Women & Energy
World Vision 2050

Contact list World 2001 - Europe included
Let Women Have A Say, Too!

It Would Matter!

Women and men have different experiences with energy use, stemming from their different roles and different priorities. While women are the main users in and around the households, the men often control the types of energy used, via decisions from the household level to the formulation of national energy policy. Many of these decisions do not reflect the best interests of the female users or of families in general.

Where should the PV-powered lamp be placed? Men prefer it at the entrance where they chat; women want it in the back, where they cook. Who decides? This is a simple choice, which shows in small part of the problem. -

Look around; who are the decision-makers around you and in your national energy sector? Who are the ones that steer society towards increased centralised unsustainable energy supply rather than schemes to meet demands with end-use efficiency and local solutions? Men or women? Almost all men, - and more and more so, the higher you go in the hierarchy.

Would the world’s energy supply be different if women were equally involved in decision-making? Would there be more solar and wind energy used, and fewer health and environmental problems connected to energy use? Would nuclear power have been phased out by now?

Yes, we hope so. There are growing numbers of women calling for more responsible management of resources leading to a sustainable future. Women have many and various kinds of knowledge and experience of energy through their traditional and non-traditional roles. Probably, our resources could be better managed, if women’s knowledge influenced the relevant decisions.

For the first time, Sustainable Energy News focuses on “women and energy”. We hope it will inspire men and women alike to get more women more involved and to give them more leverage in energy choices! Energy-related issues affect the future prospects of families as well as of national economies.

We must listen to and understand those who use and suffer from the present energy system; use this understanding when we organise the shift to sustainable energy technologies. In this process, women must be more engaged in the development of technologies and in decision-making at all levels.

In this issue you can also see an energy supply vision for 2050. I, personally, would like to see a world powered by sun and wind energy no later than 2025. A world in which our daughters and sons participate equally in decision-making and household tasks.
Co-ordinators’ Conference 2000

By Susanne Backer, INFORSE Secretariat

In December, 2000, the INFORSE Co-ordinators met in cyberspace in an electronic conference. Key issues were the preparations for CSD9, strengthening the network, and membership administration.

Preparations for CSD9

The INFORSE Secretariat has prepared an input for the UN Secretary General’s report on energy for the 9th meeting of the Commission on Sustainable Development (CSD9) in April 2001: “Sustainable Energy 2050. A proposal to achieve a sustainable energy system, following environmental and social imperatives”. INFORSE representatives have also participated in various regional meetings related to the preparations for CSD9. Papers presented during these meetings are available at the INFORSE homepage. (See also articles on pages 11-13)

INFORSE CSD9 Strategy

CSD9 will primarily function as a stepping stone towards RIO+10. INFORSE will focus on establishing strategic alliances with like-minded organisations, like Greenpeace, Climate Action Network, and ENERGIA.

An INFORSE task force of 3-4 persons will represent INFORSE during the CSD9. Due to funding constraints, the originally planned INFORSE Co-ordinators’ meeting in New York has been postponed to RIO+10 in 2002, to make sure that all INFORSE co-ordinators can participate in this important event.

Regional Action Plans (RAPs)

During the last Co-ordinators’ Conference in Denmark in 1999, it was agreed to experiment with RAPs for each of the INFORSE regions. The INFORSE network now has had its first year of experience with RAPs. Based on this, priority will be given to build up the capacity for information sharing in RAPs for 2001. For all 6 INFORSE regions, a total sum of 180,000 DKK (approx 20,000 USD) has been reserved for 2001.

Strengthening of the INFORSE Network

In order to be able to maintain the diversity of the INFORSE network, the co-ordinators stated that the network shall continue its activities in lobbying and in information sharing. INFORSE shall also continue to be a meeting place for members to develop and implement project ideas.

The discussion of how to strengthen the INFORSE network further will continue. A small internal evaluation of the INFORSE is planned. As part of this evaluation, core network members will receive a questionnaire.

The Secretariat respectfully requests that all members respond to the questionnaire, as it will provide very valuable information on how to strengthen the network.

Membership News

For some time a need has been felt to clarify and to simplify the membership categories and criteria. Consequently, the Co-ordinators agreed to the following changes, effective immediately:

• Core membership of the INFORSE network is available only to NGOs supporting the revised INFORSE Charter. Existing core and associate NGO members will continue as core members unless they protest. Associate non-NGO members will be offered to continue as contacts and subscribers to Sustainable Energy News. All present members will receive the revised Charter for their consideration.

• The membership application procedure will also be simplified. Membership applications will now be dealt with directly at the Secretariat and with copies for the relevant Regional Co-ordinators, who will function as ‘gatekeepers’.

CSD9: Progressive Vision Is Needed

When climate negotiations are almost stalled, bogged down in political stage battles disguised as bureaucratic nickel-and-dime spectra, while at the same time climate scientists conclude that our climatic balance is about to be tilted, CSD9 and the following Rio+10 provide a much needed opportunity to take a fresh look at the real global issues of climate and energy.

If, for a moment, we forget about “flexible mechanisms” and “hot air trading” and focus on common visions instead, we may be able to concentrate on how to mitigate climate change in a sustainable way: how we can develop a world without fossil fuel use and without nuclear energy that is also a better place to live. NGOs must take on the challenge of making the CSD-process a constructive feedback to climate talks and vice versa and avoid the danger of the two processes living separate lives.

In INFORSE, we have followed CSD9 preparations; we have discussed visions and proposals to meet energy demands of a growing population, relying on increased energy efficiency and renewable energy. The technologies are available, but we need to change the ways in which the markets work. We need to let renewable energy and energy efficiency benefit from economies of scale without sacrificing local involvement, and we need to set a price on the environment. The benefits will be a sustainable development and prevention of future oil crises.

Read our input to the UN, and how we co-operate on energy towards to the 9th meeting of the Commission on Sustainable Development (CSD9) in New York, April 2001

See pages 11-13

“Women and Energy” Theme

including another

input to CSD9

See pages 4-10
The ENERGIA Network has made a thorough analysis of women’s roles and interests in sustainable energy. This work was done in close collaboration with the Commission on Sustainable Development (CSD) NGO Women’s Caucus and through a very comprehensive process. On the basis of this analysis, general recommendations for all agencies involved in working for a sustainable energy future, as well as specific recommendations for the 9th meeting of CSD in April 2001 (CSD9), have been worked out.

The INFORSE Network supports the recommendations and suggests that other networks do the same. In the article, a summary of the recommendations and important facts from the analysis are presented.

**Recommendations**

- Address poor women’s development needs for labour saving, for timesaving, for improved health, for security, and for income in rural energy projects and technology research by:
  - Assign high priority to the cooking fuel crisis and its impacts on women’s health,
  - Increase the efficacy and the numbers of renewable installations as well as of sustainable public transport systems;
  - Support capacity-building (education and resources) for women and men involved in energy to enable the development of a critical mass of women and men who can act to change the policies, programmes, and practices affecting women and their energy choices;
  - Adapt and apply specific, proven “best practice” development-sector approaches to overcome institutional factors such as women’s lack of access to credit, to training, and to employment in the energy sector;
  - Integrate energy access and financing for income generation in a holistic approach, offering a bundle of services to enable women to access improved energy, while at the same time enhancing women’s entrepreneurial skills, self-respect, and self-confidence;
  - Support and allow institutional representation of women in the decision-making of organizations that affect women’s vital energy interests;
  - Address issues of energy insufficiency in war-torn countries and in refugee camps, where women and children are especially vulnerable;
  - Disaggregate information by gender at all levels in the energy sector (target groups, beneficiaries, project staff, planners, policy, etc.);
  - Create more knowledge, analysis, and understanding of gender/energy linkages and needs;
  - Provide technical, catalytic, moral, financial, and political support to efforts to promote joint initiatives between the (sustainable, ed.) energy sector and development-sector professionals, organisations, and projects;
  - Support networks and partnerships for and about aid to women and their needs for energy.

**Specific Recommendations for CSD9**

The Commission on Sustainable Development in April 2001 (CSD9) should:

- Establish an ongoing, multi-stakeholder process on gender and sustainable energy, hosted by an appropriate organisation such as the World Bank or the UNDP.
- Quickly address the high-priority issues recommended (see above) and include them in the budget for the different areas.

