SUSTAINABLE ENERGY NEWS

Newsletter for INFORSE International Network for Sustainable Energy.

No. 50, September 2005

Theme: Local Supply

Demands for CSD

Europe: Seminars, EU Campaign,

Gender Equality in EU?

Asia: Anagi stove, INFORSE project



Sustainable Energy News
ISSN 0908 - 4134
Published by:
INFORSE-Europe



International Network for Sustainable Energy (INFORSE) is a worldwide NGO network formed at the Global Forum in Rio de Janeiro, Brazil, 1992.

Editorial Address:

Sustainable Energy News INFORSE-Europe Gl. Kirkevej 82, DK-8530 Hjortshøj, Denmark. T: +45-86-227000 F: +45-86-227096 E: ove@inforse.org W: http://www.inforse.org/

Editors:

Gunnar Boye Olesen Judit Szoleczky Magalie Séron Niki Fowler (text advice)

Advisory Board:

Emil Bedi, FAE, Slovakia Sécou Sarr, ENDA, Senegal Timothy Byakola, CDI, Uganda Richard Worthington, EA, S. Africa Raymond Myles, INSEDA, India Emilio La Rovere, LIMA, Brazil Roque Pedace, Rejima, Argentina D. Sukkumoed, SENT, Thailand

Deadline for the next issue: 15 November 2005 Next issue: December 2005

The newsletter is published quarterly.

Feel free to use the information, but please state the source.

Annual subscription rate:

EUR 25/year. The newsletter is free of charge for INFORSE members as long as possible.

Printer: Fjerritslev Tryk, Denmark. 1400 copies



Sustainable Energy News is supported by the European Commission DG Environment -Civil Society Support in 2005. The articles reflect the views of the authors and of INFORSE, not of the financial supporters.

Photo on the front page:

A group of pupils visiting a top of a wind mill on Samsø, the Danish renewable-energy island. See articles of the Theme: Local Supply, pages 7-9. Photo by Søren Hermansen.

"Mission Not Yet Accomplished"

The provision of sustainable energy services remains a challenge in the years to come, both in affluent and in poor countries.

The limitations of future use of fossil energy sources are illustrated, e.g., by the present high oil prices and by increasing concerns about climate change.

The global imbalance in energy access is an equally important issue. The present number of people without access to modern energy services is a staggering 2 billion. Most of these people live in rural areas of developing countries. With the current lack of investment in rural energy provision, e.g., in Africa, this number is even increasing. Of course, the lack of energy services constitutes a serious barrier to economic and social development, as has been pointed out in several recent reports, including the report of the UN Millennium Project (the "Sachs" report).

Historically, non-governmental and community-based organizations have played an important role in facilitating access to energy services. Just remember the role cooperatives played in the early days of Europe's electrification, and the role they have played in recent times, e.g., in the development of wind power; and the role of NGOs in developing markets for efficient charcoal stoves in East Africa.

More than ever before, there is a strong need for innovative approaches to address the present and future energy-access challenges.

- How can modern energy services be delivered in a way that is reliable, affordable and environmentally friendly?
- How can municipalities, private companies and community-based organizations work together on this agenda, e.g., in publicprivate partnerships?
- How can we create a sustainable market where the end-users' ability to pay for the services matches the financial needs of the service provider?
- How can we use energy most efficiently to stimulate productivity, job creation and income generation?

It is in the responses to such questions, and through frontline action at the local level, that non-governmental organizations have a key role to play. They have demonstrated their ability to develop new approaches. This talent for innovation should be applied more widely, also to move beyond stand-alone demonstrations into full-scale interventions, in partnership with communities, authorities and the private sector.

Both at the national and the international levels, there is increasing political support for sustainable energy development. A growing number of national and regional development plans, e.g., Africa's NEPAD, reflects the importance of energy for economic and social development. At the global level, in the implementation plan of the World Summit in Johannesburg, the Heads of States recognized the key role of energy in facilitating the Millennium Development Goals, in particular in poverty alleviation, and requested a substantial global increase in the use of renewable energy.

However, this positive development should not lead to a feeling of 'mission accomplished'. Quite the contrary, the attention to and visibility of energy and development still need to be increased at the international level. Important international events at which energy will be discussed include the current review of the Millennium Development Goals and the meetings of the UN Commission on Sustainable Energy in 2006 and 2007.

NGOs with the ability to influence such international processes should work to ensure that the energy momentum created by WSSD is not lost and that the attention to the role of energy in poverty alleviation and in sustainable development is further strengthened.



This is the 50th time we issue Sustainable Energy News.

We are celebrating this by inviting Mr. Rene Karottki, former director of "Forum for Energy & Development" (FED) and editor of Sustainable Energy News, to write this issue's editorial. FED supported the start up of Sustainable Energy News, and the development of the INFORSE network 1993-2001.

Rene Karottki is now working for the EU Energy Initiative for Poverty Eradication and Sustainable Development.

