100% Renewables in 2050!
INFORSE in Action:
Join Petitions, Projects, Lobby, Education Initiatives
INFORSE Vision:

100 % Renewables in 2050

At the “Renewables2004” conference in Bonn, June 1-4, there is a large emphasis on targets for renewable energy. Targets are important. They are needed to see if the development will meet the imperatives of reducing climate impacts and of reducing the use of dwindling fossil reserves. They are equally important as yardsticks to measure the actual development against. Thus, one of the measures for success of Renewables 2004 is the targets developed for renewable energy.

In INFORSE, we want to go one step further. We want to include the targets in visions for a transition to highly efficient energy use and to an energy supply based on renewable energy. This is the ultimate sustainable solution.

Researchers have shown how a world of 9 billion people can be fuelled with renewable energy in 2050. We are developing visions for a 50-year transition to such a situation, for countries as well as for regions. The visions show how a combination of renewable energy growth and increase in energy efficiency can secure a gradual transition to renewable energy supply.

The vision presented at Renewables2004, and available at the website www.inforse.org/europe, is the first version covering EU-15. It will be developed further following the comments that we receive and the cooperation partners that we find for this. In addition, we will develop a vision for the 10 “new” EU countries. This introduces the hydrogen economy into the vision. The hydrogen is expected to be produced mainly at electric-driven hydrogen plants.

The vision for EU-15 is based on a gradual increase of efficiency from 1%/year, 2000-2010, to 4%/year, 2040-2050, for heating and 6%/year for electricity demand and industry. In this way, industry and electricity use will have increased efficiency by a factor of four in the period 2000-2050.

Estimates of renewable energy use are based on sectorial forecasts, such as Windforce12 for wind energy. For traffic, a smaller decrease is expected in transport of persons as well as of goods, as is some modal shift from cars to trains. This is because current transport patterns are inefficient given the too low costs of transport and the trend to commute long distances, often with state support in the form of tax breaks. Thus, the society will be more efficient with less transport and more use of public transport.

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We welcome cooperation on national, local, and regional Vision 2050s.

“Vision 2050“ Cooperation Welcome !

The Visons have been developed for Denmark, Romania, Slovakia, and Ukraine. A new vision, covering the 15 “old” EU countries, will be presented in Bonn in parallel with Renewables2004. In addition, a Vision is under development for Belarus.

The INFORSE Coordinator

Gunnar Boye Olesen

INFORSE Coordinator

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INFORSE-Europe

INFORSE Coordinator

Gunnar Boye Olesen

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INFORSE Vision:

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We welcome cooperation on national, local, and regional Vision 2050s.
“Renewables 2004” in Bonn - How Big a Step?

By Gunnar Boye Olesen, INFORSE

The high-profile international conference for renewable energy in Bonn, June 1-4, 2004, is expected to lead to a political declaration with shared political goals, an international action programme, and policy recommendations for renewable energy. It is essential for the success of the conference (and for that future development of renewable energy) that these documents include agreements for substantial increase of renewable energy use as part of a global sustainable development.

The outcome should include:

- Regional and national targets for renewable energy that are not less ambitious than the 15% global renewable energy by 2015 proposed by most European countries and many others for the Johannesburg Summit 2002, and substantially higher targets for 2020.
- A fast process to develop targets after the conference for countries that do not have targets ready by June 1, and that are part of the Johannesburg Renewable Energy Coalition (JREC).
- Targets for ending energy poverty, following the Millennium Goals for Poverty Alleviation. This is particular relevant for the African and Asian JREC member countries, where many of the people who lack sufficient energy live.
- Strategies to realise the targets for renewable energy as well as for ending energy poverty with maximal use of renewable energy. For countries and regions that do not have these strategies, a rapid process should be started to develop the strategies. The durations should not exceed one year.
- Financing mechanisms for renewable energy should be agreed (grants as well as loans).
- International structures to support the development of renewable energy. INFORSE supports an international organisation for sustainable energy.
- The development of renewable energy must be guided by the principles of sustainable development, such as those included in the declaration of NGOs united in the CURES (Citizens United for Renewable Energy and Sustainability).

Unlike that of UN conferences, the success of Renewables2004 is not dependent on consensus among all the participating countries. If targets, strategies, and international cooperation are agreed upon by a number of countries, and if a fast implementation of the strategies and cooperation is started, the conference is a success, even if some countries decide to step out.

The urgent need is for a critical mass of countries to take the lead. A crucial factor is the position of the 25 EU countries. The 15 “old” EU countries have already agreed to 12% renewable energy by 2010. An ambitious goal for EU for 2020 will be a signal that could bring Europe firmly to the front of the development.

European NGOs have advocated for 25% renewable energy in total energy supply by 2020, while the European renewable-energy expert meeting in Berlin in January recommended 20-25% renewables by 2020. If the EU countries have not agreed to a reasonable 2020-target before or during the Renewables2004, individual EU countries must take the lead in the conference with national targets, and the EU must follow-up with a fast process to agree a target.

The involvement of developing countries is also important for success. Many have joined JREC; they must now follow-
up with national targets and strategies for renewable energy, as well as for energy efficiency and for energy to reduce poverty. Many developing countries cannot achieve ambitious renewable energy targets as part of their development without assistance from industrialised countries. This should not prevent them from setting targets and developing strategies, clearly indicating what assistance they might need.

The Latin American target of 10% renewable energy by 2010 (agreed upon in principle at the Latin American preparatory conference, October 2003) is an important signal and must be followed up with strategies.

The African countries agreed on a statement in support of the Renewables 2004 conference and the efforts to engender worldwide consensus on the JREC. JREC calls for targets, but the African countries did not specify any target in their statement. They called for support for their development of renewable energy in a number of ways, including support for development of guidelines for large hydropower use in a sustainable manner, and for investment in large hydropower that follows these guidelines.

The Arab countries also met to prepare for Renewables2004, in Yemen, April 21-22, and approved the Sanaa Declaration. They called for support for development and import of renewable energy technologies and for diversification of the economies of oil-exporting countries; but they did not propose targets.

The Asian countries met in Bangkok on March 25-26, also to prepare for Renewables2004.

Based on the regional preparations, it is in no way certain that Renewables2004 will be the big step forward for renewable energy that we all hope for. The last preparations, and the conference itself, will be critical to success.

Read more on NGO positions at www.inforse.org; see the positions at www.renewables2004.de.

