts are starting to pay off. The Dutch EPI-SOHO partner WonenBregburg plans to spend some €15 million each year on energy-saving measures from 2009, and Nassauische Heimstätte is using the new ESAM methods to manage the group's 66 000 apartments.

Will these results and the promotional campaigns around both projects convince the other 40 000 social-housing companies operating in Europe to use the new methods and techniques?

Traditionally, most of them seem to give little consideration to energy-efficiency questions in their portfolio management. Yet Mr Fürst remains optimistic: "The rules of the game are changing and many of these companies may have to adapt faster than expected to the new needs."

EPI-SOHO

Frans Lemmens
WonenBregburg, Netherlands

+31 13 539 99 11
f.lemmens@wonenbregburg.nl
www.epi-soho.eu

ESAM

Francis Deplace
Delphis, France

+33 1 56 08 54 24
esam.delphis@wanadoo.fr
www.esamproject.org



"We save 80% in heating costs, up to 95% for cooling, and up to 50% in electricity. We can offer people a very comfortable building, in summer and winter, with no problems of overheating, draughts or very uncomfortable places. (...) The big problem today is lack of information. There is really too little information out there, too little explanation, and too little marketing of this modern building technique. Construction companies really know don't know enough about what is technically possible today and they build things as their fathers and grandfathers did."

**Stefan Oehler is the architect
of the Energon building in Ulm (Germany)**

Constructed in 2003, Energon is the largest office building to meet the demands of the German Passivhaus label. Triangular in shape, it covers 8 000 m². It cost no more to build than a traditional building. For more details, see the video 'Sustainable cooling helps fight global warming' on http://ec.europa.eu/energy/intelligent/library/videos_en.htm

<http://ec.europa.eu/intelligentenergy>

> More than **400** international projects, involving some **3 500** European organisations

News from the field

The Intelligent Energy – Europe programme of the European Union has lent its support so far to more than 400 international projects, involving some 3 500 European organisations. This programme aims to create better conditions for a more energy-wise future. Its projects cover a variety of areas including renewable energy, energy-efficient buildings, industry, consumer products, transport and developing countries. Below you will find the latest details about achievements linked to the programme and future plans under it. Full details of all Intelligent Energy – Europe projects are available at: http://ec.europa.eu/energy/intelligent/projects/index_en.htm

Energy-efficient buildings

> **Implementing the Buildings Directive – First results available**



The ASIEPI project helps monitor how the European Energy Performance of Buildings Directive is implemented. The first results of this monitoring have now been published, including:

- analysis of how Member States deal with the energy-performance requirements for new buildings (by taking four Member States as an example);
- an overview of key aspects that must be addressed to stimulate better airtightness of buildings;
- a summary of the effective handling of thermal bridges;
- an assessment of innovative systems.

Visit the website to follow keep track of developments.

Peter Wouters
International Network for Information on Ventilation and Energy Performance (INIVE)
Belgium

 +32 2 6557787
 asiepi@asiepi.eu
www.asiepi.eu

Energy efficiency

> **Energy certification process completed for 12 demo buildings**



The BuildingEQ consortium has developed a method to link the certification of the energy performance of a building, required by EU legislation, to the commissioning of that building (quality assurance process).

The method was applied to 12 demonstration buildings in four countries in the non-residential sector and the results are included in the final report, now available on the website. The consortium has also published an analysis of how EU Member States could apply certification procedures. Its conclusions are part of the report 'Evaluation of existing modelling and assessment techniques'.

Under the project, the experts conducted research on energy consumption, temperature of main water circuits and indoor conditions. The first results are available on the website.

Christian Neumann
Fraunhofer Institute for Solar Energy Systems
Germany

 +49 761 45885465
 christian.neumann@ise.fraunhofer.de
www.buildingeq.eu

> **Advice on saving energy: new information service**



Since energy use in households often varies significantly – even in the same building, it represents a great potential for savings. The project SAVE@Work4Homes has introduced a new service to provide tenants with information on their individual energy consumption. It also offers advice on energy-related behaviour such as ventilation, room temperature settings or hot water usage.

The project partners will evaluate services in Angers, Belfast, Berlin, Frankfurt, Moulins and Karlsruhe as pilot projects. The idea is that the results will help tenants and householders in Europe to identify areas for saving energy in their homes.

For further information, visit the demonstration websites for Moulins, Berlin and Belfast, at:

Moulins: <http://213.218.152.132/facility%5Fdashboard/js/desktop/desktop.asp?l=fr>
Login: demo1, password: demo1

Berlin: <http://sul.domdata.com/>
Login: sul, password: 123456

Belfast (UK): <http://savepda.domdata.com>
Access is free of charge.

Simon Robinson
Empirica GmbH
Germany

 +49 22 898 5300
 atwork@empirica.com
<http://save.atwork4homes.eu/>



> **Energy-efficient cooling:
building guidelines now available**



The COOLREGION project partners have just published building guidelines on efficient cooling, aimed at owners, architects, planners and technical staff working in office buildings or buildings in the care sector. The guidelines include:

- concrete measures for the demand and supply side of cooling;
- an outline of associated costs and savings;
- advice for integrated planning;
- benchmarks;
- checklists for new building and refurbishments.