NGOs Demand Sustainable Energy for Development - CSD Process



By Gunnar Boye Olesen, INFORSE

Energy will be the main theme of the 14th and 15th sessions of the Commission for Sustainable Development (CSD), to

be held on May 1-12, 2006 and in April or May of 2007, respectively.

In preparation, the UN secretary asked stakeholders to provide input with a dead-line of September 1, 2005.

INFORSE was happy to respond to this with a number of clear recommendations on the essential parts of sustainable development. We list them below:

Phase-out of Environmentally Harmful Subsidies, specifically:

- Set a timeframe for the phase-out, e.g., end of 2008.
- Give an international body responsibility for assisting countries with this
 phase-out, including development of
 socially just phase-out plans.
- Extend the phase-out to international institutions, including development organizations and development banks.
- Address the phase-out to export credit agencies.

In all international cooperation, give highest priority to renewable energy and energy efficiency among energy solutions.

Stop development assistance and International Development Banks (IDBs) from lending to fossil fuel and nuclear development.

To ensure that international funding is used for sustainable development, the energy-related IDB lending and all energy-related development assistance should be limited to energy efficiency and to sustainable use of renewable energy.

A special focus must be on local renewable energy solutions that contribute to poverty reduction.

Real and fast reductions of man-made climate impacts.

The CSD should send a clear statement to the climate negotiations on the need for fast, global greenhouse gas reductions in line with recent scientific findings on the reality of dangerous man-made climate change.

Establish a Global Organization for Sustainable Energy.

There is no "home" or focus point for sustainable energy among international organizations. To provide such a focus, INFORSE favours the establishment of an international organisation such as the proposed International Sustainable Energy Fund (ISEF) and the proposed International Renewable Energy Agency (IRENA). Both of these proposals should be used as inputs for the preparations for CSD 14 and 15.

(See http://www.gracelinks.org/energy/international/ and

http://www.world-council-for-renewable-energy.org/ for more details.)

Stop the promotion of nuclear power.

Since its start, the International Atomic Energy Agency (IAEA) has supported the further expansion of nuclear power.

INFORSE finds that this mandate is not contributing to sustainable development. Consequently, we proposed that IAEA be asked to change its mandate and role so that it no longer supports expanded use of nuclear power, and that it focus its activities on the safest possible use and decommissioning of existing nuclear power.

Renewable Energy and Sustainable Development

INFORSE also proposed that CSD take as input the CURES Declaration made by the network, "Citizens United for Renewable Energies and Sustainability", in which INFORSE participates.

Read the full INFORSE input to CSD at www.inforse.org

Beijing Renewables Conference

The largest meeting at which inputs for CSD are discussed will probably be the Beijing Conference on Renewable Energy 2005, which is scheduled for November 7-8, 2005. It is being organised by the Chinese government and is an official followup to the Renewables-2004 conference in Bonn last year. It is expected to lead to a Beijing Declaration and to high-level meetings in REN21, the follow-up network from Renewables2004 as well as among the JREC countries (Johannesburg Renewable Energy Coalition). Unfortunately, participation is quite expensive, but it is expected that a smaller number of NGOs will be represented, including INFORSE and Greenpeace.

Info: www.birec2005.cn.

Regional Preparations for CSD The UN regions will organise preparatory meetings before CSD14. For UN-ECE (Europe + North America), the meeting is expected to be in mid-December in Geneva.



The last time the UN discussed energy, and sustainable development was at the World Summit for Sustainable Development, in Johannesburg, 2002.



Edited by Gunnar Boye Olesen, INFORSE-Europe Coordinator and Magalie Séron, trainee at INFORSE-Europe in August-September, 2005.

New European Campaign to Raise Public Awareness on Sustainable Energy

The EU Commission has launched the European Sustainable Energy Campaign 2005-2008 as a new initiative to meet EU energy policy aims, i.e., an increase in the share of renewable energy up to 12% by 2010, together with substantial savings in energy consumption.

This campaign is basically aimed at:

- ensuring a strong level of public awareness.
- spreading good practices,
- stimulating the necessary trends towards an increase in private investments in sustainable energy technologies, and
- making decision-makers at all levels aware of the need for more efficient energy production and consumption.



The Campaign specifically supports and promotes actions in the following nine main areas:

- Regions,
- Cities,
- Islands and Rural Areas,
- Communities aiming at 100% RES Supply,
- Transport,
- Buildings,
- · Lighting Systems and Appliances,
- Co-operation with Developing Countries, and
- Promotion and Communication.

The projects and programs selected by the Commission will benefit from a range of promotional and communication tools that will be used to increase the visibility of these actions at a European level.







Annual key events such as the Sustainable Energy Awards are scheduled within the framework of the Campaign.

The Campaign has achievable benchmarks for 2008:

- around 5 million inspections and assessments of heating system to take place,
- 2 million Energy Performance Certifications on smaller buildings to be assured, and
- expected construction of 50,000 'very low' energy-use houses,
- a fivefold increase in the production capacity of bioethanol,
- a threefold increase in biodiesel.

INFORSE-Europe has decided to join the campaign, and will follow up with news from it.