Events in Bonn beside “Renewables2004”:

**Before:**

In addition to the World Council for Renewable Energy Conference (May 29-31) and CURES Strategy Meetings (May 30-31), events before “Renewables2004” include:

- The Climate Relay in Germany
  - The KlimaStaffel 2004 is a relay for renewable energy that started at Artefakt near the Danish border on May 7 and continues through all German states. It will be carried through its route - 3600 kilometres in total - in climate-friendly ways, such as on bicycles, in renewable-energy-driven vehicles, by runners, etc. It will include the “Climate Relay Declaration”, signed by all the 16 German states that make up Germany, whereby they commit to strongly promote the use of renewables.
  - On 1 June, it will reach Renewables 2004 in Bonn, where the messages will be handed over to the German Environment Minister. Before that, the relay will have visited all the regional state (Land) capitals, along with an outstanding renewable-energy project in each state. Wind farms and solar installations as well as hydroelectric, biomass-fired, and geothermal power plants will showcase how sustainable energy systems are realized.
  - The event is organized by the Climate Alliance. Info: [www.klimabuendnis.org](http://www.klimabuendnis.org) and [www.klimastaffel.de](http://www.klimastaffel.de).

- Local Renewables Conference, May 31
  - Political representatives of cities from all around the world are invited. They will make presentations, discuss requirements, put forward the positions of the local communities, and discuss a “Local Renewables Declaration”. In addition, individual cities – or networks and associations – are invited to formulate their own, wider-ranging voluntary commitments and recommendations.

- Youth Energy Summit 2004, May 29-31
  - The participants will develop proposals for energy change. The results of the YES2004 will be handed over to a representative of the German government in the form of a Youth Declaration. The conference participants will also present their proposals and demands in a public action on the Muensterplatz in Bonn. The Youth Alliance for Future Energy was founded in the preparation for the Renewables2004 and the youth summit.

**Side Events:**

About 60 official side events are planned during Renewables 2004. In addition, there are NGO events at the CURES NGO center outside the official conference venue and elsewhere in Bonn. Some of the side events are:

- **Official Side Events:**
  - Renewable Energy - Gender Perspectives from North and South
    - By ENERGIA, International Network for Gender and Sustainable Energy (INFORSE member), and LIFEx.V., Focal Point, Gender Justice and Sustainability.
  - Wind & Hydrogen in the Martin García Island and Patagonia, June 1, 18-19.30. by the Argentinian Wind Energy Association, [info@argentinaeolica.org](mailto:info@argentinaeolica.org)

- **NGO Exhibitions Stand**
  - The NGOs supporting the CURES declaration will have an exhibition stand for NGOs during the conference. INFORSE also exhibits.

- **Unofficial Side Events:**

At the CURES NGO Center, Dahlmannstreet 1, 53113, Bonn:

- A Vision for a Transition to a Sustainable Energy System by 2050, June 2, 12.30-13.15
  - By INFORSE-Europe, includes examples for EU-countries and Eastern Europe.

- **CURES Final NGO meeting** - June 4

- **INFORSE Meetings, June 5**
  - more info: [www.inforse.org](http://www.inforse.org)
Renewables Can Get South Africa Working

By Claire Taylor, Sustainable Energy and Climate Change Partnership, a project of Earthlife Africa, Johannesburg and member of the Energy Caucus. INFORSE member and coordinator (shortened by the editors)

South Africa faces a crisis of unemployment – up to 40% are without work. In the energy sector alone, 70 000 jobs have been lost in the last 20 years (from 130 108 to 59 987 employees) even though the amount of electricity generated increased by over 60%.

If government decided that just 15% of our total electricity in 2020 should be generated using renewable energy technology (RET), it would create 36 400 new jobs without taking any jobs away from coal-based electricity. This is according to a study commissioned by the Sustainable Energy and Climate Change Partnership (a project of Earthlife Africa, Johannesburg). The study looks at the number of people needed to generate 267 TWh – the amount of electricity that South Africa is predicted to need in 2020.

To illustrate this point, the researchers worked out how many people are employed to produce electricity using conventional energy technology (CET) and RET. The results are striking, with RET having the potential to employ many times more people than CET.

For instance, 0.3 people are currently employed for each GWh of electricity generated from coal, while 0.1 people would be employed to produce one GWh from the pebble bed modular nuclear reactors (PBMR). In contrast, producing 1 GWh of electricity from solar thermal energy would employ 10.4 people, from wind energy would employ 12.6 people, from capturing the energy in landfills would employ 23 people, and a significant 62 people would be employed for each GWh of electricity generated from solar panels.

The labour-intensive nature of renewable energy technology, including producing, installing, and maintaining these technologies, means that thousands more people would be employed if they were supported by government.

It’s the words ‘if they were’ that lead us to the crux of the matter, because currently RETs are not supported in government policy. In fact, government’s RET target for 2013 is ambiguous, and will give an increase in RE below 1.5% of annual energy consumption in 2000. So, we’re a long way off from 15% of our electricity in 2020 being from RETs.

Clean Energy Program Launched in Namibia

“The future is about as bright as the Sun can get!”

Robert Schultz, R3E Namibia, INFORSE member

The Renewable Energy and Energy Efficiency Capacity Building in Namibia Project, REEECAP for short, was launched on April 27, 2004. The launch was preceded by a 6-day seminar, which involved participants from the Ministry of Mines and Energy, the R3E Bureau, and several others. This 3-year capacity building project was made possible through funding to the value of N$ 10 million from the Danish Government and will address greater energy awareness in rural areas, through the conservation of wood fuels and use of off-grid energy technologies; and in urban areas, through the introduction of energy efficiency in housing programs.

A component to REEECAP is enhancing the capacity of the R3E Bureau to support successful fulfillment of its mandate to help the Ministry of Mines and Energy coordinate Namibia’s renewable energy and energy efficiency projects and programs. The Bureau will gather and disseminate reliable energy information and will advise the Ministry on the implementation of its Energy White Paper policies regarding alternative energies.

Parallel to the REEECAP project, Namibia has also commenced this year with the multi-million dollar Solar Energy Barrier Removal Project, funded by the UNDP Global Environment Facility and administered by the Ministry of Mines and Energy. Collectively, these two projects, along with a host of other smaller projects currently under way, provide the single largest dedicated financial support in the history of Namibia’s road to energy self-sufficiency.