The guidelines are available online in six languages (French, German, Polish, Dutch, Bulgarian and Slovenian).

Marit Kleinow
Gertec GmbH Ingenieurgesellschaft
Germany

+49 201 2456444
marit.kleinow@gertec.de
www.coolregion.info

Energy efficiency in industry

> **Benchmark tool targets graphic
media**

A new E-BAG benchmark tool allows small and medium-sized graphic media companies throughout the EU to compare their individual energy consumption with others.

The analyser generates a generic energy benchmark report, which outlines the energy situation of the company and its potential to save energy. The data is then compared to that of a company operating in the same sector but in another EU Member State. For specific questions, users can contact an energy consultant in their country.

Interested in discussing the tool with the project coordinators? In the coming months workshops will be organised in the Netherlands, Germany, the Czech Republic, Hungary and Greece. The project's final results will be presented at a European conference on 27 March 2009 at the University of Wuppertal (Germany).

M. Steerneman Energy Experts Int. B.V.
Netherlands

+31 26 3256323
m.steerneman@eei.nl
www.eeei.info

> **Toolkit for voluntary agreements
on energy efficiency**

Voluntary agreements are nowadays concluded in most EU Member States between industrial sectors and the governments, with 'LTAs' (Long-Term Agreements) giving both sides more flexibility to improve energy efficiency. The EU LTA Uptake project now offers a toolkit that takes users through every step of developing a successful voluntary agreement on energy efficiency. It includes advice for the five main steps of preparation, initiation, negotiation, implementation and evaluation.

Herman Gels
SenterNovem
Netherlands

+31 302147837
h.gels@senternovem.nl
www.LTAUptake.eu





Energy-efficient equipment and products

> **Hydrogen, Samsø's new energy Academy**

A hydrogen plant has been installed at the Samsø Energy Academy, located on Denmark's only 'Renewable Energy Island'. Visitors to the plant learn how surplus electricity generated by local wind turbines is converted into hydrogen, which is stored for later use in the field of transportation or in fuel cells in houses. The Academy also has a display featuring a hydrogen-powered truck that belongs to the Danish company H2Logic. It has plans to build a number of dwellings in which fuel cells will draw their energy from the hydrogen plant, as a demonstration for visitors.

Jens Peter Nielsen
Samsø Energy Academy
Denmark

+45 8792 1015
jpn@energiakademiet.dk
www.energiakademiet.dk

> **Solar air conditioning: the time is right**



The SOLAIR project will hold its next workshop at the EU Sustainable Energy Week Europe on Tuesday 10 February 2009 in Brussels, focusing on potential and future prospects for solar air conditioning and including discussions on technological and financial barriers. More information – such as the latest project results, examples of best practice, and market analyses – can be found on the project website.

Erika Villa
Target GmbH
Germany

+49 511 90968850
villa@targetgmbh.de
www.solair-project.eu

> **Become a certified Energy Manager**



To date, more than 750 engineers, technicians, production managers and energy consultants have been trained as certified energy managers. The training includes basic information on energy purchase, legislation and emission trade, as well as specific knowledge on single techniques such as biomass and solar power.

The EUREM project organises courses in 13 EU Member States as well as in Tunisia. The project partners expect over 1 000 participants per year from 2010, due to increasing energy prices and climate policy obligations.

Robert Schmidt
Chamber of Commerce and Industry
for Nuremberg and Central Franconia
Germany

+ 49 91 113 35299
rschmidt@nuernberg.ihk.de
http://www.energymanager.eu/

Over
750
energy
managers
trained



> Guide to smart metering



Smart metering makes consumers aware of their individual energy consumption. The idea is that a fully informed end-user will use energy resources more carefully. The ESMA (European Smart Metering Alliance) project has recently published a guide to outline the main elements necessary for a successful implementation of smart metering. Key findings include:

- consumers' wishes must be fully respected;
- smart metering can enable renewables, distributed generation and smart grids;
- the support of governments and regulators is needed, if smart metering is to be adopted across Europe.

John Parsons
UK, British Electrotechnical and Allied
Manufacturers' Association

+44 796 6650554
jparsons@beama.org.uk
www.esma-home.eu

Count the cost with smart metering

> Lights on, energy savings up

EU Energy Commissioner Andris Pieblags welcomes the General Director of the Czech National Theatre, Ondrej Cerny, to the European GreenLight programme during meetings between the Czech EU Presidency and the European Commission in Prague on 7 January 2009.



The Czech National Theatre recently embarked upon a major energy saving programme which includes an upgrade of its lighting system. The new system will help the theatre save around €37 000 and will reduce its annual CO₂ emissions by 542 tonnes per year.

GreenLight is a European Commission initiative that supports the switch to modern, energy efficient technologies. Advanced lighting systems – which are mostly developed and produced by European companies – use 30 to 50% less electricity than other existing technologies. Lighting alone accounts for around 14% of the EU's total electricity consumption.

More than 530 partners have joined the GreenLight programme so far, including cities, supermarket chains, airports, hotels, restaurants, schools, and universities.

www.eu-greenlight.org



Renewable electricity, heating and cooling



> Final votes for school biomass-heating contest



More than 2 200 pupils participated in a creative school competition designed to increase awareness of solid biomass heating. The contest is now in its second phase, which will end with the selection of the final winner from the pool of regional winners. The vote for this will be organised electronically before Christmas 2008.