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**Why Women and Energy?**

**Gender Perspectives on Energy for CSD-9**

The position paper was prepared by Elizabeth Cecelski, Director for Research and Advocacy of ENERGIA, the (see box), with contributions from Joy Clancy, and with review/inputs from the following: Wendy Annecke, Energy Research & Development Centre, Capetown, South Africa; Lalita Balakrishnan, All-India Women’s Conference, New Delhi; Upendra Gautam/Odin Olaya, Peoples’ Movement for Empowerment and Development, Leyte, Philippines; Johanna Gregory/Lisa Buttner, Winrock International, Washington DC; Minu Hammati, United Nations Environment & Development Forum, London; Jeanne Betsock Stillman, Strategies for Development, Inc., Hastings-on-Hudson, NY; Njeri Wanakomya, UNEP Centre for Energy and Environment, Roskilde, Denmark; Beth Woroniak, Goss Gilroy Inc, Ottawa, Canada.

More information:

- CSD NGO Women’s Caucus

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**Photo taken in South America by ETC Energy, the Netherlands.**

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**Solar Cooker evaluated by an Ethiopian woman. Photo: GTZ / ENERGIA**
Facts from the Analysis

Fuel Scarcity
Rural women (and their children) are the primary collectors of wood and residue fuels, which account for 80% of all household energy use in many developing countries. The proportions of rural women affected by fuel wood scarcity range from 60% in Africa, to nearly 80% in Asia, and nearly 40% in Latin America. Time spent in fuel collection in fuel-scarce areas can range from 1 to 5 hours per household per day.

Real Energy Crisis: Women’s Time
The real rural energy crisis is rural women’s time, with women working longer work days than men to provide human energy for survival such as fuel and water carrying, cooking, food processing, other household duties, non-monetised work which is largely invisible in national energy accounts and labour force statistics. Many income-generating activities of women in the informal sector - often critical to family economic survival - are fuel-intensive, and the viability of these activities is affected by energy prices and energy availability.

Energy/Water Scarcity
Energy scarcity impinges on the provision for other basic needs, such as water, health, and education. E.g., the proportions of rural women affected by water scarcity are estimated to be 55% in Africa, 32% in Asia, and 45% in Latin America, with the median time for collecting water in the dry season about 1.6 hours per day.

Health
Women are victims of environmental pollution due to energy use. More than 50% of the world’s households cook daily with wood, crop residues, dung, and untreated fuel. They have the highest exposures to indoor air pollution, which is linked to, e.g., acute infections, chronic lung diseases, low birth weights, lung cancer, and eye problems. Women are also particularly vulnerable in their reproductive roles because of radiation after nuclear accidents.

Violence Against Women
Physical and psychological violence against women has been reported e.g. rapes while gathering fuel wood and bride suicides related to women’s inability to meet their family’s wood fuel needs.

Women as Activists
Women are effective activists on energy questions in health, environmental, children’s and peace-related organisations and issues, ranging from community education for recycling, lobbying for sustainable energy, to anti-nuclear protests. Women are considered to be more favourable to energy conservation and renewable energy. In Sweden, in the late 1990’s, 80% of young women were found to be against the long-term use of nuclear power.

Poor in the North
There is an increasing population in the North who are poor, and who are suffering energy poverty as well. Moreover, space-heating is needed for a larger part of the year in the North than in the South. 15.4% of women and 12% of men are below the poverty line in the USA. In 1991, in the UK, 7 million households (36% of total) suffered from fuel poverty.

Also in the North, poor single-parent families are often headed by women. Old women are left alone to struggle for meeting their energy needs, because they live longer than men.

Male Preserve
The energy industry is perceived as a male preserve. In the energy sector, in the industrialised countries more than 80% of employees are men and more than 90% of all managers are men. Women occupy less than 5% of technical positions. Despite the increased access by women to science and engineering education, women still make up less than half of students enrolled in energy courses.

In the developing countries, the situation is even worse. There are few women who have access to the education, financing schemes, and support systems necessary to negotiate careers in the energy sector. This also hinders the development of energy policies and of technologies better suited to the needs and wishes of women, who are actually the major users of the energy.

ENERGIA Network
The International Network on Gender and Energy, ENERGIA, was formed by an informal group of women involved in energy inputs to the Beijing Conference on Women in 1995. It was a response to the lack of any international institution or program with the main objective of promotion of the role of women in sustainable energy development.

Major plans up to 2002:
• Regionalisation of ENERGIA activities, by supporting national and regional networking initiatives in Africa, Asia, and Latin America.
• Establish a Resource Centre focusing on synthesis and dissemination of knowledge, especially in electronic form.
• Advocacy and capacity building.
• Research and development of case studies, both to improve empirical understanding of linkages between gender and energy, and to generate examples of successful practices.

ENERGIA publishes a quarterly newsletter in issues of 1200 copies. The activities are funded in part by the Dutch and the Swedish Development Agencies (DGIS, Sida). ENERGIA is also a member of INFORSE.


Sheila Oparocha, Secretary of ENERGIA and editor of the ENERGIA News in the Netherlands since 1999. Sheila was born and raised in Zambia. She holds a BSc in Veterinary Medicine, Zambia and MSc in Gender and Rural Development from the Asian Institute of Technology, Thailand.

Elizabeth Cecelski, Director for Research and Advocacy of ENERGIA.
Poverty/Gender Analysis Examples

By Elizabeth Cecelski, ENERGIA

If you were an expert on the project, would this give you ideas about how to work with women? Examples from Ghana:

EXAMPLE 1:
What do you see in these photos? Both show a solar PV street light installation in a village.

Now, how are the women using the PV-powered street light?

EXAMPLE 2:
Where should the light be if there is only 1 lighting connection point in the house?

Women want to use the light
• in the kitchen (for preparing food),
• in the workroom (to income generating activity),
• in the bathroom (to bath children in the evening).

Men prefer to use the light
• in front of the house (for entertaining friends, playing cards),

Policies strengthening the position of poor men, may not have the same impact on women.

More Information:
ENERGIA (See on page 5)

Active Network in Latin America

In 2000, GENES (Central American Network on Gender and Sustainable Energy) had its 2nd regional meeting since its inception in 1998. The meeting produced an action plan including a number of proposed projects. The creation of the network was facilitated by Winrock and Fundacion Solar with support from USAID and the Dutch HIVOs. Then, the World Bank program, ESMAP, approved a proposal to provide support to key GENES activities. Some of the projects are in progress, like the Hurricane Mitch Reconstruction PV and household project funded by USAID, sharing training material in gender-relevant methods developed by the World Conservation Union (IUCN).

GENES consist of more than 50 organizations, including NGOs and constituencies. There are national coordinators in Panama, Nicaragua, Honduras, Costa Rica, El Salvador, Guatemala, and Mexico.


New Network in Zimbabwe

A recent initiative in Zimbabwe is the setting up a GENEZ (Gender and Energy Network in Zimbabwe).

The new network is built on a previously formed committee WISEZ (women in Sustainable Energy in Zimbabwe) consisting of several governmental and non-governmental organizations. The network wants to move barriers. It does case studies and analysis. It highlights the present role of women in using energy resources, balanced against the fact that women are given little representation in major energy programs, strategic planning, and energy policy decision-making.

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Post-Soviet Changes

A new report shocks the readers.

The structural adjustments in economy have resulted in economic crisis, which changed women’s status:
• Although women are generally better educated than men, women find it harder to get jobs. Women occupy lower positions than men do, and they have limited choices of profession.
• A woman’s salary is about 55%-70% of a man’s salary. The wage gap increased by 50% over the last 10 years.
• Women are still overloaded with the “double burden” of professional duties and housekeeping.
• Women spend more time to search for cheap products and cannot allow themselves to use washing and other social services because of high prices.
• The poverty rate among females doubled.
• The birth rate is decreasing.
• Women have no confidence in the future, and this influences their desires to give birth.
• The paradox is that women still live longer than men.