Information: http://www.sustenergy.org, email: mr@sustenergy.org

Energy Efficiency Discussions Launched

In June 2005, the EU Commission released a Green Paper on Energy Efficiency to launch a discussion on the topic. It is expected to lead to new activities in the field. The paper stresses the many benefits of cost-effective energy-efficiency measures to the economy, environment, employment, etc. It explains the massive job creation that could be gained from realization of such measures. It gives an overview of the current activities for energy efficiency in all sectors and poses 25 questions for discussion, ranging from improving energy-efficiency labelling to taxation to road pricing of cars. It also asks the stakeholders about their opinions of new measures such as a proposal for tradable "white certificates" of energy efficiency.

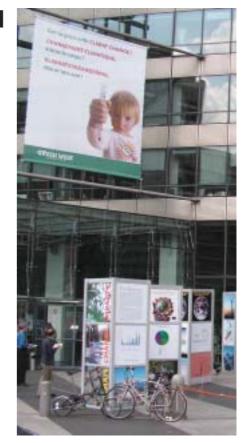
INFORSE-Europe is discussing the Green Paper and will offer its opinion on the 25 questions and on the Green Paper in general.

The Green Paper has no targets for energy efficiency. If it is to lead to an efficient EU-wide process for energy efficiency, targets should be set for the process. The targets should not be below the potential of cost-effective energy-efficiency measures. This is 20% by 2020, according to the Green Paper; but this is calculated with previous energy prices. With current higher energy prices, this potential is certainly higher.

The EU energy ministers will discuss the Green Paper during the autumn, 2005.

Read more on the Green Paper and INFORSE-Europe's comments on it at INFORSE's EU policy web page.

The Charlemagne building during the EU's Green Week in 2005. "Get to Grips with Climate Change"



UK PRESIDENCY

EU Policy for Sustainable Energy this Autumn

During the previous UK presidency of the EU, the Cardiff process was launched to integrate environmental considerations into EU policies and activities.

The current UK presidency of the EU (July-December 2005) intends to revitalize this process by applying environmental integration to individual proposals for EU legislation, etc.

The energy-related proposals expected to progress during UK's Presidency are:

- Energy End-Use Efficiency & Energy Services Directive. The Proposal was approved by EU energy ministers in June 2005, but with low (1%/year) non-binding energy-efficiency targets. In October, it is due to undergo its second reading in the EU Parliament, which proposes stronger targets.
- Security of Electricity Supply and Gas
 Transmission Networks Directives,
 both expected to be adopted in September.
- European Energy Efficiency Initiative, which is a new package of measures that will be proposed following the ongoing debate on the EU Green Paper on Energy Efficiency.
- Work towards EU strategies on climate change.
- Discussions on climate change, energy, and competitiveness at the Energy and Competitiveness Councils.
- EU-Russia Permanent Partnership Council, work towards a common strategy for energy efficiency.

Read more about the UK's presidency targets on the INFORSE EU policy web page http://www.inforse.org/europe/eu_cardiff.htm.



A larger building of this prior military complex is now restored to be used for training.

"Reopening" Party of Artefact for Sustainable Energy

News from Artefact, Glücksburg, Germany, June 2005

On Sunday 26th June, 2005, everyone was able to have a look at this new electric installation of the centre of Artefact. The Centre's reopening party celebrated the new installation as well as the consolidation of the training and visitor center, which successfully overcame several years of economic problems. The beaming faces of children and the good humour of the parents illustrate the success of this Sommerfest.

About 500 visitors have enjoyed the program of the Artefact center of Glücksburg. These inhabitants, most of whom were visiting the power park for the first time, were surprised to see the several possibilities offered by this energy station. Artefact is member of INFORSE-Europe.

More info: www.artefact.de. Previous article about Artefact: e.g., issue # 39/2002 p.12.



Picture: Children from the school of Glücksburg in front of the new PV roof of the Artefact Center

South European Sustainable Energy Seminar, Aug-Sept

INFORSE-Europe was co-organiser of the first South European NGO seminar for sustainable energy.

The event was held at the Solar Academy, which is under development on the island of Solta in Southern Croatia, August 29 - September 2, 2005. This was the first time the Solar Academy was used for its intended purpose, the training of NGOs and local groups in sustainable energy and environmental issues.

The seminar drew together almost 20 NGO representatives from the former Yugoslav Republics, Albania, and Bulgaria.

More information: www.inforse.org/europe/seminar.htm



The international group at the seminar on Solta, in Cratia on September 2, 2005.

Trainers included the INFORSE-Europe coordinators Emil Bedi and Gunnar Boye Olesen. The training combined discussions on EU and national policies for sustainable energy with interactive development of a simplified national energy strategy and with practical work on solar heating.

The seminar was co-organised by Green Action Zagreb and ProAktiva. The Norwegian Society for the Conservation of Nature supported the seminar.

The organizers are planning to repeat this success with further regional and national seminars for sustainable energy in the coming years. In addition, the volunteer camps for restoration of the Solar Academy facilities will continue.



A training session is held outside in the shadow of trees in the sunny weather.