The competition, held under the Regbie+ project, invited teachers and pupils to hand in creative or technical proposals on renewable energy sources. In total some 2 200 pupils from more than 140 primary or secondary schools were directly involved. The jury was very impressed by the highly inspiring proposals received, underlining children's high awareness of the problem of global warming.

Marion Elle
target GmbH
Germany

 +49 511 90968857
 der@targetgmbh.de
www.regbieplus.eu

More than 2 200 pupils participated in the creative school competition.



> Renewable energy: more support please





The Support_Ers project partners recently published a report on existing support instruments for heating with renewable-energy resources in Austria, Bulgaria, Croatia, Estonia, Germany, Latvia, Romania, Slovakia and Spain. The report highlights wide differences between countries, some of which have already implemented many support instruments whilst others are only now starting to develop their schemes.

The report also includes policy recommendations on how to develop those instruments in new EU Member States and candidate countries. Examples of such instruments are schemes linked to financial incentives, regulations and education. A wide range of groups are targeted by the support instruments mentioned in the report, such as companies, households, municipalities, and so on.

Please email ulrike.leis@gtz.de for a copy of the report or specific results.

Ulrike Leis
GTZ GmbH – Germany



 +49 30408190152
 ulrike.leis@gtz.de
www.support-ers.eu

> Creating a transparent European pellets market



The PELLETS@LAS project aims to assist the development of a transparent European pellets market, with a view to ensuring that detailed information on this emerging market is available to all market actors. Typical information available includes figures on price, quality, production and trade in pellets. The data is collected in all EU Member States plus Norway and Switzerland. It is updated regularly and can be downloaded from the project website.

Dr Rainer Janssen and Wolfgang Hiegl
WIP Renewable Energies
Germany

 +49 89 720 12743
 rainer.janssen@wip-munich.de
www.pelletsatlas.info

> Rays of hope for solar cooling



On 10 February 2009, the final conference of the SOLCO project will be held in Brussels under EUSEW 2009, the EU Sustainable Energy Week. The conference will present the project results that are of special interest for stakeholders in the solar cooling market.

SOLCO started in January 2007 and is coordinated by APEA, the Provincial Energy Agency of Agrigento. The project aims to remove non-technological barriers to the use of solar cooling technologies.

Awareness of solar cooling technologies remains limited in the EU. This is particularly true in southern Europe, where it is mostly needed and where the potential environmental benefits of this technology are significant. Those wishing to register for the SOLCO International Conference next February should visit www.eusew.eu or www.solcoproject.net

Stefano Rugginenti
APEA Provincial Energy Agency of Agrigento
Italy

 +39 03355 200721
www.solcoproject.net

> Wind energy in focus





The TradeWind consortium is organising its final workshop on Thursday, 12 February 2009, under the EU Sustainable Energy Week. The event will be divided into three main parts:

- presentation of the project and main results achieved;
- a presentation on transmission and interconnection;
- a presentation on electricity market design for wind penetration in the European power system.

All actors involved in grid and power market issues, EU institutions, national public authorities and so on are invited to participate in this event. For registration, visit <http://eusew.eu/>

Glória Rodrigues
EWEA – European Wind Energy Association
Belgium

 +32 2 546 19 43
 Gloria.Rodrigues@ewea.org
www.trade-wind.eu



> Promoting solar thermal obligations

The ProSTO project investigated 11 solar thermal obligations (STOs), legal provisions that oblige owners of buildings to install a solar thermal system on new or renovated buildings. The results of this study are now available online. This is an important step towards the implementation of best practice for local STOs. The partners will soon make available a set of tools to help local administrations to introduce solar obligations.

Rodolfo Pasinetti
Ambiente Italia S.r.l. – Research Institute
Italy

+39 02 277441
rodolfo.pasinetti@ambienteitalia.it
www.solarordinances.eu

> Gasification guide under development



Although biomass gasification technology for small-to-medium scale power generation is almost ready for market, various factors continue to hamper its wide-scale implementation. Partners in the Guideline for Safe and Eco-friendly Biomass Gasification project are developing a major new tool to raise awareness and understanding of the technology. The Guideline and software tool will include a great deal of useful information, including health, safety and environment (HSE) issues in relation to biomass gasification. Any comments on the guide should be sent to Harrie Knoef at knoef@btgworld.com. Following publication of the guideline, several related workshops will be organised in 2009:

- January: Stuttgart, Germany
- May: Aalborg, Denmark
- June: Varna, Bulgaria
- September: Vienna, Austria

John Vos
BTG Biomass Technology Group
Netherlands

+31 534861191
vos@btgworld.com
www.gasification-guide.eu

> 100+ measures to increase electricity efficiency

A major activity within the EL-EFF Region project is the development of regional action plans to boost efficiency in electricity use. At the heart of these plans are measures to boost efficiency in electricity use. More than 100 of the most appropriate measures have been identified by the project partners and these are now available online. Aimed at regional actors and decision-makers, they include measures addressing electricity consumption in private households, public bodies and businesses.