Politics Needs More Women
Fear lead to a strong mother group to influence politics

By Anna Golubovska-Onisimovo, MAMA-86, Ukraine

My path to environmental activism was quite simple: after my first child was born, my viewpoint changed. Maternity made me worry in what environment my child would live and what future he would have in the motherland of the biggest environmental catastrophe. In 1990, after four years of the Chernobyl disaster, my son was one year old. There was a lack of reliable information about Chernobyl. My friends have children born in 1985 and 1986. We didn’t know how the radiation would influence our children, but we knew that its impact could cause serious disease and even death. It made us scared, but also indignant, because the state was not going to give us the information that we needed to protect our children and ourselves. The feelings of helplessness and fear were combined with the desire to get free from it, to be saved.

“Help ourselves!” and “Rescue of the drowning is the business of those who are drowning” were very valid slogans for us when we were starting “MAMA-86”. When we registered our NGO with Kiev’s city administration in 1991, it was the first time that a group of citizens, simply applied to be registered. But we succeeded after a lot of troubles. Today, “MAMA-86” is the network of many environmental mothers’ (women’s) groups and activists in Ukraine.

We raise public awareness of environmental and health issues, focusing particularly on women, through information-gathering and dissemination, as well as through education and the organization of intersectoral debates. We aim to empower women - who are essential to achieving sustainable development - through promotion of public participation in decision making.

Why is Kiev’s “MAMA-86” mainly a mothers’ group? Sometimes men or even fathers drop in, but they can’t hold such work for a long time in the conditions of post-Soviet Ukraine. They usually leave the group quite soon. This is mainly because the environmental NGOs’ activities need much dedication and patience, sometimes even sacrifices, and it doesn’t give a stable and high income. Thus, you can understand that the women who are working in our NGO are very strong, this in addition to the general spiritual strength which is typical for Ukrainian women. Indeed, it is not easy to work or live with strong women! Additionally, maternity gives a sacred feeling: a feeling of responsibility for life and for the future.

The basic concept of femininity, for me, is love as a lifestyle, although on a personal level this goal is hardly achievable for women. And, as women perceive it, there is no love without responsibility - here you are, women are responsible for the Earth!

Science Needs More Women
We should make science more responsible!

By Cathy Foley, Australian physicist

Looking down at my perfectly formed baby, I could not remove from my mind the contrasting image I had seen that morning in a scientific journal: a picture of a Ukrainian baby horribly deformed as a consequence of the mother’s exposure to nuclear radiation before she had even conceived her child. That devastating image made me reflect again and again: how can I participate in a profession that contributes to the knowledge that causes these disasters, which have destructive and long-term effects on our children, ourselves, our environment and our future generations?

How can I morally be a scientist, even worse a physicist, and be part of a profession that takes little or no control or responsibility over what research is undertaken and how its outcome influences our world? As I pondered these thoughts while nursing my child, I realized that this situation exists because there are not many women working in scientific careers. Science needs more women.

Scientific research depends for its existence upon grants of money. The grant process determines the subjects of research. Grants are usually allocated by committees of eminent senior scientists, dominated by men for whom participation is a feather in the cap. This method of allocating funds and directing research in technology and science argues for a single voice, a single responsibility, and the problem with it is that a kind of silliness comes over collective decision-making. Is this collective stupidity or collective cowardice? A. Squires observed in 1986: “Males in our culture learn early to admire chance-taking and mistake it for courage. Men in numbers often do not speak up against a bit of daring that few would accept if given sole responsibility.”

For too long, scientists have claimed they can have no responsibility over how others use their scientific findings. We publish and then wash our hands of it all. This must change! Knowledge and how it is used is the responsibility of us all. I believe a very different science would exist today if there were more balance in the female-male ratio. A lone woman does not change things. Look at the governments where a single female has risen to power. The lone woman, to survive, needs to mimic the masculine line behavior of her male peers. Equal numbers of males and females with equal standing could change all this. Chernobyl will not happen again if we have more women in science.


The source of the 2 articles:
Women Special for Men, WISE.
http://www.antenna.nl/wise,
e-mail: wiseamster@antenna.nl

Photo: Anna Golubovska-Onisimovo with her child.
More info: MAMA-86, 22 Mikhailivska st., Kyiv-1 01001, Ukraine.
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Photo: Women Respond to the Nuclear Threat.
Micro Credit to 100 Million Poor Women
By Lalita Balakrisnan, AIWC, INFORSE National Focal Point, India

The AIWC began playing a leading role in support of the International Summit on Micro Credit in February 1-5, 2001 in New Delhi. The objective is to open avenues of access to economic resources through micro-credit for at least 100 million poor women in the Asia Pacific Region.

I think that there is a lot more to be done in this field. I find that poor women, who cannot buy commercial energy like electricity, are coming forward in larger numbers to benefit from these schemes. Among the Conference objectives are that we should

• help women to understand the concept of safe, viable renewable energy, including its linkages with family health and living standards.
• train women in the use of improved technologies and of credit management for energy projects.
• devise training for women’s groups for planning and implementing projects as well as for collective action.

Our ultimate aim is:
• to save as many women as possible from smoke-related diseases through the use of improved stoves and biogas burners.
• to reduce drudgery, improve the quality of women’s lives, and to free time for other activities such as income generation.

It has been my experience that rural energy initiatives have empowered women at the village level. Often, as a result, the role of women in decision-making at village levels as well as at local governance levels has improved.

More information:
www.microcreditsummit.org/newdelhi/ and AIWC (see in the box).

Improved Chula (woodstove)Training, September 2000: Less smoke, reduction in cooking time, saves fuel. Photo by AIWC.

Trainees in the computer center
AIWC headquarters.

Lalita Balakrisnan
Hon. Secretary General of All India Women’s Conference (AIWC) and chairperson, Rural Energy Department, AIWC. Lalita was born in 1932 in South India. She is educated in the social sciences. She earned a postgraduate diploma in journalism in India and obtained a Diploma in Company Law in the UK.

AIWC is a core member of INFORSE and an Indian focal point. On behalf of INFORSE, AIWC organised a sustainable energy exhibition at the World Women Conference in Beijing.

AIWC is also active in the World Renewable Energy Network and in the ENERGIA network. AIWC was identified in 1984 as a Nodal Agency by the Ministry of Non-conventional Energy Sources, as a key actor involving national and grassroots NGOs in the implementation of the improved cook-stoves and biogas programs.

AIWC has obtained consultative status with the UN and with the Government of India.

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Improved Chula (woodstove)Training, September 2000: Less smoke, reduction in cooking time, saves fuel. Photo by AIWC.
Micro Credit in Bangladesh

Women’s way from the darkness to light, from carrying wood to using mobile phone and internet.

By Rubina Hossain, Grameen Shakti, Bangladesh

Let there be light......for everybody in Bangladesh, a country of no electricity for 80% of the population, ...... was the main motto of Grameen Shakti, which emerged out from the Grameen Bank family in Bangladesh. We found that the appropriate technology to meet the increased need for energy is renewable energy.

Meeting the Needs
We opened 25 branches in rural areas and provided micro credit to more than 3,000 PV solar home systems between 1996 and 2000. In the last 2 years, the rate of sales was more than 1200 systems/year. This is a huge success in a country with a per-capita income of less than US$ 240, considering that the cost of a system is more than US$ 300.

We opened up 2 types of financing model to buy a PV system:

1st type:
15% down payment.
85% payment/month in 3 years
Service charge: 12% per year.

2nd type:
25% down payment.
75% payment/month in 2 years.
Service charge: 8% per year.

Customers reported increases in income due to extension of working hours after dusk. They started new businesses, like a radio/TV repairing shop, telephone service, power selling service, etc. Grameen Shakti has a desire to develop an area as a micro-enterprise zone. The targeted options of these micro-enterprises are: electric sewing machines; ice-making, rice-husking, and other post-harvest machinery.

Why Women?
Why does Grameen Shakti place the emphasis on women?
Grameen Shakti emerged out from the Grameen Bank family and it has been working in the field of renewable energy since 1996. The Bank’s earlier experiences giving micro credit to women shows that:

• Village women have already shown their potential in growing businesses and small entreprenuerships, then have proved their sincerity by repaying loans in due time.

