SUSTAINABLE ENERGY NEWS on EMAIL (SENSE) number 9

Welcome to the ninth edition of the email newsletter – Sustainable Energy News (SENSE) – a service of the Sustainable Energy and Climate Change Partnership (SECCP), a project of Earthlife Africa Johannesburg, in partnership with WWF, Denmark.
SENSE is published monthly and we welcome any feedback and submissions. It is edited by Erika Schutze (Research and Information Co-ordinator) and Mette Nedergaard is assistant editor based in Denmark.
Please let us know if you wish to be removed from this list or suggest recipients for the list or if you would like to receive our separate Climate Change email newsletter, CCEN, edited by the facilitator of the SA Climate Action Network (SACAN), Mamashoabathe Noko.

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1. SECCP News

Call for Papers – "The work that goes into renewable energy"
SECCP is considering commissioning research into the job creation potential of renewable energy technology manufacturing. "The use of renewables creates 10 times the jobs of the conventional energy sector," says founder of Solar Fabrik, Henning Holm. Making solar panels is highly labour intensive as is servicing them. It has huge potential for creating jobs in rural areas. The research would outline the production cycle process, the materials and skills needed, the role of unions as well as the resources needed for re-training of workers currently employed in the fossil fuel industry.
The aim would be to emphasis to government what it *should* be doing to promote expansion of renewable energy as well as to strengthen advocacy stance and to get union alliance in this. NUM has already endorsed the supplementation of fossil fuels with RE.
A U.S. Renewable Energy Policy Project (REPP) study: "The work that goes into RE" by Virinder Singh with BBC Research & Consulting and Jeffrey Fehrs (see http://www.repp.org) is a comparable study.
SECCP would like to know of any other research studies or data on the subject to inform our terms of reference for the research and to avoid duplication. Should you have any information, please contact: erika@earthlife.org.za

"Getting to Grips with Sustainable Energy"
SECCP booklet available – a 74-page booklet intended to provide introductory information and to raise awareness of sustainable energy potential, developments and technologies. Overall, it emphasises the combined long-term social, environmental and economic benefits of renewable energy and energy efficiency. Focusing on the South African and third world experiences, it provides definitions and descriptions of different renewable energy technologies and energy efficiency measures, case studies of local/southern applications of such technologies, outlines and status of some of South African government initiatives, and some civil society advocacy positions. The booklet will be useful for all people interested in the energy choices facing South and

Southern Africa. NGO activists pursuing the goals of social and environmental justice will benefit from the more advanced policy discussions and could use the exercises as training tools. Contact: seccp@earthlife.org.za

SECCP joins the INFORSE network
SECCP has joined the INFORSE network with a view to information sharing and South-North-South exchange. INFORSE is a world-wide network of 200 NGOs in more than 60 countries. All of these organisations work to promote sustainable energy and social development. INFORSE acts as independent initiator of programmes and projects and is actively engaged in international awareness rising. Moreover, INFORSE provides a meeting place for organisations at all levels including donors.

Bookmarks available for free
SECCP has two funky awareness-raising bookmarks: the "2020 Energy Vision" and the "Save Energy, Save Money, Increase Access" guide to living an energy efficient life. Contact Lerato on seccp@earthlife.org.za.

T-shirts available
SECCP T-shirts are now available for R70 each. It says: "Power the World with Sustainable Energy – save money, save energy, extend access". Contact: seccp@earthlife.org.za

2. SA's renewable energy progress

Draft White Paper on Renewable Energy
The World Summit did not establish targets for the development of renewable energy resources, but South Africa is in the process of adopting a ten-year target – as part of the draft White Paper on the Promotion of Renewable Energy and Clean Energy Development, which is now available for public comment. But the proposed target contradicts the goals and objectives articulated in the policy document.