O.Ö. Energiesparverband
Austria

+43 732 7720 14382
office@esv.or.at
www.efficient-electricity.info

100+
ways
to boost
electricity
efficiency

> On the rise: new case studies on ground-source heat pumps



The Ground-Reach project aims to raise consumer awareness of the potential of ground-source heat pumps for heating and cooling buildings. These pumps offer numerous benefits, as they can:

- reduce the primary energy demand and greenhouse gases;
- improve the local environment;
- add value to buildings.

The project partners have now made available 40 best practice case studies, which provide more details on this technology.

Dimitrios Mendrinos
Centre For Renewable Energy Sources (CREC)
Greece

+30 2106603205
dmendrin@cres.gr
<http://www.groundreach.eu/>

> Historic buildings – equipped with modern energy technology



Many historic buildings could integrate renewable energies and energy-efficiency measures to improve their energy balance. The project New4Old will soon release technical guidelines showing how renewable energy sources and energy efficiency technologies can be integrated in them. The guidelines address in particular planners, architects and building designers.

In June 2008 the project coordinators inaugurated the first Renewable Energy House which will be followed soon by others. By the end of the project, each house in the network will cover its heating and cooling needs entirely by the use of renewables and will be equipped with photovoltaic systems for electricity production.

EREC – European Renewable Energy Council
Kim Vanguers – Belgium

+32 2 546 1933
vanguers@erec.org
www.erec.org/projects/ongoing-projects/new4old.html

> Easing renewables into electricity networks





A higher share of renewables in the energy mix can increase costs through additional networks, system balancing and conventional generation costs. The RESPOND project has analysed the necessary response options to reduce these costs and produced a report that includes more details on the following solutions:

- increase interconnection capacity;
- demand response;
- dispersion of variable generation;
- cheap storage options;
- flexible generation.

Currently the project partners are analysing policy and regulatory barriers. All results are available online.

Frits van Oostvoorn
Energy Research Centre of the Netherlands
Netherlands



 +31 224 564438
 oostvoorn@ecm.nl
<http://www.respond-project.eu/>

> Online tool supports sustainable wood use



Following a market analysis of biomass in several European countries, the partners in the Astwood project have developed a strategy concept that is now available as an online 'Biomass Decision Tool'. The key finding of the analysis is that biomass (such as wood pellets and chips) has great potential for use in domestic heating. All technical data, conclusions and a downloadable version of the Biomass Decision Tool are available on the website. Demonstration projects in Spain, Portugal and Bulgaria have also been completed and visitors are invited to have a look at the new biomass boilers used in these projects.

Ignacio Marquez Acedo
Protecma
Spain

 +39 84390066
 lola.gonzalez@protecma.es
www.astwood.info



> Launch of new biogas handbook



The consortium of 12 partner organisations in the BiG>East project has recently published biogas handbooks tailored specifically for farmers, available in seven languages. The project has also completed its analyses of the potential of biogas in six countries in southern and eastern Europe. The results are featured in a study that looks at policies, barriers, waste availability and agricultural structures.

The project facilitates the exchange of information on biogas across Europe. Countries involved in the training courses that it organises are Bulgaria, Croatia, Latvia, Romania, Slovenia and Greece. The objective is to promote biogas as a renewable energy source and as waste treatment technology.

Dominik Rutz
WIP Renewable Energies
Germany


 +49 89 720 12739
 dominik.rutz@wip-munich.de
www.big-east.eu

> Figuring out the costs and benefits of home heating

Do you need a new heating system but don't know which one to choose? A new online tool developed by the BioHousing project allows you to quickly compare the advantages and disadvantages of different heating systems on the market. The tool comes with an energy calculator to identify heating costs in different kinds of houses, and you can even compare the energy and investment costs and the average CO₂ emissions of the different systems.

For more information on innovative biomass applications, including presentation slides from a recent BioHousing seminar on 'success stories of small-scale biomass heating', check out the project website.

Tytti Laitinen
Jyväskylä Innovation Ltd
Finland



 +35 8144451142
 tytti.laitinen@jklinnovation.fi
pekka.aanismaa@jamk.fi
www.biohousing.eu.com

> Biogas ready for prime time on islands



The Biores project focuses on islands that use biogas derived from municipal solid waste as an energy resource. The partners have already carried out a SWOT (strengths weaknesses opportunities and threats) analysis to identify technical barriers to the uptake of such biogas there and are using the analysis to design a decision support system (DSS) to evaluate different options from technological and economic viewpoints. This system is intended to support investors in this area. In the near future, the partners intend to draw up action plans and general guidelines based on the experience of the six participating islands. It is hoped that other islands will use the information to develop action plans that meet their own needs.

EPTA Ltd
Greece

 +30 2102224208
 achatzimpiros@epta.gr
www.biores.eu



> Solar combisystems explained



The CombiSol project offers help to solar combisystems manufacturers and installers for the technical inspection of such systems. It has produced a report, in the form of an Excel sheet, that includes all items for technical inspections – from solar collector loops to heating loops. The report also includes a manual. This material will cover 70 different combisystems in Austria, France, Germany and Sweden.

A recently published report from the partners sets out a common method for checking the performance of combisystems. The method has been successfully tested by companies and industries and is currently being used to monitor 45 solar combisystems. In addition, the report looks at the type of equipment needed and identifies useful performance indicators.