• The Grameen Bank has 2.3 million borrowers from 38,951 villages. It contributes up to 1-1.5% of the GDP of Bangladesh. It is a Bank of women. Presently, 94% of its member customers are women.

• Women often play a very significant role in popularizing renewable energy. They are also good publicizing ambassadors. Starting from the family level, a woman can be a good motivator to introduce renewable energy into the household. Due to a demonstration effect, the neighbors will be inspired to do the same in their own houses. In this way, the use of renewable energy may expand.

• Village women’s quality of life can increase radically with the blessings of solar energy. Solar energy will remove the darkness of their household as well as that of their fate.

• The solar light eliminates the health hazard arising from kerosene lamps and providing a better light.

• Solar home systems allows housewives to be involved in new income-generating activities like basket making, net weaving, tailoring, etc. Hence, the sufficient light obtained from solar systems not only brings them economic solvency but also ensures the equal participation of both men and women in development processes.

• The bright light improves the quality of their work after dusk in their household and in post-harvest or money-making activities. It helps to ensure the women’s security.

• Beyond meeting their everyday needs, it presents other new opportunities as well. They can also enjoy television along with their families, and children can study in the evenings. Moreover, in the future, a PV system along with wireless mobile phone connection and computers with Internet access will bring them some of the advantages of modern technology. Thus, real empowerment will enhance their lives. Hopefully, this will halt the tragic practice of migration to unknown destinations, which commonly are city slums.

More information:
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See also article in issue 24 (’99) about the Grameen Bank.

The author, Ms. Rubina Hussain, has been working in Grameen Shakti as an Assistant Manager since its inception in 1996.

She received a Master of Social Science degree in Economics from Dhaka University.
UNDP Analyses and Assists

An “Energy and Women” Project aims to generate opportunities for women in the energy field in Africa. It has produced national reports, a guideline for decision makers, and a series of case studies. Pilot projects are in progress in Mali and Uganda.

By Gail Karlsson, United Nations Development Program (UNDP), USA.

In February, 1999, the United Nations Development Program (UNDP) initiated a project entitled “Energy and Women: Generating Opportunities for Development” which is being co-ordinated by UNDP’s Sustainable Energy Program.

Shared Concerns

In order to gather information, the Project began by sponsoring national consultations in southern Africa in the spring of 1999. National experts, government officials, and leaders of community organisations discussed the particular energy situations in different countries in relation to women’s development needs and priorities. Reports were prepared by representatives from Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe, and were presented at a regional workshop held in South Africa on June 21 and 22, 1999.

At the regional meeting, there were many shared concerns about the need for more attention to women’s energy problems, especially in rural areas, and for more involvement of women themselves in solving those problems.

There were also similarities in the kinds of energy projects discussed, many of which dealt with improved cook stoves, briquette-making, wood lot management, solar electric panels, and solar cookers or food dryers. Participants expressed frustration that past donor-driven pilot projects did not involve consultation with the expected users, and ended when the donor funding was finished, without sufficient follow-up or analysis.

Some of the major concerns raised in the country reports were the following:
- Lack of energy services creates particular hardships for women.
- Energy planning processes, policies, and projects generally have not been gender sensitive.
- Participatory approaches are needed in energy project planning.
- Education and training of women is needed to increase their role in energy plans and projects.
- More public information is needed about possible energy options.
- Financing arrangements are essential for project continuity.

Gender Agenda

The Program has prepared an introductory briefing paper entitled “Gender and Energy: How is Gender Relevant to Sustainable Energy Planning?”

This paper has been distributed to UNDP country offices, energy planners, and to gender specialists, as well as at the UN General Assembly meeting in June, 2000 to review progress 5 years after the international forum on women held in Beijing.

It has been included in a new publication:

“Sustainable Energy Strategies: Materials for Decision-Makers”.

The Project is currently putting together case studies as an input to the 9th meeting of the UN Commission on Sustainable Development in April, 2001.

Technical Assistance for Pilot Activities

The Project is involved in promoting certain pilot activities identified through national and regional consultations. E.g.:
- Expansion of an ongoing multifunctional platform project in Mali. The project engages village women in acquiring motorised equipment that can be used for a variety of productive purposes, including producing electricity, pumping water, and grinding grain.
- Monitoring and evaluation of a UNDP/GEF project in Uganda designed to establish financial and institutional mechanisms for supplying solar photovoltaic electrical services to households, businesses, and communities on a commercial basis. The managers are currently working with a women’s bank, Uganda Women’s Finance Trust Limited, to establish a pilot credit mechanism to allow women to purchase PV systems.

In addition, discussions are in progress with other UNDP country offices in Africa concerning technical assistance in designing new proposals.

More information:
Energy and Women Project, UNDP, 304 E. 45th Str., 9th floor, New York, NY 10017, USA. Ph: +1 212 9065569, fax: +1 212 9065148, michael.pedersen@undp.org, or Gail Karlsson, e-mail: g.karlsson@worldnet.att.net. http://www.undp.org/
UNDP Mali project: Laurent Coche, e-mail: plateforme@cefib.com, http://www.pjpm.net
UNDP/GEF project in Uganda: Alexandra Karekaho, e-mail: Alexandra.karekaho@undp.org.
NGOs Look Towards CSD9

INFORSE and other NGO networks see the 9th Session of the Commission for Sustainable Development (CSD9), in April 2001, as an opportunity to start new worldwide co-operation on sustainable energy. It is also a step on the road to Rio+10 in June, 2002, where we would like to see energy integrated in the plans for sustainable development at all levels.

For these reasons, an increasing numbers of NGOs are following the preparations for CSD9, at the UN-and regional levels as well as in special events.

Energy Caucus Coordinates

INFORSE and many NGOs have used the CSD Energy Caucus as a co-ordinating body for communication with the UN Secretariat, which is preparing CSD9. The NGOs in the Caucus have approved a common paper, “NGO Paper for the Multi-stakeholder Dialogue on Sustainable Energy and Transport of CSD9”, that reflects the consensus in the Caucus. The Caucus is also the body to co-ordinate NGO positions during CSD meetings, meetings of the group of country experts leading up to CSD9 and the CSD “intersessional” (preparatory meetings). For CSD9, the Energy Caucus has given special priority to the question of subsidies.

Focus on Subsidies, Prices

As “special events” for CSD9, the International Energy Agency (IEA) and the UN Environmental Program (UNEP) are organising a series of focus workshops on energy subsidies and sustainable energy. These are located in Europe (Paris, November 6-7), in Africa (Durban December 15-16), in South East Asia (January), and in Latin America (February). INFORSE representatives are following the events that will result in a report to CSD9.

We give a short overview of some of the visions and findings of INFORSE and of other NGOs for CSD9 in this and the following pages, as well as on pages 4-5.

Follow the NGO activities on:
www.inforse.org and www.igc.org/csdngo/ (Energy Caucus);
follow official activities on
www.un.org/esa/sustdev/ and
www.unescap.org/ (Asia-Pacific).

Regions Meet for CSD9

By Raymond Myles,
INSEDA, India,
INFORSE Regional Coordinator

The Asian countries prepared for CSD9 at the High-level Regional Meeting on Energy for Sustainable Development, November 21-24. In parallel to this, NGOs including regional INFORSE co-ordinators organised an Asia-Pacific NGO Symposium on “Regional Perspectives and Initiatives for Achieving a Sustainable Energy Future for All”. The NGOs developed and agreed on a paper entitled, ”NGO Perspectives on Sustainable Energy Development Action Programmes for the Asia Pacific Region” that was presented to the official conference. The main demands listed in the NGO paper are:

1. The cleanest possible energy should be accessible to all at affordable prices and on an equitable basis; this provision should be continued indefinitely to achieve social and environment goals.

2. Each nation should initiate a political process that establishes quantitative targets for energy production from renewable energy resources.

3. The signatory NGOs call for greater empowerment of hitherto under-represented sectors of civilian society in public-sector decision making, including energy policy formulation.

4. The signatory NGOs are concerned that large hydro plants should not be constructed without due consideration of environmental and social dimensions.