What are the Benefits of Renewables?
An East and Horn of Africa Perspective

By Stephen Karekezi and Waeni Kithyoma, AFREPREN/FWD

The African Energy Policy Research Network (AFREPREN) and The Heinrich Boll Foundation (Regional Office for East and Horn of Africa) held a seminar on February 27 in Nairobi that brought together 73 participants from government, civil society, NGOs, industry, electricity utilities, universities, research institutes, as well as the general public. Also participants from Uganda and Tanzania took part in the seminar.

Recommendations from the seminar:

- Renewable-energy technologies have an important and complementary role to play in development of the energy sector in the country.
- The 10% target proposed at WSSD is feasible, and in some cases has already been achieved; e.g., in Kenya, 10% of electricity is already generated from geothermal energy.
- Formal and small-scale renewable-energy technologies manufacturers and assemblers should work together in order to complement each other

The seminar was part of the study by AFREPREN to assess the benefits of RETs in order to complement each other achieve higher dissemination of RETs.

- Geothermal exploration and development in countries in the region should be expedited. Kenya’s success in geothermal should be advertised as a success story that could be emulated by other countries.
- The legal and regulatory framework should be reviewed to provide incentives for co-generators and geothermal energy developers.
- Active and sustained lobbying of policy makers on the potential and benefits of RETs should be undertaken.
- Phase 2 of the study (see below) shall focus on a wider range of renewable energy technologies that have a more direct impact on poverty alleviation.
- A clear and detailed follow-up RETs action plan for presentation at international forums, e.g., at the Bonn Conference, is necessary, in order to ensure that the study achieves maximum impact.

The CUB could represent electricity users and ensure that their rights are respected. The CUB could also be the conduit through which users (civil society) could participate in the transition to a new energy policy that is sustainable and environmentally sound.

The HELIO proposal regarding the French Conseil des Usagers en Biens Energetiques (CUBE) was included by the French National Committee for Sustainable Development (the Comité national de développement durable, or CNDD), in its recommendations to the government. The members of the CNDD hope that the recommendation for establishing a CUBE in France will be implemented as rapidly as possible.

More information:
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Initiate CUBs in Your Country!

By Helene Connor, HELIO, France

HELIO International is bringing this suggestion to other NGOs in the hope that they could initiate a Citizens Utility Board (CUB) in their own country. With a network of CUBs across Europe, energy users could have a better grasp of the impacts of energy policies on their environment, promote renewable energy, contribute to climate stabilisation and sustainable development, and in the process regain some control on their own life.

In the 80’s, several US legislatures (Illinois, Wisconsin, Oregon) formed CUBs to serve as a voice for residential and small-business utility ratepayers. Though created by the state, CUBs receive little or no state tax dollars. CUBs are guided by boards of directors elected by CUB members.

Obviously, this type of organisation can be tailored to European countries, and can be used to provide strong stakeholder input to the choice of electric generation, the quality of service, etc. This input is particularly critical in light of the liberalisation of the electricity market within the EU. These user councils would allow development of greater expertise among users with regard to energy conversion and end-use. The CUB would be a point of diffusion of information to users, possibly through gas- and electricity bills (this is how the American CUBs initially distributed information). The information provided would allow energy users to make informed choices regarding their preferences (technologies, type of fuels used, etc.).

The CUB could represent electricity users and ensure that their rights are respected.
The EU Parliament has adopted a resolution on the proposal for an EU Eco-design framework directive for energy efficiency and other environmental characteristics of products. The resolution calls for the following measures:

- One year after the adoption of the framework directive, the Commission should implement measures for those products that offer a high potential for cost-effective reduction of greenhouse gas emissions. These include heating and water heating equipment, electric motor systems, lighting, domestic appliances, office equipment, consumer electronics, as well as ventilating & air conditioning systems. Stand-by losses of all products should also be regulated as soon as possible.
- Consumer information requirements for manufacturers and distributors, with information on life-cycle impacts and resource-efficient use of the products.
- Establishment of an Eco-Design Board with balanced participation of all relevant interested parties, including environmental NGOs.

The proposal will be discussed by the EU ministers on June 10, and it is likely that they reach an agreement. The second reading of the Parliament will only be after the election.

Emission Trading

The EU countries will start using the quota system for CO₂ and other greenhouse gases with the start of 2005. Ten of the 23 EU countries included in the scheme have submitted their national allocation plans (NAPs) for initial distribution of the quotas by the beginning of May, while 6 more had drafts available. One problem is that 13 did not meet the deadline set by the EU Commission. Another problem is that of the 16 that have made NAPs public in final or draft form, many have given very generous quotas to industries. This is the case in Germany, Denmark, Austria, and several others. For many of the countries, the allocations of quotas are so high as to make it impossible to fulfill the Kyoto Protocol from 2008 with national measures. The only way to solve the problem is for the states to buy Joint Implementation and CDM quotas for their national targets. This kind of indirect state aid for the polluters is undermining the environmental value of the quota system. Over-allocation of quotas will drive down the price of emissions and reduce incentives to cut them. Hopefully, the EU Commission and the countries can agree that this is not the best way to fulfill the Kyoto Protocol commitments. Quotas should be reduced until they are in line with the Kyoto Commitments of 8% CO₂ reductions.

Heavy “Link Directive”

April 20, the EU Parliament agreed to a compromise to the so-called ‘Link Directive’ regulating the industry’s purchase of Kyoto Protocol emission quotas. Unfortunately, the Parliament agreed to unlimited use of the Kyoto quotas; however, they agreed to some qualitative limitations, in particular:

- only Joint Implementation and CDM quotas are accepted, not “hot air”;
- sinks are not allowed for the first period (but this is to be reviewed in 2006);
- hydropower above 20 MW must respect guidelines of the World Commission on Dams.

NGOs have criticized the Parliament’s compromise, and are urging the countries to agree to a strict and harmonised cap on the use of Kyoto project emission quotas in the EU’s internal emissions trading system.

Nuclear Package Going Zombie

In May, the EU ministers discussed the “EU Nuclear Package” with a directive proposed for nuclear safety principles and nuclear waste management. The proposals were heavily criticised by NGOs for being useless, or even counterproductive, in improving nuclear safety. The countries seemed to agree with the NGOs, as all countries except France and Spain were against the directives and preferred voluntary measures. Now the Irish Presidency can formalise this request and ask the Commission to withdraw the proposals. Alternatively, the directives could be tabled as proposals that will not be negotiated any further, i.e. as “living dead” (zombies).