DME officials freely admit that the World Bank has been instrumental in "trimming" the target – it has deteriorated enormously since the first 'consensus' strategy document was assembled a year and a half ago. The emasculation of this target, which will inform South African energy development for the next ten and more years, is justified as a 'realistic' approach – aligned with what the World Bank wants to achieve in South Africa through use of its Prototype Carbon Fund. DME officials are limiting national implementation of sustainable development, apparently due to leverage by a single player!
Our national spending and energy strategy should be informed by the social and environmental benefits that could be realised by capitalising on our most neglected natural resource: renewable energy. Instead, drafters are pandering to special interests, forgetting that policy should guide and stimulate investment, rather than being bought. The DME is hamstrung by a perception that the World Bank can only operate within set-asides. Set-asides are a sure way of keeping RE in its current Cinderella state. The Bank understandably wishes to operate exclusively on open tenders, which is fine if you have a level playing field.
In SA this never has been the case nor is it the current state. RE technologies have consistently been disadvantaged. So the RE grid-feeder law which has been demonstrated to be successful in establishing RE industries with concomitant jobs, environmental benefits, forex savings and energy diversity is the way to go and should not be delayed at this stage. This system is open-ended and no one can predict what market share RE technologies will achieve. At the same time the Bank is free to do its intervention the way it sees fit.
The single target in the White Paper proposes adding an amount of renewable energy to final consumption, over the next ten years that is equal to only 0.15% of current consumption in ONE year. Such a target is not only a spotlight on the lack of political will and vision, it would also effectively be a barrier to the very development that the policy is supposed to promote.
The RE target is to increase final consumption of RE by 10 000 GWh or 0.86 Mtoe by 2012. This is an addition of 1.5% of final energy consumption from renewables (using final energy is very confusing, because biomass burned to generate electricity is really primary and not final energy). According to DME, in 2000 biomass was 8.7% of final consumption. In addition, cogeneration by industry from bagasse is another percent or so. So this is why DME is saying that 10% of final energy is the goal – it's not very far from where we are now. That's of course assuming that ALL the 8,7% from biomass was renewable. There is no data to verify this as it's all based on projections from very small samples of household surveys, which in most cases were not very

rigorous. Until government does something to improve data on fuelwood use (supply and demand), it's deceptive to include it in the "renewable" energy accounting.
If we look at electricity, current production in SA is about 195 000 GWh, with only 1% from hydro and bagasse. An additional 10 000 GWh, if it was all electricity, would make renewables about 6% of electricity production by 2012.
As there are 8760 hours in a year, each 1MW capacity for a biomass plant with 0.75 availability factor would deliver 6 570 MWh per year assuming only 0.25 availability factor for wind, each MWe would deliver 2190 MWh p.a. Thus, to deliver the additional 10 000 GMh target could be achieved with 456.6 MWe wind operating for ten years, or 152.2 MWe biomass operating for ten years.
Considering that liquid biofuels could/should account for at least 5 000 GWh over the next ten years, the second half of the target could be met, by example, with 100 MWe wind plus 100MWe biomass generation installed gradually over five years. This is without even counting what can be achieved with solar and mini hydro.
The importance of solar water heaters (SWH) as a form of renewable energy, a forex saver and a job creator has been overlooked in past versions of the Paper and this looks set to continue. The time to give SWH its rightful place in the sun is now (see Q&A at end of document).
Targets should also be specified for liquid fuels and the application of passive solar design in housing.
The paper champions investment incentives. While they do address issues of high start-up costs of many RE technologies, they can lead to installations that produce no electricity. We have heard many warnings of the shortcomings of investment incentives, as opposed to feed-in regulation/law or REPS, with USA providing cautionary tales.

Rural renewable energy programme provides energy, jobs and raises high school pass rate
Renewable energy programmes introduced in rural areas are far more likely to be sustainable when they are undertaken as holistic, multi-faceted programmes aimed at uplifting the whole community. The experience of the 2000-strong community of Maphephetheni, situated in the Valley of a Thousand Hills in KwaZulu/Natal, bears this out.
Solar Engineering Services began in 1996 with a pilot solar home system programme here, and the project has grown over time to encompass school electrification (incorporating a computer centre and distance learning), clinic electrification and solar water heating, battery charging and solar-powered pay cell phones, solar cooking, crop drying and rainwater harvesting, biogas for cooking and refrigeration, and a project which is just getting underway to use biogas to power a generator for electricity at a school, water pumping to irrigate community gardens and deliver water to homes, and tourism opportunities.
The success of this venture is based on the fact that it was undertaken as a basket of projects so that the overhead costs for training, supervision, travel, marketing, financing, quality control and so on can be shared between the projects. Some 43 jobs have been created at Maphephethe during the first phase. Phase two will extend the benefits from the programmes to the larger community.
Myeka High School is one of three high schools in Maphephetheni not connected to the electricity grid. In 1995, Eskom installed the first of some 2000 PV systems, as part of its rural schools electrification programme. The 357 Wp x 24 volt AC/DC system provided electricity and lighting for three classrooms and the headmaster's office. The lights remained largely unused, as the school seldom conducted activities at night. The computer system kicked these facilities into operation. Today, the educational infrastructure at Myeka High School is powered by two stand-alone PV arrays and one solar/gas hybrid generator, with a total installed capacity of 2.4 kWp. The hybrid system, which is on loan to the school from Mangosuthu Technikon, consists of a 340 Wp array connected to twelve 2 volt Willard deep-cycle batteries providing 510 AH storage. This system incorporates a UW gas generator connected to a 1.7 kW battery charger. The entire system is linked to a 2.4 kW 220 volt inverter. Shell Renewables SA donated fourteen 75 Wp modules which have been mounted on an array by Solar Engineering Services (SES). Both the Shell and Eskom arrays are connected to a 24 volt x 612 AH modified deep-cycle battery bank.
Community members have been involved in every aspect of every project, and the importance of their involvement cannot be overemphasized. Since the project started four years ago, the school's final-year pass rate has improved each year - from 35% to 45%, to 55%, and most recently to 69%.
The power supply operates 27 computers, four 74 cm (29 inch) colour TV sets, overhead projectors, printers and photocopiers. The school has full Internet access via a GSM modem and cell phone link. Infosat, one of two satellite connectivity companies in South Africa, provides this technology. (There are no landlines within 5 km of the school.) The Learning Channel Campus in Johannesburg has made a full range of high school