5. It is commonly agreed throughout all most all sectors that energy subsidies are harmful to the chances of successful development of sustainable energy. The signatory NGOs feel that governments should move to phase out subsidies for fossil fuels, nuclear energy, and large-scale hydropower and redirect funding to the most sustainable energy sources.

6. External benefits, such as the benefits to health, society, and the environment, should be internalized into all energy policy and pricing decisions.

7. Various financial strategies to achieve the goal of access to sustainable energy should be strongly supported.

8. Capacity-building, as well as sustainable-energy education and training, are needed for energy policy makers.

9. Sustainable-energy education for the general public is important.

10. Networks should be established to share information on sustainable energy and on the transfer of energy technology.

The European countries prepared for CSD9 at the UN-ECE Sustainable Energy Committee with a Multi-Stakeholder Forum on November 1. INFORSE-Europe and the European ECO-Forum took an active part in the activities at this gathering, including the writing of the multi-stakeholder statement endorsed during the meeting, as described in Sustainable Energy News no. 31.

The outcome of the Asian-Pacific meeting and NGO Symposium is available on the ESCAP website: www.unep.org/ and see www.inforse.org

The logo of CSD, The UN Commission for Sustainable Development
The current world energy system has exceeded by far the capacity of the environment to support human development. The present level of energy-related pollution cannot be sustained without serious damage of the world’s climate and nature.

Our energy use is also depleting the planet’s natural resources at a rate that makes it impossible for our children, not to mention our grandchildren, to consume resources at the rate at which we do. In spite of our unsustainable consumption rate, the current energy system does not provide basic energy needs as light and healthy cooking facilities to 1/4 of the world’s population.

In the coming 50 years, it will be crucial that the world’s energy systems be made environmentally benign and sufficient to meet everybody’s energy needs. We have better technologies than ever before to use energy efficiently, and to use the world’s renewable energy resources without harming the environment.

**Environmental Imperative**

If we can keep global warming below 1 °C within the coming century, and if we can return the rate of warming to below 0.1 °C per decade within the next two or three decades, we should be able to reduce the speed of climate change to a level that nature can accommodate.

To do this, we have to limit greenhouse gas reductions drastically. If we limit global CO2 to 225 Gt of Carbon within the 21st century, it should be possible to keep the atmospheric CO2 content below 350 ppmv., and to keep climate change within a range that nature can adapt to in general.

We should also minimise other dangers of energy supply, including the hazards of nuclear power plants and their waste. Thus, nuclear power should be phased out.

**Social Imperative**

To give equal access to energy services for all, and to fuel developing countries’ economies, we must change the current unjust consumption pattern, in which 1/4 of the population consumes more than 60% of the energy and 1/4 lacks basic energy needs. This will require rapid reductions of greenhouse-gas emissions in the industrialised countries, and in the beginning, a growth in the developing countries’ emissions.

In addition to an equal distribution of resources and emissions, a special emphasis must be directed towards the 1/4 of the global population that lacks basic energy needs. There is a need for a worldwide campaign to give basic energy services to all: affordable and clean light, cooking, and heating in the homes as well as for public service and business.

**What is a realistic plan?**

**50% Renewable Scenario by 2050**

Several scenarios have shown how it would be possible to cover 50% or more of the world’s energy demand with renewable energy by 2050, reducing CO2 emissions and providing adequate energy services to all at the same time. Even the large oil company Shell published a scenario in 1994, showing how 50% of the energy consumption could be covered by renewable energy by 2050. Because of a large expected growth of energy-service demand and less development of energy efficiency, global CO2 emissions will grow in the Shell scenario.

**100% Renewable Scenario by 2050**

From independent researchers, several proposals exist with faster CO2 reductions. Prof. Bent Sørensen et al. published in 1998 „A Global Renewable Energy Scenario” on how to supply the world with 100% renewable energy by 2050, and accordingly a 100% reduction of energy-related CO2 emissions. A development following that scenario would be in line with the limitation of global CO2 emissions to 225 Gt of Carbon in the 21st century.

**New Technologies**

Regarding the economy of changes to renewable energy and to energy conservation, a massive introduction of new technologies will lead to huge reductions of costs for those new technologies. Studies and projections have indicated that many would be able to compete with fossil fuels before 2025 if developed vigorously; e.g., large-scale windpower could be cost-effective within
As part of this effort, energy research and energy equipment in developing countries.
local production of simple renewable energy-efficiency equipment, including production of renewable energy and scale changes in energy investments for initially, there is an urgent need for large-scale (R&D) should be focused on renewable energy and on energy efficiency. The current energy R&D funding is primarily used for development of nuclear energy and fossil fuels.

Markets To attract investments for production of the new technologies, there is a need of mass markets and of long-term markets. It is up to political decisions to create these markets. With the growth of markets, renewable energy will be increasingly cost-effective, and the need for public support will decrease.

To create markets for renewable energy, targets and portfolios must be defined at local, national, regional, and global levels.

To create markets for energy efficiency, labelling - and progressive energy-efficiency standards should be introduced, along with other measures.

Environmental Costs Currently some renewable-energy technologies have difficulties in competing with traditional energy sources, of which some are subsidised. To cope with this, environmentally harmful subsidies must be phased out as soon as possible. In addition, the environmental costs energy must be reflected in the pricing.

Fixed Prices, Targets The targets for renewable energy can be reached by different means. A successful way is fixed price arrangements for renewable energy production with high enough prices to attract investments. Another way is via targets for individual consumers, including companies.

Local Initiatives The new technologies are by nature decentralised, and their introduction depends on local participation in decision-making regarding their installation and their use. There is much more need for local involvement and local decision-making in the application of the new technologies than in the traditional, centralised energy systems.

Who Will Organise Changes? While the push for changes from the world climate negotiations are currently far too small for a fundamental shift of the world energy system, a dynamic development is taking place in a number of countries, replacing fossil fuel with renewable energy in several sectors.

To achieve the necessary changes, the motivated nations, groups of nations, companies, towns, local groups, and individuals must act – not letting the resistance/reluctance of others discourage them from taking their own action. They should set their own targets for renewable-energy portfolios and for energy efficiency. Those doing it first will have the biggest benefits by being involved in the related technology development, and their industries will be in the front.

Also on the international level, there is a need for organisations that will take the lead in the changes. The international organisations should be in charge of technical co-operation, co-ordination of policies, technology transfer, and the programs to supply essential energy services where they are lacking today.

CSD9 and Rio+10 can play a crucial role in organising international co-operation for the changes, and include the vision in the follow-up of Agenda 21.

The full text is at: www.inforse.org
Europe

European News

By Gunnar Olesen, INFORSE-Europe

INFORSE-Europe Plans and Seminar August, Denmark

Following the INFORSE-Europe email meeting in December, the outline of the INFORSE-Europe action plan for 2001 is set. The main activities foreseen are:

- DIERET (Distance Internet Education on Renewable Energy) shall continue with updated material, with a CD of the texts + graphics, and with the start of two new rounds of the course.
- A seminar will be held in Denmark for INFORSE members and other NGOs; the proposed dates are August 18-25. The seminar will include a tour of new Danish examples of sustainable energy (off-shore windpark, cogeneration, energy savings with urban renewal, integration of windpower into the electric grid, and others), as well as a 3-day seminar at the Danish Folkecenter for Renewable Energy (successes with and challenges for sustainable energy, policies and measures including phase-out of subsidies, NGO-cooperation, INFORSE-Europe meeting).
- Improve and update of the INFORSE-Europe’s website.
- Energy-planning models for NGOs, assisting members with development and use of simple models.
- Develop a database for data on sustainable energy successes and sustainable energy plans from European countries.
- Follow the developments in EU energy policy.
- Follow-up of INFORSE-Europe’s wind campaign with national wind campaigns, assistance to members that would like to start a national wind campaign.

Nuclear Revival in Eastern Europe?

During the last months of 2000, nuclear power got a push forward in Ukraine and Russia, unparalleled since the days of the Soviet Union.

K2R4 Funding Approved

The directors of the European Bank for Reconstruction and Development (EBRD) approved a loan of 215 mill. $ for the K2R4 project to finish two half-built Soviet nuclear reactors in Ukraine. The directors approved the loan December 7, and just a week later the EU Commission approved a loan of 585 mill. $ to K2R4, taken from its EURATOM fund. The total cost of the project is budgeted to be 1,500 mill $ or 750 $/kW.