So far, this is a happy ending for a problematic proposal from the EU Commission.

EU Parliament Elections

Election of a new EU Parliament for five years will take place on June 10-13. While the Parliament has become an increasingly important supporter of renewable energy and energy efficiency in Europe, the elections tend to attract fewer voters than national elections, and sustainable energy is too often overlooked in the election campaigns. Thus, there is an acute danger that the new Parliament will have other priorities than sustainable energy. It is important to raise awareness of sustainable energy in the election campaign, e.g., by asking the candidates’ positions on, e.g.:

- adoption of a target for renewable energy by 2020 of 25% for EU-25;  
- a stronger climate strategy for the period after 2012, when the first Kyoto Protocol ends;
- support for energy efficiency strategies beyond the current proposals (such as directives described above);
- an end to public financing, loans, and guarantees for fossil fuel and nuclear power;
- EU measures for renewable energy for heating;
- priority of renewable energy and energy efficiency over other forms of energy in EU external assistance programmes and lending.

Energy package

The EU energy ministers will discuss the four proposals in the energy packet at their meeting on June 10, but only the gas directive and the proposal for Trans-European Energy Networks are so advanced that the ministers can engage in real negotiations, such that they could reach a political agreement.

The other proposals, the directive on energy services and end-use energy efficiency as well as the problematic directive on security of electricity supply, have not been discussed in the EU Parliament. Given the election of the Parliament, it is unlikely that they will be discussed before the Autumn. Then the ministers will not discuss the proposals before December, at the earliest.

Read more about EU Policy at www.inforse.org/europe
Europe

Europe Needs Strong and Coherent Policies

Seven renewable-energy industry associations and two environmental organisations have joined forces in a common call for European support of renewable-energy heating and cooling. Increased renewable-energy heating, in particular, is essential to reach the goal of 12% renewable energy in the EU by 2010, as well as to reach climate goals. The progress is much below expectations and the activities to promote it are small, across the EU as well as in many countries.

Therefore, the organisations call for strong and coherent policies to promote renewable heating and cooling sources. These should include:

- Specific targets for renewable heating and cooling at the European level and in the Member States.
- Financial incentives, regulations, and other market stimulation tools strong enough to achieve the targets at the European and national levels.
- Increased focus on renewable heating and cooling (long term heat storage, solar and biomass assisted cooling) in the R&D programs at European and national levels, including substantial demonstration projects for renewable cooling.
- A high-level discussion should be launched with all the stakeholders to define which elements of these policies should be tackled at national or regional levels and which ones can be better managed at the European level.

Representatives from INFORSE-Europe member organisations participating will meet in September in Copenhagen immediately before a European Sustainable Energy Education Conference, which representatives will also attend.

The project will be particularly focused on sharing practical information including the use of models, mobile exhibition units, and IT-based energy-education materials. Participants will research the most effective ways of engaging school pupils in various Western European and CEE countries, as well as share experiences of cross-cultural barriers in the use of educational resources.


A lot is happening at the moment regarding renewable energy in European cities.

A consortium of partners, coordinated by the International Solar Energy Society (ISES), has produced a project report for the European Solar Cities Initiative (ESCi) Project, describing some of the good practices for cities and city networks. It also includes a set of CO₂-reduction guidelines.

ESCi is also organising a workshop to be held on June 22, 2004 at the EuroSun2004 conference in Freiburg, Germany, and Solar Academies. See also at the events’ list on page 15.


Join INFORSE-Europe’s New School Education Activity for 2004

By Pete West, West Wales ECO Centre, INFORSE-Europe

A new education activity has been added to the INFORSE - Europe work programme for 2004. It was realised because a number of NGOs are actively involved in sustainable-energy education at schools and colleges.

Following previous co-operation on educational activities, INFORSE members (Earth Friends, Romania and West Wales ECO Centre) made a proposal to include sharing information, resources, and experience on sustainable-energy education as a pilot programme among at least 6 INFORSE-Europe member organisations in 2004. If successful, the project may be extended in future years. Educational resources, descriptions of climate- and energy-related projects with schools, and success stories will be posted on a new education section of the INFORSE-Europe website.

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A young Romanian renewable-energy engineer learns how to use and to stop a model PV-powered car! Photo by INFORSE-Europe


Renewable Heating & Cooling

Solar heating as here, and biomass are the main renewable heat sources. Photo: INFORSE-Europe

A young Romanian renewable-energy engineer learns how to use and to stop a model PV-powered car! Photo by INFORSE-Europe


The project will be co-ordinated by the West Wales ECO Centre, which has 20 years’ experience of energy-related and environmental educational work with schools, with INFORSE-Europe secretariat managing the web-based resources and the finances.

Russian Energy Brigades Created

Energy Brigades in Russia is attractive to young people. They are learning how to do it through cooperation with the Ukrainian and the Czech Energy Brigades.

By Elena Krouglikova, GAIA Apatity Environmental Centre, Russia

GAIA Apatity Environmental Centre is a non-governmental organization, and member of INFORSE. The organisation is active in energy issues since 1996. In its first three years, it focused mainly on the development of a non-governmental movement in the Kola peninsula, contribution to the development of renewable energy, and some issues of nuclear energy.

In 2003, GAIA started a new direction connected with energy-saving and energy efficiency in the household sector. One of these activities was the formation of Russian Energy Brigades.

Seminar in a School, Video, Leaflet, RuEB Created

Ukrainian Energy Brigades, long-standing members of the International Energy Brigades, helped the Russian partners with the training seminar. This seminar took place in one of the schools of Apatity, in a small city situated in the far northern reaches of Russia, north of the Arctic Circle. This seminar was rather fruitful: the main method of sealing windows against heat loss by caulking them with silicone, a method used by the International Energy Brigades, was demonstrated on the windows in the coldest classroom of the school.

The process also generated an educational video and leaflet. Most important, though, was the blooming of friendship between the Russian GAIA and the Ukrainian Ecolucb.

In the autumn of 2003, Keti Popiashvili, national coordinator from the non-governmental movement “Hnuti Duha” from the Czech Republic, visited GAIA Apatity. This visit was a starting point in establishing the Russian Energy Brigades (RuEB).