Ukrainian "ZELENA ENERGETYKA" 5[™] Anniversary



Andriy Konechenkov, Renewable Energy Agency (REA), INFORSE member organisation, Ukraine

Start with INFORSE Cooperation Project

The magazine "Zelena Energetyka" ("Green Energy") celebrates its 5th anniversary this year. The quarterly edition was founded in 2001 in the frame of a INFORSE-Europe, Ukrainian-Danish Sustainable Energy NGO Co-operation project supported by Danish Open Air Council's Small Grant Fund.

From Ukraine, the Future Age Energy (now Renewable Energy Agency - REA), and from Denmark the Danish Organisation for Renewable Energy participated in the launching of the magazine, and developed a mobile exhibition in the Ukraine.

National and International Recognition

Since 2002, "Zelena Energetyka" has been issued under the aegis of "EKOinform" private publishing house without any international financing support. "Zelena Energetyka" is a unique magazine devoted to promote renewable energy sources and is published in large editions on the territory of the former Soviet Union. Nowadays, "Zelena Energetyka" is distributed throughout Ukraine, Poland and Russia.

The magazine, together with other publications of "EKOinform" such as "Rynok Instalyatsyi" (Market for Installations) and "ELEKTROinform", has participated in more than 100 conferences and exhibitions devoted to energy-generating and energy-conservation issues.

These exhibitions have taken place in Ukraine, Poland, Czech Republic, Greece, Italy, France, Sweden, Germany and Russia.

The information published in "Zelena Energetyka" has been used by scientific information sources, mass media, and internet sites, as well as by university students, lecturers, and experts from scientific and governmental institutions.



Events, other Publications

In addition to producing the magazine, the editors are involved in renewable-energy promotion activities, e.g. organizing special events and lectures for other publications' journalists.

DIERET - Online Education in Russian

Through the Ukrainian INFORSE-Europe member organisation REA, the editorial staff has translated and carried out the Russian version of the distant Internet education (DIERET) for those interested in renewable technologies.

Zero Energy House

Since 2003, the publishing house "EKOinform" has started realizing the project entitled "Zero Energy Home". The building in which their headquarters are housed is in the central part of Lviv. It already has been equipped with modern heating and hotwater supply systems, PV module, special roof covering, heat pump and recuperators. "Zelena Energetyka" provides information support for the project.

Invitation for Further Cooperation

On this jubilee, the editorials of "Zelena Energatyka", together with publishing house EKOinform, congratulate everybody and invite further cooperation. "Zelena Energetyka" will continue to provide their readers with the most interesting information on future energy developments and will continue to assist producers in implementing their technologies within the territories of the Ukraine and the former Soviet Union.

More information: E: fae@fae.kiev.ua, W: http://www.rea.org.ua



Photo from the Center where the seminar will take place.

European Sustainable Energy NGO Seminar, Black Sea Cost, Romania, September 13-18, 2005

The seminar and annual INFORSE meeting will bring together 25 participants, mainly from NGOs. They will discuss national and European energy policies, along with NGO political and practical activities for sustainable energy, including education and training.

Read about the results at http://www.inforse.org/europe/seminar05_RO.htm



Theme: Local Energy Supply



Theme: Local Supply



Edited by Magalie Séron, trainee at INFORSE-Europe.

Many localscale initiatives that favour renewable energies and apply energy efficiency measures have been launched.

In this theme, we focus on the benefits of local supply as well as on some remarkable European outcomes in the creative use of energy efficiency, of local renewable energy sources, and of cogeneration of heat and electricity.

Plug the leaks in the Local Economy

Many communities use 20% or more of their income on energy, and 80% of this money leaves the community immediately. If these funds were kept and used within the community, the local economy would benefit. The same is true of expenditures for food and for a number of other goods that could be produced locally.

goods that could be produced locally. The Rocky Mountain Institute in Colorado, USA has analysed these effects on local economies. In their "Economic Renewal Program" for local communities, they analyse the local "multiplier effect" of spendings, referring to the circulation of money within an economy. When a community keeps more money at home, the money recirculates and increases the local multiplier. Each time the same money changes hands before it leaves the community, it creates more value and supports more local economic development opportunities.

Typically, less than 50% of investments in energy efficiency of houses is spent on imports from outside a local economy. The rest is labour cost. Such investments pay for themselves in reduced energy costs. Thus, they increase the multiplier effect, and directly benefit the local economy. The same is true of many renewable-energy solutions that also yield the considerable environmental and national economic benefits of sustainable energy.

Read more at www.rmi.org.

Woking: Local Sustainable Community Energy



The Borough council of Woking in the UK, with 100,000 inhabitants, succeeded in its ambitious objectives of a 14-year strategy for a sustainable-energy society.

The aims were to get the area supplied by energy-efficient low-carbon energy resources while establishing a sustainable community energy infrastructure.

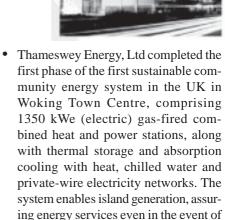
Now the Woking Council has succeeded in this with the combination of technical innovation, partnership with the private sector, financial/commercial innovation and the use of a local electricity -balancing and -trading system.