In spite of a large NGO campaign against K2R4, the nuclear lobby was stronger, and Ukraine got an expensive project that it does not need. In Ukraine, the NGOs will try to halt the project by legal means, as Ukraine’s own decision to go forward with K2R4 is based on questionable and partly outdated legislation and procedures. Another potential hindrance for K2R4 is that the EBRD and EURATOM loans are given with some criteria that might be difficult for Ukraine to fulfill.

Russian Nuclear Waste Import

A few days after the approval of K2R4 funding, on December 21, the Russian Duma voted in favour of amendments of Russian legislation to allow Minatom (the Russian Ministry of Atomic Energy that is operating Russian civilian nuclear facilities) to store and reprocess foreign spent nuclear fuel in Russia. After this first reading, the Duma will consider the amendments in the second reading, scheduled for February 22. Then follows a third reading of the Duma and an evaluation by the Federation Council, the upper chamber of the Russian parliament.

Minatom expects that the waste import will give it a revenue that will allow it to fund its plans of constructing 23 new nuclear reactors in the coming 20 years. While 89% of the Duma voted in favour of the nuclear waste import legislation, the Russian population is less happy with the plans. In the Fall of 2000, Russian NGOs collected almost 2.5 mill. signatures against the plans, well above the 2 mill. signatures needed to call a national referendum on the issue. The Russian Central Electoral Committee rejected around 600,000 of the signatures and declared that 127,000 signatures were lacking to meet the required 2 million criteria for starting a referendum. According to Greenpeace, 93.5% of the Russian voters are against the import.

Following this environmentalists protested the Duma’s vote in favour of the amendments on December 21st, and this year they made Jan. 15 their first protest day under the heading “Antinuclear Resistance”. Protests took place in more than 20 Russian cities.

The protesters have pointed to several problems: e.g., that nuclear waste transport is far from safe in Russia. Also of concern are the Russian plans of sending waste from Japan by ship north of Siberia. If the Russian government approves the waste import plans, the USA will hold a key position: most nuclear fuel is of US origin, and the US must authorise each deal involving the spent fuel (i.e., the waste).

Sources: Social Ecological Union’s Anti-Nuclear Campaign (www.ecoline.ru/antinuclear), WISE (ww.antenna.nl/wise), and Bellona (www.bellona.no), CEE Bankwatch Network (www.bankwatch.org).
More Detailed EU Limits

Following Fierce Criticisms
The new EU guidelines on state aid, adopted by the EU Commission on December 21, set more detailed limits on the EU countries’ national support programs for renewable energy and for energy efficiency than did the previous guidelines. Following fierce criticisms of the first drafts of the new guidelines by EU countries and NGOs, the revised guidelines do not affect existing support programs significantly, but they do place significant limits on the countries’ development of new support programs.

NGOs, including the WWF European Policy Office, have criticised the guidelines and proposed that no EU limits be placed on national programs for renewable energy, and that state support to fossil and nuclear energy be restricted, rather than state support to sustainable energy. The below table gives an overview of the new guidelines.

EU’s Competence in Question
The authority of the EU Commission to limit the national programs for sustainable energy is a question that is debated, not least in Germany. A crucial question is the definition of the «state aid» that the EU Commission shall limit as part of its task of regulating the internal market. Does this term refer just to support via the state budget, or does it cover all kinds of national programs for renewable energy and cogeneration of heat and electricity (CHP)?

Specifically: is the German feed-in law for renewable-energy-based electricity considered state aid? This question is now being considered by the EU Court of Justice, following a question from Schleswig Holstein’s county court.

At the end of October, the advocate general of the EU Court stated in a legal opinion that the law is not state aid. If this opinion will be followed by the EU Court, the Commission’s competence will be limited to direct or indirect support from state resources.

Information: During February 2001, the new guidelines will be available on the EU Commission’s homepage. There are a press release and a paper available on the guideline at the following internet address: europa.eu.int/rapid/start - use the search function to find IP/00/1519 and MEMO/00/125.

To reach 12% renewable energy by 2010, EU must allow substantial support for renewable energy.

<table>
<thead>
<tr>
<th>Type of State Support</th>
<th>New Guidelines</th>
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<tbody>
<tr>
<td>Investment support for renewable energy, energy efficiency, and cogeneration of heat and electricity (CHP)</td>
<td>Maximum 40% subsidy, except for communities covering 100% of their supply with renewable energy and for small and medium-sized enterprises, which may receive a 50% subsidy.</td>
</tr>
<tr>
<td>Support of operation costs for renewable energy and CHP</td>
<td>The countries can choose between 4 types of support: • maximum 50% support over 5 years • state support equal to electricity selling price and production costs, including a “fair” return on capital • support via green certificates or similar market-based scheme • support equal to reduced environmental costs, but limited to 5 EURO-cent/kWh.</td>
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<tr>
<td>Exemptions of energy and environmental taxes (Note: EU restrictions can be counter-productive, as high energy taxes often require exceptions of some industries with international competition).</td>
<td>3 possibilities: • maximum of 50% reduction of taxes over 5 years • maximum 10 years’ reduction of taxes combined with voluntary agreements on implementation of energy efficiency measures • maximum 10 years’ small reduction</td>
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Ukrainian Magazine & Exhibition
A new magazine on sustainable energy has been launched in Ukraine with Future Age Energy as host of the editorial office. NGOs from the Ukrainian NGO Working Group in Climate Change will be editorial advisors. The first issue will be published in February and the first four issues will be compiled in co-operation with OVE, the Danish Organisation for Renewable Energy. Another part of this co-operation will be a sustainable-energy exhibition to be used by Ukrainian NGOs and energy efficiency centres, starting April 22 in Kiev.

The co-operation activities are supported by the Danish Open Air Council’s small grant fund.

Information: Future Age Energy, fae@fae.kiev.ua, OVE: ove@inforse.org.

Seminar for CEE NGOs
The Energy and Environment Seminar organised by the Energy Club will provide training to NGOs from Central and Eastern Europe on global trends in the energy sector and their consequences on the regional and national levels. Topics will include energy sector privatisation and liberalisation, EU energy policy, nuclear policy and trends, connections between climate policy and energy efficiency, and renewable energy sources.

Participants are expected to be members of environmental NGOs from Central and Eastern Europe and to have a basic understanding of energy issues in general, as well as of their respective countries’ energy policies.

The seminar will be conducted in English. Limited funds are available for travel, accommodation, and participation fee.

Application deadline: March 5, 2001.
"This is so simple, and it really works!" “Come teach us”

9,500 Families Now Solar Cooking at Kakuma Refugee Camp. An insight into how the project started. How did it happen that women who had never signed up for anything in 20-some years of being in refugee camps registered to take the course?

When you go through the refugee camp in Kakuma, you can see a large number of the cooks. They really are being used. Of course in a refugee camp you have a desperate need. They’re not doing this for environmental reasons. They’re doing this to survive. Solar cookers are most apt to be adopted when people are desperate, but do we have to wait until the whole world is desperate before we adopt this? We hope not.

How did it get started?

We’d always talked about doing solar cooking in refugee camps, but we always knew that box-style cookers were too expensive. In 1994, the refugee situation in Rwanda exploded. We read about people dying from cholera, and we said, “Don’t we wish we could transport thousands of solar cookers there, so people wouldn’t have to die from not having clean water!”

The New Design

At roughly the same time, the new version of the panel solar cooker (the solar foldable cooker “CooKit”; See box) had arrived. It was tested, and people were saying, “This is so simple, and it really works!”

There were 2 camps which were willing to have us. We decided to start with Kakuma mainly because it was a more stable camp with 30,000 people where we could do longer-term follow-up. One of us spent 2 weeks in the camp before we started, just talking to people, telling them a little about solar cooking and seeing their reaction, looking at their fuel-efficient stove program, getting to know staff people, and getting to know what kind of people were at the camp. This turned out to be a really good idea because we found out exactly what we’d need to bring with us, and it gave us an idea of how to proceed.