Influence Policy

The main objectives of RuEB are: influencing energy policy in the Russian Federation in favour of energy efficiency; improving the comfort of citizens through basic energy-efficiency improvements; increasing public awareness of and NGO involvement in energy-efficiency programs; promoting new NGO partners, programs, institutions and investments that favour sustainable energy alternatives; and creating a positive profile of the NGOs in the country regions.

Among the practical activities in 2004, there are organization of seminars devoted to energy-saving issues for the population, for business, and for administration of the city; participation in the organisation of a Public Energy Efficiency Centre in partnership with the other NGOs of the region; cooperation with mass media; development of the network of RuEB in Russia; and national cooperation within the framework of the International Energy Brigades.

Attractive to Young People

GAIA Apatity is very fond of this new direction of work, as the Energy Brigades are very attractive to young people, and it is very important to attract young people to the idea of sustainable energy.

More information: GAIA Apatity Environmental Centre, PO Box 68, 184209, Apatity, Murmansk region, Russia. Ph: +7 81555-75553, fax: +7 81555-75553, E-mail: gaia@aprec.ru, www.gaia.arctic.org.ru.

Renewable Program for Romanian Energy Brigades

By Ion Zamfir, Earth Friends, Romania

Romanian Energy Brigades (REB) started in 2002 with practical actions promoting cost-effective energy efficiency in buildings. The volunteers’ team, coordinated by Earth Friends, worked to improve insulation of windows and doors in schools and kindergartens. Last year, Earth Friends, together with other south-east International Energy Brigades (IEB) member organizations, decided to include in their activities programmes renewable-energy promotion through practical projects. Building and installing hot water solar collectors were the subjects of some seminars, and practical projects were implemented in Romania, Bulgaria, and Macedonia with the financial support of the Allavida Foundation (UK).

Analysing the needs in rural areas, REB (Earth Friends) decided at the beginning of 2004 to start actions towards promoting low-cost renewable-energy systems such as solar fruit dryers and sawdust stoves.

Simple, easy-to-build “do it yourself” (DIY) devices, they are a real help for people living in rural areas. It is a challenging project trying to involve youngsters from villages, offering them basic training for such DIY activities, and providing education towards sustainable life-styles in rural areas.

The training course support is already prepared, and practical activities will start in July 2004.

A real help in developing the new project is the Centre for Sustainable Energy in Galati, supported by Sainsbury Charitable Trust, and the REB staff - supported by Heinrich Boell Foundation.

All projects on energy efficiency and renewable energy run by Earth Friends are based on the information, training, and international exchanges facilitated by INFORSE-Europe.
Task for Men & Women Alike?

Gender Equality and Climate Policy

Climate protection: a task for men and women alike? It wouldn’t seem to be so – in the departments of local administrations responsible for climate protection, namely urban planning, transport, and energy, women are almost entirely absent.

The Climate Alliance has initiated a new project, with EU support, entitled, “Climate for Change: Gender Equality and Climate Policy,” that aims to change this situation. Ten cities in four countries are taking part: Berlin, Dresden, Frankfurt, and Munich in Germany; Ferrara, Genoa, Naples, and Venice in Italy; Lathi in Finland; and Malmö in Sweden.

The first step is to take stock in the cities of the situation with regard to the participation of women in decisions relating to climate protection. This will be followed by the development of methods and tools by which to change the situation. The next steps are concerned with implementation. Awareness shall be raised among local administration executives of the need to ensure balanced participation of women in decision-making positions in the field of climate protection, too. Discussion processes need to be initiated; supporting material and information must be provided.

Climate protection measures are often very hard to carry through. One explanation for this is that there is a reliance on technological measures due to the low level of participation of women. The important fields of public education and information would presumably gain higher priority through a greater participation of women. It is also desirable to make women more interested in climate protection as a field of work.

Contact: Claudia Schury, c.schury@klimabuendnis.org.

Quickstart for Local Climate

The vision of the new Quickstart project by Climate Alliance is that every local authority which intends to get active in climate protection policy shall be able to get high-quality and cost-efficient advice and guidance, built on existing experience and activities. The project is developing a methodology for local authorities to work out an immediate climate policy action program in a very short time. Promoters, trained to apply this innovative method, will use the Quickstart method to work directly with local authorities. This will ensure that activities are based on local circumstances and needs, and that local authorities receive continuous, long-term support. Beyond this, a broader application of the method all over Europe can be achieved. The project is supported by EU.

Contact: Silva Herrmann, s.herrmann@klimabuendnis.org.

U.S. Clean Energy State Funds in Bonn

By Marc Berthold, Heinrich Böll Foundation, & Allison Schumacher, Clean Energy Group

At the 2002 Summit for Sustainable Development in Johannesburg, attention was directed at national governments and intergovernmental negotiations. Concrete measures and initiatives to promote renewable energy are actually taken on subnational levels as well as at the state and local levels. Many of these actions are leading the efforts of their national governments and are proving to be policy laboratories for future national programs.

U.S. states and German Länder are frontrunners in designing and implementing policies to promote renewable energy. While in Germany the Länder received major federal incentives, many U.S. states have become active on their own through Renewable Energy Portfolio Standards or state funds to support renewable energy. More and more states cooperate with each other in the areas of renewable energy and climate change policies, and are thus building momentum for further action on the federal level.

Numerous U.S. state- and local governments have already started reducing emissions through investment in clean energy technologies and deployment. From 1998 through 2012, state clean-energy funds in 15 states will have collected nearly $3.5 billion for investments in renewable energy, making state policies a market driver for clean energy technologies.

“Even though most have been in place for only a few years, state clean-energy funds are becoming key catalysts for the deployment of clean energy technologies,” said Ryan Wiser, a scientist in Berkeley Lab’s Environmental Energy Technologies Division. “Almost without notice, state-level actions have become significant drivers in the clean energy field,” says Lew Milford, president of the Clean Energy Group.

These state funds are working together in the Clean Energy States Alliance (CESA), a coalition of seventeen public funds from twelve states that have banded together to promote clean energy projects and companies. They are key players in leading the way on promoting renewable energy, creating employment opportunities as well as economic growth, technological progress, and taking action against climate change.

Within the United States, CESA has been advancing new multi-state efforts to promote solar, wind, fuel-cell, and other clean energy projects and investments.

CESA at Renewables 2004

Eight of these U.S. state funds of the CESA will be participating in Renewables 2004 by invitation of the German Heinrich Böll Foundation. They will speak at the Multi-Stakeholder Dialogue of Renewables 2004 and at a side event on June 1, 2004.