Philippe Papillon
CEA/INES
France

 +33 4 79444557
 philippe.papillon@cea.fr
www.combisol.eu



> Boosting biomass



The partners in the Biobusiness project have recently published several reports examining Europe's biomass resources and the development of small and medium-sized companies in the sector. The reports include:

- best practices for creating enterprises in the biomass sector (based on case studies in different countries);
- business opportunities for entrepreneurs and small and medium-sized companies;
- the technical and economic potential of biomass resources.

CEEI-Burgos
Spain

+34 947244332
jcmartinez@ceeiburgos.es
www.euro-biomass.com

Alternative fuels

> CO₂ labels for vehicle fuels



The Carbon Labelling project has set up three labelling initiatives in Europe for biodiesel (B100), high efficiency lubricants, and freight services. The CO₂Star label is now applied to B100, synthetic lubricants and a fleet of horticultural trucks (running on B30) in Germany and in the Netherlands.

The project coordinators have also finalised a consumer survey on carbon labelling which highlights serious concerns among consumers about the true environmental and social benefits of biofuels, since the legal and fiscal framework for biofuels is not yet fixed and they are often criticised in public debates. It emerges that price is the main driving factor for investing in biofuels.

Rainer Janssen
WIP Renewable Energies
Germany

+49 89 720 12743
rainer.janssen@wip-munich.de
www.co2star.eu

Biodiesel labels up and running

> Green energy from quality fuels



A great deal of research and analysis has already been published on energy crops. The Encrop project builds on this by offering guidance to readers interested in the subject by identifying vital information for them.

It also places individual research activities within the general research context for energy crops. To that end, the co-ordinators will organise several events in 2009:

- an international energy-crop seminar (Poland);
- an international study tour on the logistic chains of small-diameter wood and reed canary grass (Finland);
- a seminar on short rotation plantation (Italy);
- a seminar on biogas from maize and grass (Austria).

Jyväskylä Innovation Ltd
Finland

+35 8405771815
kirsi.knuuttila@jklinnovation.fi
www.encrop.net



Energy-intelligent transport

> Code of Practice on mobility
for housing areas



The ADD HOME project has developed a Code of Practice on mobility for housing areas. It summarises the best practice examples gleaned from a recent case study conducted by the partners and deals with the question of how different means of transport can improve mobility for housing areas in an (energy-) efficient way.

A recent study conducted by the project shows clearly that legal frameworks usually favour cars over other modes of mobility and proposes innovative ways of improving this situation.

Claus Köllinger
Austrian Mobility Research
Austria

+43 316 81045166
koellinger@fgm.at
www.add-home.eu

Promoting energy-efficient ways to leave home

> Sustainable mobility
at your front door



Twelve countries are involved in the Pro.Motion project, which aims to foster energy-efficient forms of transport in the joint field of housing and mobility. The conception phase has now finished and, for the regional areas taking part in the project, the partners have identified:

- current mobility patterns, and
- specific demands to accessibility and mobility services.

In the next stage, they will draw up concrete actions based on the analysis of infrastructure planning (e.g. roads for bicycles) as well as actions aimed at stimulating people living in these areas to change their behaviour by switching to energy-efficient transport modes (e.g. car-sharing).

Anna Thormann
Det Gronne Hus, Agenda 21 in Koge
Denmark

+45 56 676073
anna.thormann@koege.dk
www.iee-promotion.eu





> Choosing the best bus system for your city

Public transport with a modern bus system improves environmental conditions and helps reduce car use in cities. However, choosing the best buses from the various systems on offer is often a difficult exercise. The Starbus web-tool is of great help to anyone involved in this choice. Users can compare air emissions, noise, costs etc. of different buses on a specific route. Several European bus operators, in association with Starbus partners, use this method already to assess their bus lines, compare routes, calculate emissions, and identify improvements.

Gabriel Plassat
The French Environment
and Energy Management Agency (ADEME)
France

+33 4 93957996
gabriel.plassat@ademe.fr
www.starbus-project.eu
www.starbus-tool.eu