The key 3 principles of the strategy are:

- Adopting an overall target to reduce Woking's CO₂ equivalent emissions by 80% of its 1990 level;
- Adopting the concept of an Environmental Footprint;
- Declaring itself Climate Neutral and setting up a Climate Change Fund.

To meet these ambitious targets, the following projects have been implemented by the Council:

- The Council installed the only local authority private-wire residential combined heat and power (CHP) and renewable-energy systems in the UK to provide heating, hot water services, and electricity directly to its shelteredhousing residents.
- Woking incorporated the UK's first Energy and Environmental Services Company (EESCO) called Thameswey Energy, Ltd, in 1999. It is able to provide energy services, to enable green energy projects to be implemented and to serve buildings directly with green energy. For the housing stocks where the Council pays the energy bills, it has achieved impressive savings of 46% of energy consumption within 10 years.



• The first integrated CHP and photovoltaic system in the UK has been launched, combining a 81.5 kWp (peak) PV that mainly produces power in the summer with a 30 kWe CHP unit, with most production in the winter.

a prolonged external power cut. The sur-

plus electricity is exported to other

Council sites.

• The Woking Park – fuel-cell CHP project comprises a 200kWe fuel cell CHP, together with 950 kWe new and existing CHP, solar shading photovoltaic systems, heat driven absorption cooling, and large-scale thermal storage. The cost of the fuel cell CHP was diluted by integrating the project into a larger green-energy project.

The service manager of Woking, has now been hired by the Major of London to replicate the Woking success on larger scale.

Read more:

http://www.woking.gov.uk/environment/ climatechangestrategy/ climatechangedevelopment http://www.forumforthefuture.org.uk/ uploadstore/GenH_Jones.pdf



100 % Renewable Energy Communities in EU

Local supply has been the focus of many initiatives in the EU countries in the last ten years. In order to foster the implementation of the Community Strategy and Action Plan, the European Commission launched "*The Campaign for Take-Off*".

The campaign, which supported 98+ initiatives, ran from 2000 to 2003. The overall aim of these projects was to prove that various energy sources such as wind, sun and biomass can be linked to guarantee a reliable and tailor-made energy supply.

One of the key sectors of the campaign consisted of "Communities Aimed at 100% Renewable Energy Supply" projects, a number of which are islands. Some of these islands already have produced remarkable results, like the Danish Samsø and the Greek Crete. These two islands have followed totally different approaches to the development of renewable energy, according to their respective available natural resources.

Sustainable Energy Communities (SEC) can be defined as local communities in which politicians, planners, developers, market actors and citizens actively co-operate to demonstrate and to develop high degrees of decentralized energy supply, favoring renewable energies as sources, together with a conscientious application of energy-efficiency measures in all end-use sectors.



SAMSØ:

The island of Samsø was selected in 1998 by the Danish Government as a demonstration case for a community to be supplied with 100% renewable energy. The island, which covers 114 km², has 4,400 inhabitants.

The most important means of achieving

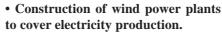
the objective of 100% community renewable energy supply are:

- Cuts in consumption and increased efficiency in terms of heat & electricity during the period of 1998-2008. Improved housing insulation and the technical effectiveness of heating plants should make it possible to save 21% of heating requirements on average. The target for average savings is about 25% of electricity consumption.
- Expansion of the district heating supply systems and individual heating systems using local biomass resources.

About 60% of the total heating on Samsø is expected to be supplied from district heating based on biomass (straw, wood and biogas), heat pumps, and solar thermal collectors. The remaining 40% is in

the rural areas, where houses are planned to supply heating individually by wood stoves, heat pumps and solar thermal collectors.

Presently, roughly 25% of the residences in the rural areas are now supplied entirely from renewable energy sources. The other residents of rural areas complement their RE heating supplies with conventional heat. The concept of neighbour heating has also been integrated, allowing farmers to supply neighbours with heat produced at the farm, for example from a large straw boiler



Eleven 1-MW land-based wind turbines cover 100% of the electricity consumption of the island. An offshore wind farm was installed in 2002 and contains ten 2.3-MW wind turbines. Their production is a compensation for the fossil-fuel energy supply in the transport sector. The ownership is a mix of co-operatives, private and the local municipality.

• Gradual conversion of the transport sector from petrol to biofuels, electricity and, later, to hydrogen: The development of alternative fuels is slow but some biofuel projects are in progress. A rapeseed press has been installed to pro-

> duce pure plant oil for diesel cars. The future hydrogen based transport is under development.



100% Samsø Success

All of these actions have led to an impressive 100% renewable energy coverage of the electricity consumption, which has remained stable even as people have obtained more electrical equipment. In 2005, Samsø produced 130% of its electricity needs without CO₂ emissions, exporting a surplus of approximately 80,000 MWh to the mainland from the offshore turbines.

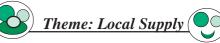
The success is a story of local commitment and global responsibility.