More info:
Marc Berthold, Environment and North-South Dialogue; Heinrich Böll Foundation; Ph: +202 462 2202, Email: marc@boell.org; 1638 R Street, NW; Suite 120; Washington, DC 20009; www.boell.org.

Allison Schumacher, Clean Energy Group (CEG) a non-profit NGO, which manages the CESA. Ph: +802 223-2554; Email: allison@cleanegroup.org; 50 State Street, Suite 1; Montpelier, VT 05602; www.cleanegroup.org, and www.cleanenergystates.org.
Clean Energy Now in the US!
States Struggle to Lead the U.S. on Renewable Energy and Energy Efficiency Policy In the Face of Continual Opposition by the Bush Administration

by Mary Jean Burer from NRDC Natural Resources Defense Council, and Lynda Arakelian, Greenpeace USA.

In the run-up to the Bonn Renewables Conference, US non-profit organizations are planning to highlight the Bush Administration’s constant opposition to policies and measures that would encourage investments in renewable energy, increase efficiency, and lead to real reductions of global warming pollutants. The following are only a few examples of this constant opposition.

National Energy Policy
The energy policies proposed by the Bush administration consistently promote fossil-fuel exploration and production, ignoring or erecting barriers to renewable technologies and worsening global climate change. The energy bill that the administration is currently promoting is a collection of subsidies, tax breaks, and loopholes benefiting big fossil-fuel companies that would cost consumers and taxpayers billions of dollars, while threatening their health and environment. The energy bill was blocked by filibuster in the Senate at the end of 2003, but it remains a priority for the administration and will likely be brought up again in 2004. Furthermore, in May of 2002, the Bush administration weakened a major efficiency standard for air conditioners. In addition, the Bush administration’s history of budget requests on energy efficiency programs indicates that even these marketplace-friendly, cost-effective programs are subject to the President’s cuts. The latest decrease was accompanied by an increase in funding of research into fuel cell vehicles, but such a tradeoff shortchanges technologies and programs proven to be effective in favor of long-term research, which may or may not pay off in the coming decades.

Progress at the State Level
While efforts to reduce U.S. emissions on the Federal level remain deadlocked by opposition from the Bush administration, a number of U.S. states have taken significant steps to promote renewable energy and energy efficiency. Below are several examples of states leading the way.

- **Renewable Standards**: Twelve states have passed Renewable Portfolio Standards (RPS), which require utilities to provide a percentage or amount of renewable power in the mix of energy they provide to their customers. RPSs have already had a dramatic impact on the amount of renewable energy provided in a number of states. Significant examples include: Maine: 30% by 2000; California: 20% by 2017; Connecticut: 13% by 2009; Massachusetts: 11% by 2009; New Jersey: 6.5% by 2012; New York: 15% by 2020.

- **Renewable Energy Funds**: Twelve states have created Renewable Energy Funds, including the following: New Jersey: $45 million/year; Massachusetts: $20 million/year; Ohio: $15 million/year; Oregon: $10 million/year; Rhode Island: $3 million/year, and California: $135 million/year.

- **Local Initiative**: San Francisco voters approved a $100 million bond initiative to pay for solar panels on municipal buildings. The University of California system, which covers 10 university campuses, recently adopted a comprehensive Clean Energy & Green Building policy that mandates 10 MW of renewable energy be installed on its campuses, approximately one-fifth of the amount of solar power across the U.S.

- **Western Governors’ Association**: At the North American Energy Summit, which included governors from Canada, the U.S., and Mexico, actions were proposed by the Western Governors’ Association to address global warming and the promotion of renewable energy. It was recommended that 30,000 MW of clean energy be developed in the West by 2015 and that energy efficiency be increased by 20% by 2020. The three states are also committed to reducing greenhouse gas emissions by improving appliance and building code energy efficiency standards.

- **Energy Efficiency**: Many states are taking action to promote increased energy efficiency. California in particular is aggressively expanding utility sector investment in energy efficiency (targeting more than 850 MW of savings over the next two years) and coordinating that investment with tighter building and equipment efficiency standards (the new building standards alone will save about 550 MW over the next three years). In addition, energy efficiency retrofits have been mandated for many state buildings and several school districts. Zero-interest loan funds also provide financial service to implement energy efficiency improvements in the following states: California, Indiana, Iowa, Maine, Mississippi, Oregon, South Carolina, and Texas.

Info: Greenpeace, 75 Arkansas, Suite 1, San Francisco, CA 94107, USA.
Ph: 415-255-9221, Fax: 415-255-9201, lynda.arakelian@sfo.greenpeace.org.

1: see sources at www.inforse.org/s_e_news.php3
New Continuation of the Action Program for Improved Cook Stoves in Nepal

By Ganesh Ram Shrestha, CRT/ Nepal

The Action Program for Strengthening Improved Cook Stoves (ICS) Network in Nepal, supported by the Asia Regional Cookstove Program (ARECOP), completed its Phase II in February, 2004. Recent activities include small grant for initiatives like production of a video documentary, and support to students to undertake research, e.g., on indoor air pollution.

A Phase III program was initiated from 2004-2007, which would extend the program to high hill areas, integrate more kitchen management, work on commercialisation, and contribute to the achievement of the national ICS target of the 5-year plan (2003-2007), i.e., to cover 250,000 more households.

CRT Nepal is member and national focal point of INFORSE. It coordinates the Nepalese Gender, Energy and Water Network (GEWNet). CRT Nepal joined the IUCN, the World Conservation Union, in March, 2004. In the previous issue (Nr. 44), you can read about CRT’s improved water mill program.

Solar Dryers to Generate Income for Poor Women in India

By Lalita Balakrishnan, Rural Energy Department, All India Women’s Conference, INFORSE member & national focal point.

AIWC started to work on a new area to realize the potential of dryer technology. AIWC bought four solar dryers from the Society for Energy, Environment and Development (SEED) and installed them in 4 project areas of Andhra Pradesh, Kerala, Tamilnadu, and Delhi.

In 2003, AIWC, in cooperation with SEED, conducted 4 short trainings in the capitals of the states; i.e., in Hyderabad, Chennai, Delhi, and Trivendrum. The aim of the training was to demonstrate that the solar drying of fruits & vegetables is:
- commercially viable on a micro-enterprise scale;
- an effective and hygienic process;
- a way to create income among poor women.