> New drive to reduce vehicle fleets' energy and emissions

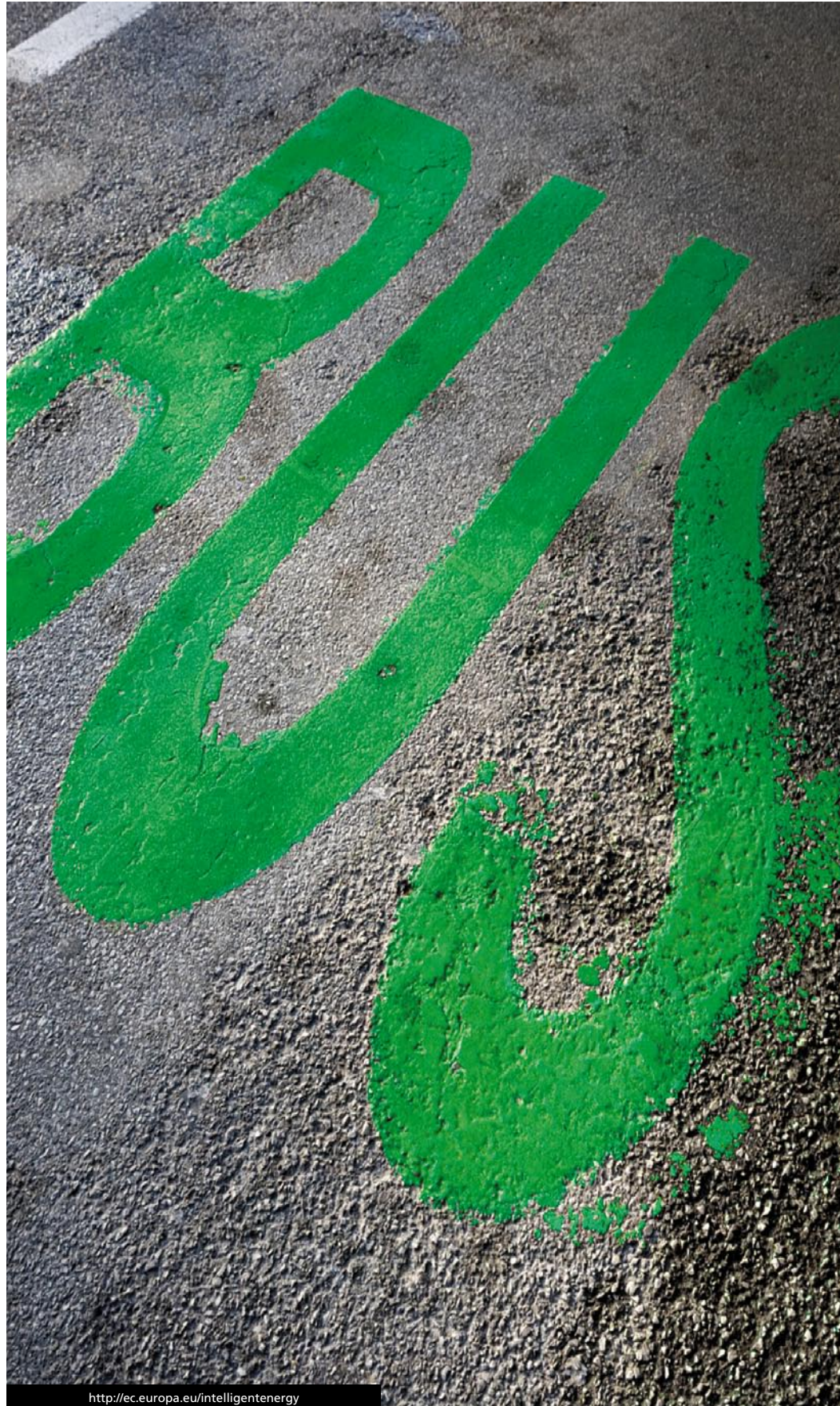


The FLEAT project partners are getting ready to start 31 pilot actions involving more than 8 000 vehicles. The goal is to test whether the tools they have already identified will save energy and CO₂ emissions under real-life conditions. Different options will be tested for low-carbon fuels and vehicles, as well as driving behaviour and mobility management.

The project includes private cars as well public transport fleets. Some large fleets – such as those operated by the Austrian Railways group, Hamburger Wasserwerke, Leaseplan Greece and TNT Express – will also be tested.

Leen Govaerts
VITO
Belgium

+32 14 335821
leen.govaerts@vito.be
www.fleat-eu.org



Energy education

> New Active Learning toolbox – learning intelligent energy by doing

Are you a teacher? Then why don't you try out the ready-to-use education material which is available in 14 different languages in the new Active Learning toolbox? The toolbox contains suggestions for fun school activities based on the pedagogical principle of Active Learning. The topic is sustainable energy development. The target group is children aged 6–12 years.

Active Learning is about learning by doing. In the toolbox you find a set of activity sheets. Each describes an activity that can be used to meet the teaching requirements of the national curriculum among other regarding energy education. The sheets describe the activities step-by-step from planning to realisation and reflection and include handout materials for the pupils and references to additional education materials.

Kirsten Dyhr-Mikkelsen
Ea Energy Analyses
Norway

+45 60391709
kdm@nee.no

Active Learning toolbox: www.teachers4energy.eu
Active Learning project: www.consortium4al.eu

> Energy audits in the classroom



Learning by doing is a tried and tested method in education. Under the Check it out! Project, children at more than 90 schools have investigated the energy performance of their establishments by conducting EPAs (Energy Performance Assessments).

Children involved in the project have just completed school audits in five countries (Germany, the Netherlands, Spain, Hungary and Bulgaria) and developed action plans to save energy in their buildings. Their action plans and further education material are available in six languages on the project website.

Giel Linthorst, Ecofys Netherlands
Netherlands

+31 306623322
G.Linthorst@ecofys.com
www.check-it-out.eu

> Energy campaigners offered a helping hand



The energyXchange project identifies awareness-raising materials used in successful campaigns about energy and CO₂ saving. The material – which includes logos, brochures, videos, stickers, Christmas cards – is then made available online, so that others can benefit from it.

The project website provides further support for those who want to roll out an energy campaign, for example by offering guides on how to organise an Energy Awareness Day and an online tool to detect people's energy-wasting habits. The partners have put together special advice for companies looking for ways to cut energy bills by providing incentives to staff to save energy.

The Student Power section aims to help young people to put theory into practice by running marketing campaigns.