Wood vs Food

Each person in the refugee camp is given one “stick” every two weeks. A stick is about 5 cm in diameter and a little less than one meter long. So a family of 5 would have 5 of these sticks to cook all of their meals for two weeks. This is not very much. They scrounge to find whatever they can find around the camp; but only inside the camp because the local people own the land communally and they have made it clear that no refugee should go onto their land. You can imagine that it is a very neat camp without much left to scrounge. What this means is that they have to trade their food for wood. Each person is allotted 1,800 calories per day, and they have to trade some of this with the local people who bring donkey carts of wood into the camp. We’ve often talked about the fact that solar cooked food is more nutritious, but more to the point, you get more food! It’s really a very direct trade-off.

Food to Start with

So we went in January of 1995 and were there for 2 months. We started almost immediately. Here’s how it worked: women arrived and we’d have them mix the ingredients themselves and put the food into a few cookers along with water for tea. Then we’d introduce ourselves and talk about basic solar principles. On the break we’d use the hot water to make tea. We gave our first workshop for staff people and a few refugee leaders. On the following Monday we did our first workshop with refugees who had been designated by their leaders as appropriate possibilities. When we had gone out to invite this second group we told them that we wanted to teach them to cook with the sun, and they laughed hysterically; they thought it was the funniest thing they had ever heard. Then we said, “and then we’ll feed you. We’ll give you some food to try out in your new cooker.” This was something else then; they would come to the class.

Why the Oromos Spark!

This first refugee group consisted of Oromo women. Afterwards people said to us, “Why did you take these Oromos? They’re the most backward group of the whole lot! Why would you start with them?” They never go to school; they never send their kids to school. They turned out to be just wonderful! They picked it up just like that. A funny thing happened with these women later. All of sudden, the entire class from this original Oromo group showed up to register for a class in tailoring. And these were women who had never signed up for anything in twenty-some years of being in refugee camps! Some sort of spark had been lit in them. Next week, we had a meeting with them to see what kind of problems they had, and they brought rolls they’d baked in their cookers as refreshments for this meeting. We hadn’t taught them this; they just chose to do it. By the following week, they were trying soups and they were asking us how to make pasta.
Success on our Hands

Then we did 6 more workshops like this with various ethnic groups. We decided that the participants in any workshop had to live near each other. We also didn’t use the standard diffusion model where you start with the leader and the others will follow. Before the last workshop was done, it was clear we had a success on our hands. So we identified the two most capable and enthusiastic participants from each group and invited them to become trainers. We asked twelve and eventually got sixteen because the Sudanese said they needed more. We made contractual arrangements with them for incentive payments. We hired a coordinator and two monitors: People knew about the cooker pretty quickly. Within a week we had people coming up to us with lists of names saying, “We have this group. Come teach us!” They didn’t understand that we couldn’t be everywhere first.

Incentives for the Trainers

We set the incentives at the maximum allowed by the camp administration, within the guidelines for similarly-skilled work. In return for a $4 incentive payment, each trainer identifies a group to train, conducts the training, does home visits, and leads a follow-up group meeting with all the participants. During the home visits she interviews the participant and fills out a form describing the woman’s experiences and difficulties. When she turns in the completed paperwork, she turns in the form and receives payment for her work. She may do these trainings as often as once a week. A monitor then makes a follow-up visit to each household involved.

Shiny vs Black Pot

Each participant receives a cooker, a plastic bag, a black pot, and some food to try out the cooker with (so that they don’t have to risk their own food). When we first went there, the decision had been made not to give them a pot along with the cooker. But people had one pot. How could you tie up your one pot for a whole day of cooking. And they were not as willing to paint their pot black.

Now, there is where we put our foot down, and said, “You are not going to ask people to paint their pot black before they have had a demonstration that this works!”

These are women who had killed themselves to keep these pots shiny. It’s an endless job trying to keep your pot looking decent. After the demonstration we painted their pots black if they asked us to do so.

Later, we found a company in Nairobi that made spun aluminium pots for US$3 each and we found a latex paint from a hardware store. Bear in mind that this almost doubled the cost per participant in the workshop. But that cost is only $10 - $12 for the whole package.

540 Cookers/ Month

In the last 5 years (1995 - 2000), about 15,500 CooKits were received in Kakuma. Roughly 6,000 have worn out, leaving 9,500 families equipped for solar cooking. During the same period, the camp size grew from 5,000 families to 13,000 families (meaning an increase from 30,000 to 80,000 people). In the starting year, in 1995, about 1,500 households got the CooKits, and 24 trainers were training about 340 families per month. In 1999, 35 refugees served as trainers and monitors, resulting in 540 new solar-cooking families per month.

Surveys show 25%-50% fuel-wood savings for families using solar cookers on sunny days. There are fewer waterborne diseases, the food does not burn, and people have more time to go to other useful activities like courses.

New Developments:

• A group of blind refugees received solar cooking training and cookers, which made their life more bearable.
• A plastic-bag recycling program started. High-quality baskets, mats, and ropes are woven from used, worn-out plastic bags used to insulate cooking pots in the solar CooKit.

“CooKit” We couldn’t have done the project without the new design. That’s really the bottom line. For the cost of one box cooker we could have 25 panel cookers. We were able to spend all our time on how to use the cooker. We didn’t spend any time on construction. You just fold it up and insert the two tabs into the slots and that’s it.

Production of the Cookers The cardboard manufacturer takes a large roll of corrugated cardboard, laminates aluminium foil on one side, and sprays a waterproofing lacquer on the other side. This is then die-cut to form the cooker, complete with the folds and slots. Then they are bundled into lots of 25 (which is about as large as one person can handle).
Publications

**Beating the Heat**
*Why and How We Must Combat Global Warming*

A dynamic highly readable book, which calls to arms for renewable energy advocates helping mitigate global warming. It could become a handbook for climate activists who wants to polish their arguments based on hard scientific, political and energy system information. It counts the costs and clears myths.

By John J. Berger, PhD, specialist, authors of 7 other books on environment.
Contact: Berkley Hills Books, PO Box 9877, Berkley, California 94709, USA. Ph: +1-888-8487303, www.berkleyhills.com or the author: e-mail: JohnJBerger@prodigy.net.

**Sustainable Development International**

Autumn 2000, Edition 4. It provides showcases for strategies and technologies for local-global Agenda 21 implementation. It includes an invitation to the UN Global Compact by the UN Secretary General. Among others, it has sections on energy and transport, as they are the core themes for CSD9. Gratis. 180 pages. ISSN 1466-4739

**We can do it! We will do it! And We Are Doing It! Building an Ecovillage Future**

The personal journey and vision of Ross Jackson, the founder of Gaia Trust a grant making foundation. The currency-based hedge fund’s profit supports groups around the world that are pioneering the development of ecovillages and green enterprises. We can read about the inspiring time when the Gaia foundation was created with all its difficulties.

We visit the world in 2064, the Eco-Village Era, where people live in small communities of 500 people. All nations joined the Gaian League, including USA, which has a women president. The petrol disappeared. The transportation is with “Sunway”. All this happened after the big break down, an environmental disaster, in 2013.

By JT Ross Jackson, PhD, Chairman of GaiaCorp

**Liberalization of Europe’s Electricity Markets – Is the Environment paying the price for cheap power?**

By Antony Froggatt, Greenpeace
Report, 50 pages, May 2000

**North See Offshore Wind A Powerhouse for Europe,** By Greenpeace and German Wind Energy Institute.
Contact: Karl Mellon, Greenpeace Int’, Keizersgracht 176, 1016 DW Amsterdam, The Netherlands. Ph: +31-20-523 6222, fax: +31 20 5236200, e-mail: receptie@ams.greenpeace.org.

**How Safe is ‘Safe Enough’ – Chernobyl Reactors in the EU?**

A FOE paper on the nuclear power plants in the EU accession countries 18 pages, October 2000.
Contact: Patricia Lorenz, Friends of the Earth Europe, Rue Blanche 29, 1060 Brussels, Belgium. Ph: +32 2 5420184, fax: +32 2 5375396, e-mail: patricia.lorenz@foeurope.org, www.foeurope.org.