The training included studying the market for dried/processed fruits and vegetables; exploring the terms of financing and asset ownership; establishing a set of specifications for solar high-speed dryers; and learning the processing technology for the various dried/processed fruits and vegetables.

The program mainly focused on preparation of mango bars, but processing of tomato, ginger, coconut, green chillies, curry leaves, and mint leaves was also demonstrated using solar dryers. Attendance at the various training courses ranged from 10-50 representatives of various women’s organizations and self-help groups. The participants showed keen interest in learning the technology. Trainees expressed their appreciation of the usefulness of the training and, especially, of the cost-effectiveness of the production process. Products were displayed and were sold after the training.

The program was widely covered by the media, including “The Hindu” and a private television channel, “WIN”. Trial production is proceeding in all centers.

Optimal costing, proper marketing, and securing the sustainability of the process are being explored.

AIWC got funding from ADB Small Grants for researching to help women come out of poverty using solar dryers.

More information: AIWC, 6, Bhagwann Dass Road, New Delhi-110001, India. e-mail: l_balakrishnan@hotmail.com.
New Demonstration & Documentation Centre for Sustainable Energy Solutions in Malaysia

By Gurmit Singh, CETDEM, Malaysia

The Centre for Environment Technology and Development Malaysia (CETDEM), an INFORSE member organisation, is currently undertaking 2 projects addressing sustainable energy usage in Malaysian urban households:

• Establishing a Demonstration and Documentation Centre for Sustainable Energy Solutions for urban households. Using the retrofitting of an existing two-level terrace house as a demonstration of the possibility of providing thermal comfort and renewable energy usage, including grid-connected PV. The project will also help develop energy profiles for Malaysian urban households. The project started in March, 2004 with funding from the Danish International Development Assistance (DANIDA). The partner organisation is another INFORSE member organisation, the Danish Organisation for Renewable Energy (OVE).

• Assessing the current energy usage of about 500 households in 5 different towns and then undertaking a series of measures to reduce this consumption. This project started in April, 2003, and is funded by UNDP/GEF.

More information: att. Gurmit Singh, CETDEM, P.O. Box 382, 46740, Petaling Jaya, Malaysia. Ph: +60 3-78757767, Fax: +60 3-78754039. Email: cetdem@po.jaring.my, abc@cetdem.org.my, www.cetdem.org.my.

Wind Energy Education in the Pacific Islands

A 20 kW grid connected wind turbine has recently been installed at the Fiji Islands Department of Mineral Resources compound close to the South Pacific Applied Geoscience Commission (SOPAC) Secretariat, in Nabua, Suva. The wind turbine is a component of a postgraduate wind energy course being offered as part of the University of the South Pacific Physics Department’s degree offerings.

The course was first introduced during the last semester of 2003. The wind turbine will be useful in teaching students about the practical aspects of wind power generation and general aspects of wind technology covering the fields of engineering and energy.

The wind turbine is the first grid-connected wind turbine in the Fiji Islands. It has a rotor with a diameter of 10 meters, and a 24-meter tower. The electricity generated by the turbine is directly fed into the 415 V, 3-phase electricity grid of the Fiji Electricity Authority.

The expected output of the turbine is of course dependent on the wind, but will be in the range of 10,000 kWh per year, or enough to supply 5 households with electricity. During cyclones, the tower can be lowered using a winch.

The Governments of Denmark and France provided funding assistance towards the development of the postgraduate course and the purchase of the wind turbine. The overall project was administered and coordinated by the SOPAC Community Lifelines Programme.

Information:
Anare Matakiviti, Energy Adviser, SOPAC Secretariat; anare@sopac.org
Rupeni Mario, Rupeni@sopac.org.
The WISIONS is a new support initiative of the Wuppertal Institute: SEPS (Sustainable Energy Project Support) call for projects that have not yet been implemented in the field. SEPS will help to overcome the key obstacles that hinder the process of implementation by supporting them with its expertise and decisive contacts, obtaining additional funding or financing incremental costs.

PREP (Promotion of Resource Efficiency Projects) invites “good practice” examples in two topics: “energy-efficiency in the construction sector” and “water and energy”.

Call for Closure of World Bank Climate Fund

Over fifty environmental and social justice NGOs and other groups sent a letter of protest on April 19 to the World Bank calling for the closure of its emissions-trading fund, The Prototype Carbon Fund. The NGOs state that so far the fund has exacerbated existing human rights violations and furthered environmental destruction.

Call for the Seed Awards

A new initiative is ready to help you implement your ideas and make them a success. The Seed Initiative (Supporting Entrepreneurs for Environment and Development) is a joint effort by a network of international organisations - from global organisations such as IUCN, UNEP, and UNDP to national organisations such as Development Alternatives and LEAD Pakistan.

One element of the Seed Initiative is the biennial Seed Awards - an international competition to seek out the most promising innovative or entrepreneurial ideas for action through partnership, and to help you make those ideas work. The award itself is not monetary but a comprehensive, individually-designed package of support, training, connections, and facilitated access to funders, to give winning partnerships every prospect of success.

Information: info@seedinit.org, www.seedinit.org

Publications

Impact of Structural Changes in the Energy Sector of CEE Countries on the Creation of a Sustainable Energy Path

The study has special focus on investment in environmentally friendly energy and the impact of such a sustainable energy path on employment and access conditions for low income consumers.

The energy sectors in the EU accession countries have been undergoing drastic structural changes since the fall of communism, but the implications of these transitions on sustainability, environment, and society have not been in the limelight and are thus poorly understood. The study provides a clearer picture on these issues.

By Diana Urge-Vorsatz, Central European University (CEU), Freie Universitat of Berlin, Ecoconsulting in Prague; WISE in Brno; and the Industrial Energy Consumers’ Forum in Hungary. The project was commissioned by the European Parliament, financed by the Research Directorate-General with a matching grant from CEU.

102 pages, 0.9 MB pdf file

More info: Dr. Diana Urge-Vorsatz, Department of Environmental Sciences and Policy, CEU, Budapest, Hungary. www.coe.hu/en/vsci/research/ep.htm Nador street 9, 1051, Budapest, Hungary. Ph: +36 1 327 3021, Fax: +36 1 327 3031, miladinovag@ceu.hu, vorsatzd@ceu.hu or

WEB SITES:

Solar Cookers International (new web site) www.solarcookers.org

New Conservation Ideas Every Day! www.energyconservationposters.com

ECOTEAM, Armenia (INFORSE member) http://ecoteam.iatp.irex.am

INFORSE Database of the Sustainable Energy Contact List (800 organisations) www.inforse.org

Call for WISIONS to Sustainability

Call for Closure of World Bank Climate Fund

Call for the Seed Awards

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ECOTEAM, Armenia (INFORSE member) http://ecoteam.iatp.irex.am

INFORSE Database of the Sustainable Energy Contact List (800 organisations) www.inforse.org

101 Solutions

The DIY Guide to Climate Change

101 ways in which you can help reduce the threats posed by climate change by making simple changes in your everyday lifestyle.