Brian MacNamee
Consulteco
UK

+44 20 81442480
info@energyxchange.eu
www.energyxchange.eu

Monitoring and evaluation

> Energy savings add up, say final summary reports



Two final summary reports, dealing with bottom-up and top-down calculation of energy savings, have been published by the EMEES (Evaluation and Monitoring for the EU Directive on Energy End-Use Efficiency and Energy Services) project. They are available for consultation on the website and anyone with comments to make on the reports should send them to the project coordinator.

On 15 October 2008, the partners gathered for a conference on 'Harmonised methods for evaluating energy end-use efficiency and energy services'. A comprehensive overview of the results of that event can be found in the 'Events' section of the project website.

Dr Stefan Thomas
Wuppertal Institute for Climate,
Environment and Energy
Germany

+49 202 2492143
stefan.thomas@wupperinst.org
www.evaluate-energy-savings.eu





Financing mechanisms and incentives

> Direct taxation: pros and cons for renewable heating



To meet the ambitious European targets set for 2010 and 2020 for renewable energy sources, countries have to use every policy tool at their disposal. The Refund + project is studying direct tax measures used in this field in five countries (Austria, Belgium, France, Italy and Portugal), with a view to highlighting that such measures can boost the renewable energy market for individual households. The partners are also conducting a simulation of these policies in Lithuania and Poland, in order to investigate the impact of direct tax measures.

Visitors to the project website can download a complete analysis of national experiences in the five countries covered. In 2009, regional workshops will be held in Poland and Lithuania, followed by a final conference to present the project's global results.

Diane Lescot
Observ'ER
France

+33 144180080
observ.er@energies-renouvelables.org
www.energies-renouvelables.org/refund

Sustainable energy communities

> Communities to meet local energy challenges



Four pilot initiatives on smart energy-efficient houses have been completed in Spain, Slovenia, Croatia and Bulgaria. The tests included:

- energy-efficient regulation of heating, cooling, ventilation;
- energy-efficient insulation of low-energy houses; and
- high energy-efficient household appliances.

The consortium is now drafting an action plan based on the results of the pilot studies.

Lidija Horvat
Local Energy Agency Pomurje
Slovenia

+386 25 381354
lidija@lea-pomurje.si
www.nimsec.info

> Islands to get their own energy strategies



The Transplan project develops energy strategies for on islands, which face specific challenges in terms of energy supply and resources. Each strategy takes into consideration the global energy balance, including energy conversion, distribution and fuel consumption.

Three out of five energy strategies for these islands are finalised and are now being put into practice. The first results are a new wood pellet factory in Gotland, which will produce 5 000 tonnes of pellets annually from local sawdust; and the introduction of electric-powered cars on Bornholm.

A new brochure with more details will soon be published on the website.

Louise Lyng Bojesen
Bornholms Regionskommune
Denmark

+45 5692 2059
louise.lyng.bojesen@brk.dk
www.transplanproject.eu

Energy strategies to meet the needs of islands

> In the starting blocks: training courses on sustainable energy



Partners of project PRACTISE organise training courses to promote sustainable energy in communities. The courses include training totalling around 70 hours, specifically tailored to the needs of participants. There are three levels: a basic course (for all operators), an advanced technical course (for technicians), and an advanced planner course (for planners, engineers and architects). The training will provide scientific and practical support, allowing participants to select the content they consider the most useful for their activities.

Municipality of Alessandria
Italy

+39 0131 515461
giuseppe.dago@comune.alessandria.it
www.energypractise.eu

> Peak power: sustainable mountain communities



The Mountain-RES/RUE project supports mountainous-agricultural communities that want to use more renewable energy sources. In total, 32 projects in Greece, Slovenia, France and Austria were identified as prototypes. For each community, an action plan was created, setting out their needs and measures to address them. These plans are now being implemented.

Prof. John Psarras
Energy Policy Unit of the National Technical University of Athens (EPU-NTUA)
Greece

+30 210 772 3551 (or +30 210 772 3583)
john@epu.ntua.gr
http://sustainablemountains.epu.ntua.gr

Sustainable energy in developing countries

> Guidelines for decentralised rural electricity



Under the Dosbe project, partners have recently looked at the way rural-electrification systems operate in Ecuador and Peru. The information they have collected, combined with international experience, has led to recommendations published in 'Generic guidelines for decentralised electricity service operators'.

The brochure addresses companies and other actors who operate in the electricity services sector. It includes sections that cover the following key aspects:

- implementation models for electricity services;
- responsibilities and roles of the different stakeholders;
- decentralised organisation issues;
- contractual relationships;
- financial and economic issues.

Pol Arranz-Piera
Trama Tecnoambiental (TTA)
Spain

+34 93 4463234
pol.arranz@tta.com.es
www.dosbe.org



'Generic guidelines for decentralised electricity service operators' For free download at www.dosbe.org



Renewables go rural in Cambodia and Laos

> Promoting renewable energy in Laos and Cambodia



Rural areas in Laos and Cambodia still lack access to basic energy services. The REEPRO project, which brings together European and Asian partners, aims to address this by providing know-how focused on renewable energy.