**Coming Clean How clean is nuclear energy?**

Information brochure 16 pages, October 2000

**CAN 2000**

International NGO Directory of the Climate Action Network 320 NGO from 81 countries.
Contact: 44 rue du Taciturne, 1000 Brussels, Belgium. Ph: +32 2 2310180, fax: +32 2 2305713, e-mail: info@climnet.org, www.climnet.org.
EVENTS

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* = INFORSE is Participating

March 12-13, 14-15 2001
Can Renewables Deliver? Keeping the lights on Tradition or Innovation? London
Int. Conferences Environment Series.
Info: The Royal Institute of International Affairs, Chatham House, 10 St. James’s
Square, London SW1Y 4LE, UK. Ph: +44 2079575700, fax: +44-207321 2045
e-mail: conferences@riia.org.

March 14, 2001
Int’l Day of Action Against Damns and for Rivers, Water & Life
Info: International Rivers Network, 1847 Berkeley Way, Berkeley, CA 94703 USA.
Ph: 510 848 1155, fax: 510 848 1068, e-mail: dayofaction@irn.org, www.irn.org.

March 19-21, 2001
1st Hellenic Renewable Energy Sources Exhibition & Conf., Athens, Greece
Info: National Technical University of Athens, Gerantou 10 - 105 52 Athens, Greece, e-mail: Ph: +30 1 5248968, fax: +30 1 5235319,
E-mail: megoulis@internet.gr or Tijin, Ph: +30 1 7722722 fax: +30 1 7721738,
E-mail: renez@central.ntua.gr.

March 30 - April 1, 2001
New Energy 2001, Shanghai, China
2nd Int’l Exhib. on New & Clean Energy Info: Coastal Int’l Exhibition Co. Ltd, Room

April 2-5, 2001
WORK 2001, Johannesburg, South Africa
1st. Int’l Conf. on Employment Creation in Development, Info: Dept’ y of Civil Engineering, Private bag 3, WITS 2050, South Africa. Ph: +27-11 717 7157, fax: +27-11 359 1762, e-mail: filip@civen.civil.wits.ac.za, work2001@cjb.net, work2001@cjb.net,www.civil.wits.ac.za/rmc/

April 4-6, 2001
Global Conference on Creating Better Cit- ies Together, Bremen, Germany

April 5-6, 2001
Sustainable Development Research, Univ. of Manchester, UK
7th Annual Int’l Conference ERP Environment, PO Box 75, Shipleys, West Yorkshire, BD17 6EZ, UK. Ph: +44 1274 530408, fax:+44 1274530409, e-mail: elaine@erpenv.demon.co.uk, www.erpenvironment.org.

April 5-6, 2001
Energy in Local Agenda 21, London Bor- ough of Southwark, UK 6th Annual Seminar
Energy Cities Secretariat, 2, Chemin de Palente, 25000 Besancon, France
Ph: +33 3 8165 3680, fax: +33 3 81 50 7351, e-mail: sem2001@energie-cites.org, www.energie-cites.org.

April 16-27, 2001 *
Commission for Sustainable Development 9th Session (CS9D), New York, USA
April 21-25, 2001
Solar Energy: The Power to Choose, FOU- RUM 2001, Washington, DC, USA
American Solar Energy Society, 2400 Central Ave., G-1 Boulder CO 80301, USA.
Ph: 303-443-3130, fax: 303-443-3212, e-mail: ases@ases.org, www.solarenergyforum.org.

April 22, 2001
Earth Day

May 3-4, 2001
REMIC - Renewable Energy in Maritime and Island Climates, Belfast, UK. Organized by ISES-UK and Centre for Sustain- able Technologies. (CST)
Info: University of Ulster, Newtownabbey, Co. Antrim, BT37 0QB, Northern Ireland. Ph: +44 28 9036 8238, fax: +44 28 9036 8239, remic@alst.ac.uk, www.engi.alst.ac.uk/remic.

May 4 - 8, 2001,
Seminars on Energy and Environment for NGOs, Budapest, Hungary
See article on page 15, e-mail: rhodosi@energiaklub.hu, www.energiaklub.hu.

May 6-8, 2001
The Changing Land of Europe, & Renew- able Energy, Amsterdam, The Netherlands
The 1st European Conference on Agriculture and Industry Info: EMML (European Media Marketing Ltd.) PO Box 7, Torrington, North Devon, EX38 8TP, UK. Ph: +44 1805625500, fax: +44 1805625400, E-mail: land@sustain.co.uk, www.emml.com.
9-10 May, 2001
2nd Int’l Combined Heat and Power Sym- posium, Amsterdam, The Netherlands
Info: International Cogeneration Alliance (ICA), e-mail: andrea.morass@cogen.org, www.2ndCHPsymposium.com.

May 15-16, 2001
From Eco-Efficiency to Overall Sustainability in Enterprises, Duesseldorf, Germany

23-27 May, 2001
Youth Conference on Environment & Sus- tainable Development, Borgholm, Sweden

June 4 - 8, 2001
Health effects of the Chernobyl accident, Kyiv, Ukraine
Info: UN Chernobyl Program, Int’l commis- sion for Radiological Protection (ICRP) 53 Melnikov Street, Kyiv 04050 Ukraine. Ph/fax : +38-44-213-7202, +42-1803, e-mail: kosti@morion.kiev.ua.

June 1 - June 22, 2001

June 4 to July 18, 2001 (for African countries) August 13 to September 26
Int’l courses on biogas technology Info: Asia-Pacific Biogas Research and Training Center (BRTC), Hu Rongda, 4 - 13, Renmin Nan Street, Chengdu, Sichuan, China. Ph:+86-28-5222658, fax: +86-28- 5230677 E-mail: obrtc@shell.sctsi.ac.cn.

June 11-13, 2001
Power System and Market Assets, Stock- holm, Sweden
Int’l Symposium on Distributed Generation Info: Royal Institute of Technology, ETS, Teknikringen 33, 10044 Stockholm, Sweden. Ph:+46-8-7906639, fax: +46-8-7906610, e-mail: Thomas.Ackermann@ieee.org, www.ekt.kth.se/sesworkshop/ DG.htm.

June 16 - 16, 2001

July 2-6, 2001
European Wind Energy Conference, Bella Center, Copenhagen, Denmark

July 8-15, 2001
WSES/IEEE Int’l Conference on Power Engineering, Rethymnon, Crete, Greece.
Info: Piccorelli Peres and prof. Lambert- Torres, e-mail: ioannou@vii.gr or theodor@computers.gr.

August 18-25, 2001 *(Tentative Date)
European NGO Seminar, Denmark
Info: INFORSE-Europe meeting Info: OVE-Europe, Gl. Kirkevej 56, 8530 Hjorretby, Denmark. Ph: +45-86227000, fax: +45-86227096, e-mail: ove@inforse.org, www.orgve.dk/inforse-europe.

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  - New Network in Zimbabwe
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  - Post-Soviet Changes
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• Sustainable Energy Vision 2050

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  - Nuclear Revival in Eastern Europe
  - More Detailed EU Limits
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  - Seminar for CEE NGOs, May 2001, Budapest

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INFORSE in Brief

INFORSE is a global network of independent non-governmental organisations working for sustainable energy solutions to reduce poverty and protect the environment.

It was formed at the Global Forum in Rio de Janeiro, Brazil, in 1992. Currently the network has about 200 members.

INFORSE’s common vision is to develop a world where energy services, necessary for a just and human centred development, are provided in a sustainable way using renewable energy. This implies phase out of nuclear and fossil energy consumption, and increased reliance on local solutions.

INFORSE is open to membership for independent non-governmental, non-profit organizations. Membership is free of charge. Activities include meetings workshops, campaigns, and projects. INFORSE lobbies for and develop projects to promote sustainable energy solutions.

INFORSE participated in several UN events and their parallel NGO Forums including: Conferences of the UN Climate Convention, Combating Desertification, and follow-up of the Rio Conference. INFORSE has Consultative Status to the UN.

INFORSE publishes this quarterly newsletter “Sustainable Energy News” and the annual “Contact List” including 800 addresses of organizations in the field.

INFORSE in Brief