One of the key actors, the association of the Samsø Energy and Environment Office, is also an active member of INFORSE.

In June 2006, an "Energy Academy" will open on Samsø. It will be a house where scientists and researchers can meet, seminars and training sessions will be arranged and a permanent exhibition will demonstrate renewable energy and local sustainable development.



District heating system based on biomass, and solar thermal collectors. Photos by Søren Hermansen, Samsø Energy and Environment Office.



CRETE

Crete is the largest island in Greece, with 8,335 km² and 601,000 inhabitants. The topography of the island is very mountainous, which creates good conditions for wind power. Crete also receives an abundance of sunshine. The total energy consumption in Crete reached 34,000 TJ in 2004.

In 1998, the Region of Crete and its Regional Energy Agency launched the programme "Large Scale Deployment of Renewable Energy Sources in Crete", which was given the first Award for the Best Regional Renewable Energy Partnership in Europe within the framework of the 2001 "Campaign for Take-off Awards".

Through the Greek Operational Program of Energy and the Greek Operational Program of Competitiveness, around 100 investments have been realised in the sector of RE, rational use of energy (RUE) and energy-saving, especially in hotel units and small industries. The most important means to promote renewables in Crete are:

• Reduction of Electricity Consumption

- Demand-side Management

Energy-saving measures have been taken to decrease demand. For instance, passive and hybrid systems for cooling in dwellings, hotels and bungalows have been set up. The establishment of a time-zone pricing system will also smooth the daily variations in the load curve.

- Electricity Savings

The substitution of more efficient light bulbs in the residential sector and the use of passive and hybrid cooling in new constructions could lead to a 10% reduction in the net electricity production over the 1998-2010 period.

• Energy Storage

Reverse-pumping hydro-storage systems will permit larger use of intermittent renewable energy sources in the electricity system of Crete. They will also facilitate the management of the conventional electricity production system and replace the expensive use of gas turbines during the peak hours.

• Wind Power:

16 wind parks of 89 MW total capacity are in operation, providing almost 8-10% of the electricity in Crete, while 9 new wind parks of 50 MW in total capacity are under construction.





•PV Applications:

30 photovoltaics (PV) installations (200kW installed capacity) are integrated into lighthouses and small hotels for ecological tourism, as well as into residential housing.

20 new PV installations of 1.2MW total are under construction. Further development of PV energy is expected beyond 2010.

• Solar Hot Water Systems (SHWS):

Almost 3% of the total energy demand is supplied by solar thermal collectors. There are about 190,000 m² of solar thermal collectors (central and distributed) for water heating, which are mainly installed in hotels, industrial buildings, and residential housing. Two solar cooling/air-conditioning systems have also been installed in hotels.

Biogas, Biomass and Biofuels:

Two biogas combined heat and power plants are in operation. Biomass is, however, more widespread in Crete and provides more than 8.5% of the island's total energy demand. Biomass is mainly derived from residuals of the large-scale olive production processed on the island and used in thermal-energy applications



in olive-oil mills, greenhouses, hotels, houses and small manufacturing units. Olive kernel wood is also used as fuel instead of oil, as it costs 5 times less than the required quantity of oil for the same efficiency.

All these installations have been followed by "soft measures" like voluntary programs for electricity peak "saving" during summer, promotion of efficient electric bulbs, and public information for the promotion of renewables and energy saving. The program created new activities and new jobs, thus decisively contributing to energy innovation, to environmental protection, and to the reduction of greenhouse gas emissions.

Successes Can be Replicated

Both Samsø and Crete have been successful. They have sharply increased the use of renewable energies, following the plans made at the start of the initiatives 10 years ago.

Many of the other projects registered as "100% renewable communities" have similar results, and their results are being replicated world wide.

While Crete enjoys a climate very favourable to solar, wind, and biomass energy, good results can be obtained in less promising climates. For instance, Ærø, a Danish island in the Baltic Sea, managed to expand its use of solar thermal collectors without the benefit of Mediterranean weather conditions.

More Information:

- "Take off" Campaign:
- http://europa.eu.int/comm/energy/en/ renewable/idae_site/deploy/ mapa site.html
- European renewable-energy islands: www.europeanreislands.net
- Crete & Samsø: www.crete-region.gr/greek/energy/ ww.veo.dk/eng/

Commercialised Stove Production in Sri Lanka

A Success Story of 300,000 Stoves a Year



By R.M.Amerasekera, IDEA, INFORSE member organisation, Sri Lanka

Since its inception in the early 1970s, the improved cook stove program in Sri Lanka has gone through several stages from design to testing, promotion and commercialisation.

Many actors have taken part in the process. The two pot clay stove, "Anagi", is the final model that was used in the commercialisation phase initiated in 1991 by the Integrated Development Association (IDEA) with technical assistance from the ITDG and funding from the ODA. This stove is designed to serve the cooking needs of an average family of 6 people.

It is estimated that over two million Anagi stoves have been commercially produced and marketed since 1991.

The present annual production is 300,000 stoves produced by about 120 rural potters trained by IDEA.

Several district surveys have revealed that over 20% of participating households use Anagi stoves.