Domestic experts, technicians and customers are involved in a three-level training programme that is based on the 'snowball effect'. Local engineers are first provided with the necessary technical background, so they can go into the pilot villages to train technicians. In the final step, technicians work with the 'end-users' – the inhabitants of villages.

To date six pilot communities have been selected. They include an orphanage in Cambodia, where the school and students' homes have been fitted with a photovoltaic installation. This installation also serves as a demonstration for the training courses.

Antje Klauss-Vorreiter
International Solar Energy Society,
German Section (DGS)
Germany

+49 3643 256985
vorreiter@dgs.de
www.reepro.info



Running on plant oil in Honduras

> Waving goodbye to imports
of diesel oil



Thanks to the Danish enterprise Dajolka more than 20 car mechanics in Yoro, Honduras recently learned how to convert vehicle diesel engines so that they can run on pure plant oil.

By the end of 2009, the project hopes to adapt 40 engines. Together these engines will save at least \$5 000 a year in diesel fuel imports, a considerable amount. This sum will then be returned to the local economy as extra income for farmers, new jobs in biofuel processing and lower prices for consumers.

Production of pure plant oil also increases profits for farmers and ensures that biofuel processing companies are better shielded from the negative impact of volatile fuel prices. These benefits, together with the high demand for diesel in rural areas, highlight the great potential for further dissemination of this technology in rural areas throughout Central America.

Peter Moers
Honduras/Netherlands

+504 221 45 04 (Honduras office)
moers@socialtrade.org
www.gotaverde.org



<http://ec.europa.eu/intelligentenergy>

Editorial information

The Intelligent Energy News Review is a news magazine on the European Union's Intelligent Energy – Europe programme. It is published by the European Commission's Executive Agency for Competitiveness and Innovation (EACI).

Reproduction of the information contained in this issue is permitted.

The responsibility for the content of this News Review lies with the authors. It does not necessarily represent the opinion of the European Community. The EACI is not responsible for any use that may be made of the information contained herein. The information contained is provided for information purposes only and does not legally bind any of the parties involved.

Editors: Peter Löffler and Stella Willborn, EACI

Design and layout: Tipik s.a./Chili con carne

This latest issue and all previous issues of the News Review can be downloaded for free at:
http://ec.europa.eu/energy/intelligent/library/publications_en.htm

By subscribing to the News Alert Service of the Intelligent Energy – Europe programme at http://ec.europa.eu/energy/intelligent/whatsnew/subscription_en.htm you will be automatically notified each time a new issue is published.

Intelligent Energy – Europe (IEE) is the European Union's programme for promoting energy efficiency, renewable energy and sustainable mobility. It supports international projects and local/regional energy agencies promoting smarter energy use and growth in renewable energy sources.

The IEE programme is implemented by the EACI on behalf of the European Commission. The EACI assists all IEE partners by managing the different projects and events funded under the IEE programme and by disseminating the know-how and best practices they produce.

More details on the IEE programme can be found at:
<http://ec.europa.eu/intelligentenergy>

© European Communities & EACI, 2008

> **New IEE projects for 2009**

Money matters

> http://ec.europa.eu/energy/intelligent/evaluation/index_en.htm

Sixty new IEE projects to kick off this year

A series of new IEE projects is currently in the pipeline. In response to the 2008 call, the EACI received more than 300 proposals. A team of external, EACI and Commission experts evaluated these proposals and notified the successful applicants. Funding contracts are now being finalised, allowing initial projects to get underway soon. In total, around 60 new projects – involving European partner consortia and 10 local or regional energy agencies – are expected to be launched this year.

60
new IEE projects
for 2009

> <http://ec.europa.eu/marcopolo>

Sustainable freight transport: applying for Marco Polo funding in 2009

Your next chance to get your new business project funded by the EU's Marco Polo programme starts around March 2009, when some €60 million will become available. The funding areas are:

- Modal shift: shifting freight transport from roads to less polluting transport modes
- Motorways of the sea: using the motorways of the sea more efficiently
- Catalyst action: helping to overcome market barriers in European freight transport
- Traffic avoidance: avoiding road congestion by improving logistics
- Common learning: encouraging cooperation and knowledge-sharing.

If you are interested in applying for funding, visit the Marco Polo website and attend the **Marco Polo European Info Day 2009 (Brussels, 4 February)**. The Info Day is your key to a successful application as the information provided there will help you submit a successful application.

4 February 2009
Marco Polo
European Info Day

€60
million

> <http://ec.europa.eu/intelligentenergy>

Fresh funding for intelligent energy projects: the 2009 call for proposals

The publication of the 2009 call for proposals, your next opportunity to apply for IEE funding, is expected in March 2009. Some €60 million will be made available to co-finance projects promoting European energy efficiency, renewable energy and sustainable mobility projects. Up to 75% of eligible project costs can be covered by IEE funding.

The EACI is organising an **IEE European Info Day on 12 February 2009 in Brussels** to explain the application process and provide more information on ongoing IEE projects and their results. The event also offers an opportunity to meet and talk to EACI staff.

Call for proposals:

> http://ec.europa.eu/energy/intelligent/call_for_proposals/index_en.htm

European Info Day 2009:

> http://ec.europa.eu/energy/intelligent/events/infodays_en.htm

ISSN 1830-7221



9 771830 722004



Directorate-General
for Energy
and Transport