Great cartoons, good ideas, good contacts for more information!

This booklet also supports the work of many community groups and organisations.

84 pages, A5 booklet.

Published by the Greenhouse Trust, (INFORSE-member)

Address: 42 -46, Bethel street, Norwich, Norfolk, NR21NR, UK.

Ph: +44 11603631007

e-mail: info@greenhousetrust.co.uk.

www.greenhouseTrust.co.uk

Cartoons made by POLYP are copyright free to unfunded/activist groups.

poly@ethicalconsumers.org

CADDIT and GREENTIE Databases

Look to the Future

In 2003, the International Energy Agency’s (IEA) CADDIT and GREENTIE databases opened up their entries on non-IEA-member countries (26 countries), inviting wider international coverage.

The databases include energy-efficiency/renewable-energy case studies as well as lists of suppliers of goods and services to mitigate greenhouse-gas emissions.

Users from non-IEA-member countries are invited to contact the “Energy and Environmental Technologies Information Centre” (EETIC). Users from IEA countries should contact their respective national teams.

See details at www.caddit.org or www.greentie.org.

Contact enquiries@eetic.org, or Mike Landy, EETIC Centre Manager.

Ph: +44-870-190-6339, Fax. +44-870-190-6340,
E-mail: mike.landy@aeat.co.uk.


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Ph: +44-870-190-6339, Fax. +44-870-190-6340,
E-mail: mike.landy@aeat.co.uk.

May 28- June 4, 2004 *
“Renewables 2004” Conference in Bonn, Germany and 60 side events around.
See article on page 3-4

June 5, 2004 *
INFOSE-Europe General Meeting
See www.inforse.org/europe

June 6-11, 2004 *
Small and Medium Size Wind Generators,
ARTEFACT, Glücksburg, Germany
Workshop for decision makers, planners and staff of development NGOs from North & South.
Info: info@artefact.de

May 27, 2004
Exhibition “Sun” for children, The Small Earth, Holland - annual Eco-Festival.
Info: www.dekleine.aarde.nl.

August 22-28, 2004 *
INFOSE-Europe Seminar, Spain
See articles on page 15 in this issue.

15-22 of August ’04
1st European Natural Building Colloquium, Sun and Earth, Hungary
info: organizer@permalot.org
http://www.permalot.org/
September 20-22, 2004 *
2nd Int’l Conference on Biomass, Kiev
Info: info@biomass.kiev.ua,
http://www.biomass.kiev.ua/conf2/

Centre for Alternative Technology (CAT), Wales Sustainable Energy Courses in 2004

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Info: Ph: +44 1654 705 981 fax: +44 1654 703605, courses@cat.org.uk,
Address: CAT, Machynlleth, Powys, SY20 9AZ, Wales, UK
CAT is open for visitors: 7 days a week from 10am to 4-5 pm.
For group residential visits 67 beds are available, 36 of them in Eco Cabins

CAT is a non-profit NGO. Member of INFORSE. www.cat.org.uk

International Seminar on Renewable Energies and Social Change
Pola de Lena, Spain
Organised by Escanda and INFORSE Europe

The seminar will aim at fostering exchange and increasing communication between people working, from different points of view and areas of activity, towards a transition to sustainable and democratic energy production and use. Among the activities are planned:
• Discussing our role in a just transition to sustainable energy.
• Exploring the connections between fossil-fuel dependency, global political / economic / military processes, and the “clash of civilisations” theory etc.
• Developing a scheme for the exchange of young volunteers of NGOs active in these fields all over Europe.
• Building up communication, cooperation, and networking tools between renewable-energy networks and grassroots political mobilisation networks.
• Presentation of Escanda’s nascent project to create a locally owned renewable-energy cooperative.
After the seminar, there will be an optional program with practical work.

The seminar is supported by the EU youth program.
Info: Kolya Abramsky, Escanda, Spain
e-mail: energy_seminar@yahoo.com, or kolyaab@yahoo.co.uk
http://www.escanda.org
Info: www.inforse.org/europe.

July, August, September
Solar Academies, Sustainable building professional training events, Rome, Freiburg.

October 11-15, 2004
NGO Seminar: Environmental consequences of Russian oil and gas exploration
Moscow, Russia
Application deadline: September 10.
Info: ecodefense@online.ru

October 19-20, Amsterdam
Energy and Sustainable Development
Organised by the Dutch EU-Presidency, Dutch Ministries for Transport / Infrastructure, Economy, Environment/Spatial Planning.
Info: Pete Koushka Werther, Ph: +31 70 351 7197, eu-conference@dgp.minvenw.nl.

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A Million Europeans DEMAND the Exit of Nuclear Power!
Help get the word out! Sign and ask your friends to sign this petition!

We, citizens of Europe, demand that the governments of all European countries and the European Union:
- stop or prevent the construction of new nuclear power plants and facilities in the European Union,
- launch a plan to abandon nuclear power within the European Union,
- invest massively in energy-saving and the development of renewable energies, and
- repeal the Euratom Treaty, which massively supports nuclear power in Europe by means of public funding.

Only these measures will make it possible to fight against nuclear danger and global warming at the same time.

Signatures are collected in between April 26 2004 - April 26, 2005.
Already, as of May, 2004, 40 European NGOs signed the petition.
The result of the petition will be published during an event in April 2005.
More information: www.antenna.nl/wise, wiseamster@antenna.nl.

Sustainable Energy Planning
Aalborg University, Denmark
Combine aspects of engineering, economics and management in a 2-year Master of Science Programme in Environmental Management.

Gather broad knowledge and understanding of sustainable energy systems, and prepare yourselves for the challenges in planning and implementation of sustainable energy systems.

Aalborg University is located in a region known for global leadership in the development of sustainable energy systems. The right place to study Sustainable Energy Planning.

www.energyplanning.auc.dk