The retail price is around 1 Euro. The lifetime of the stove is one year when it is used without insulation and more than three years if insulated.



A step in the production of the Anagi two-pot clay stove (top), the finished stove (top-right), and the stove integrated in a kitchen under a chimney-hood (right)

Benefits of these stoves:

- Substantial financial savings for users, as the Anagi stoves need between 22% and 43% less firewood than their predecessors.
- Environmental benefits, as the Anagi stove reduces local pollution and has the potential to reduce CO₂ emissions within a range of 111 kg/ CO₂/capita/ year to 266 CO₂/capita/year.
- Substantial improvement in the socioeconomic status of the villages as a result of increases in employment rate, and generated income from the production and selling of the stove.





More information:
Integrated Development Association
(IDEA), Galmaduwawatte Rd,
Nattarampotna Kundasale, Sri Lanka.
T: +94 81-2423396,
F: +94 81-4470649,
e-mail: idea@sltnet.lk.
Read the whole article at
http://www.inforse.org/asia.

Energy to Reduce Poverty - INFORSE-South Asia Project 2005-06

This project is now well under way and its results are already available on the internet. There, you can find overviews on the topics of energy and of poverty in the participating countries of Bangladesh, India, Nepal, and Sri Lanka. Each overview includes descriptions of energy supply and demand as well as of successes with sustainable energy.

A major outcome of the project will be training manuals on sustainable energy for poverty reduction. They are under development and will be finished in the first part of 2006. The project will continue with NGO training seminars and capacity building during 2006.

The project partners are:

- INSEDA, All India Women's Conference (AIWC), and Sustainable Development Agency (SDA) from India;
- CRT from Nepal;
- IDEA from Sri Lanka;
- Grameen Shakti from Bangladesh;
- OVE The Danish Organisation for Sustainable Energy; and
- DiB The Danish Forum for Sustainable Housing.

The project is supported by the Danish Small Grant Facility for NGOs.



The project partners meeting in Sri Lanka in 2005

See the results of the project as they become available at http://www.inforse.org/asia.

Gender Equality & EU Climate Policy

In 2003-2005, the EU project Climate for Change: Gender Equality & Climate Policy, was designed to raise awareness of decision-makers and exchange ideas of best practice to improve the participation of women in decision-making in fields related to climate protection.

Climate Alliance-Europe served as the coordinator, and the partners included 10 European local authorities from 4 countries, along with the Union of Baltic Cities. The consultant was Ulrike Roehr from LIFE e.V./Women's Environmental Network. The results of the projects are a Toolkit along with other reports.

The Project partners collected practical tools known to increase women's employment in jobs with real authority over matters of climate protection.

The partners' findings indicate that a balanced participation of both genders would produce a more comprehensive approach to climate protection, which would lead to improved measures, greater acceptance, and better results.

The products of the project include:

- Facts and Arguments: Project findings, along with extensive background information from all over Europe.
- The Gender Checklist: Includes 15 test-yourself questions for department or unit leaders.
- **Tools for Promoting Women in Ex**ecutive Positions: Implementation guidelines, instructions and suggestions as well as a variety of examples.
- **Poster and Leaflet:** To post and to distribute for the purpose of promoting awareness of the issue.
- **National Reports:** Finland, Germany, Italy, Sweden.
- City Surveys: Berlin, Dresden, Ferrara, Frankfurt, Genova, Lahti, Malmö, München, Napoli, Venezia.
- Presentations, and documents.

Contact: Climate Alliance- Europe. T: +49-69-71 71 39-0 F: +49-69-71 71 39-93 E: europe@klimabuendnis.org W: www.climateforchange.net/54.html

The project is one of the transnational projects supported under the Program relating to the Community Framework Strategy on Gender Equality, Call of VP/2002/06 on Gender balance in decision-making. http://europa.eu.int/comm/ employment_social/gender_equality/index_en.html

See previous articles in Sustainable Energy News: "Theme: Women & Energy" Issue Nr 47, p2-9, Nr 48, p.3.

This article continues our coverage of the theme of "Women & Energy".

We will continue in the next issue.





Are there Gender Equality Support Criteria in **EU's Energy & Climate Programs?**

As part of the "Climate for Change - gender equality and climate change policy" project, research was done to establish how gender concerns are reflected in the EU's financial support programs on climate protection. Here you can read a shortened overview of the programs that were examined:

Intelligent Energy Europe 2003-06

Intelligent Energy Europe (IEE) promotes efficient energy use as well as the use of renewable energies through the removal of market barriers and through awareness-raising.

The "Annual Work Programs" set out the priorities for each individual year and the financial framework for the projects to be supported in that year. However, there is no mention of gender equality or of any criteria that would include it in the decisionmaking about such support, either in the currently available "Annual Program 2004" or in the "Call for Proposals". Similarly, there is no mention of gender issues in the tender for applications from experts for the selection procedure.

Sustainable Urban Development

The now completed "Framework for Cooperation to Promote Sustainable Urban Development" program of the Environment Directorate-General was a development program for all European city networks working in the area of sustainable development. In addition to supporting individual projects by the networks, it coordinated cooperation

A perusal of the call for proposals guidelines and forms did not bring to light one single instance of criteria for the consideration of equality-related aspects.

LIFE

The LIFE program is one of the most important instruments for the implementation of EU environmental policy, as laid down in particular in the 6th Environment Action Program.

On the introduction to the "Application Guide 2005" for LIFE-Environment, the following statement appears: "The LIFE program promotes equal opportunities and therefore encourages applications from organizations who themselves implement such principles and from organizations that represent women's issues.'

While there is no mention of the consideration of equality-related aspects in the "Guidelines 2005-2006 for 'LIFE-Environment' preparatory projects", the "Guidelines

for LIFE-Environment demonstration projects" states: "The LIFE program promotes equal opportunities and therefore encourages applications from organizations who themselves implement such principles."

In the application forms, however, there is no mention of it, apart from a specific question relating to the consideration of equality in the project.

Research Framework Programs (RFP)

In the ongoing 6th RFP, one of the seven priority subject areas is "sustainable development, global change and ecosystems". The research programs on energy, transport and climate protection also fall within this area.

The gender aspects of research are supposed to be taken into account in all areas and so-called 'thematic priorities'. This happens at the application, evaluation and reporting levels.

Despite this progress, consideration of the gender perspective in the RFP could still be improved, as it does not play a crucial role in the evaluation process. Nonetheless, of all the EU funding programs, this one has the most far-reaching plan for integrating the gender perspective.

Summary and recommendations:

As mentioned above, the Research Framework Program has the most extensive experience of integrating the gender perspective. All funding programs should be reviewed to establish how the gender perspective is currently being integrated or is to be integrated in future. This procedure will make the applicants aware of issues of gender equality and make sure that the procedure is implemented consistently.

For the purposes of an integrated impact assessment, as proposed by the European Commission, all projects funded by the EU should contribute to improving gender equality. It is a question of paying attention not just to the quantitative level of the participation of women, but also to the impacts that projects could have on the social situation of men and women in different areas of their lives (paid employment, leisure, care work).

Contents

Editorial p. 2:

• "Mission Not Yet Accomplished"

INFORSE/World p. 3

- NGOs Demand Sustainable Energy for Development CSD Process
- Beijing Renewables Conference November 7-8, 2005

Europe p. 4-6

- EU Policy Update
- New European Campaign to Raise Public Awareness on Sustainable Energy
- Energy Efficiency Discussions Launched
- UK Presidency Energy Policy

• INFORSE-Europe News

- South European Sustainable Energy Seminar, Croatia
- "Reopening" Party of Artefact for Sustainable Energy
- European Sustainable Energy NGO Seminar, Romania, September 13-18, '05
- Ukrainian "Zelena Energetyka 5th Anniversary

Theme: Local Energy Supply 7-9

- Plug the leaks in the Local Economy
- Woking: Local Sustainable Community Energy
- 100 % Renewable Energy Communities in EU Samsø, Crete

Asia p. 10

- Commercialised Stove Production in Sri Lanka
- Energy to Reduce Poverty -INFORSE-South Asia Project '05-06

Gender Equality & EU Climate Policy p. 11

• EU project Climate for Change: Gender Equality & Climate Policy - Gender Equality Support Criteria in EU's Energy & Climate Programs

Back Page p. 12

• International Renewable Energy Conference, Nov. 14-16, 2005 Karaganda, Kazakhstan



November 14-16, 2005

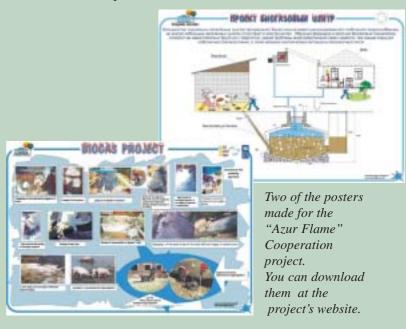
First Central-Asian Renewable Energy Conference & Tour Biogas in Focus Karaganda, Kazakhstan

Ecomuseum and INFORSE-Europe organise an international conference on renewables with special focus on biogas. There will be a technical tour, and exhibition possibilities. Limited travel support is available for NGOs from Central Asia. The language will be English and Russian with translations.

The conference is in the framework of a 2-year NGO-cooperation project on establishing a biogas center in Kazakhstan, 2004-05. The project is supported by EuropeAid, the Norwegian Society for the Conservation of Nature, and others.

The project cooperation partners are:

- Ecomuseum in Karaganda, Kazakhstan;
- Renewable Energy Agency in Kiev, Ukraine;
- INFORSE-Europe.



More info: Karaganda Ecomuseum, REA from Ukraine, and

INFORSE-Europe Secretariat.

E: bc_conference@nursat.kz

E: ove@inforse.org

W: http://www.ecomuseum.freenet.kz/bgconference.shtml W: http://www.inforse.org/europe/kz_conf_nov_2005.htm Project: http://www.inforse.org/europe/kz_biogas.htm