educational material available. This material is transferred to the school via a digital satellite; and is then downloaded onto a computer in each classroom and viewed by the pupils on 74 cm TV screens. Five computers donated by Dell SA have been installed in the computer centre.
The next phase of the project is to use a biogas digester to produce methane, which will be used to drive a generator. This will provide electricity for the school's further expansion, and will also eliminate the need to buy gas for the hybrid system. The digester will be fed by human excreta from the 850 students and teachers. It is important to note that over 50% of rural schools in SA have no toilet facilities – as such, the implications for the school biogas programme are extremely far-reaching. It has the potential to transform what is currently a major liability (inadequate toilet facilities and no electricity) into a major asset. – *willcawood@solarengineering.co.za*

ESKOM watch-dogs continue to cut electricity
Late August, members of the ANC Youth League and Sanco, subcontracted by ESKOM, continued to seize electricity boxes in Orange Farm and extort bribes from their fellow community members.
Eight years after the first democratic elections, the government has failed to deliver free basic services as promised. On the contrary, living conditions have worsened as water and electricity cut-offs now occur on a regular basis. With an alarming unemployment rate of 75%, Orange Farm households are not in a position to purchase pre-paid electricity cards and many have resorted to bridging electricity boxes.
ESKOM has responded to the crisis by appointing local members of the ANC Youth League and Sanco to spy on their neighbours, friends and family and cut the electricity in the case of “illegal” consumption. This strategy has been implemented under the banner of job creation and one might wonder about the ethical implications of ESKOM’s contribution to poverty alleviation.
The situation has further deteriorated in the past weeks as ESKOM workers have stripped households of electricity boxes and demanded large sums in return for the box. In some cases, bribes reached several thousands of rands and pre-paid electricity cardholders were also subject to harassment and blackmail.
As a sign of their contempt and outrage, residents attacked an ESKOM worker who attempted to make his way into a household located in Drieziek 1 on August 19. Shortly after the incident, a police car arrived on the scene in order to protect ESKOM workers from the angry crowd and allow them to proceed with their tasks. Although the police intimidated protesters with their guns, the crowd managed to chase them away and the day ended with a victory.
ESKOM denies knowledge of its employees’ behaviour and refuses to take responsibility for it as the work is subcontracted. One ESKOM official has suggested that victims make complaints and pinpoint the culprits. It is clear that such a tactic would individualise the struggle for free basic services and further divide the population of Orange Farm.
The Orange Farm Water Crisis Committee (OWCC) has been formed as a response to the recurrent water shortages in the township and the imminent introduction of pre-paid water cards. Its ultimate aim, however, is to fight against the privatisation of all basic services: water, electricity and sanitation.
Following the creation of the OWCC, mass meetings have taken place throughout the week in different extensions in order to consult the residents for a plan of action. Through a democratic process, the community decided to take up the struggle and march to ESKOM’s office in Palm Springs on the 22nd of August. The aim of the demonstration is to denounce the use of pre-paid electricity cards and demand the resignation of municipal councillors who have shown to serve the interests of large, profit-seeking corporations like ESKOM, Johannesburg Water and PickiTup. – *http://sa.indymedia.org/news*

COSATU takes on plastic bags
Minister Moosa has been telling all stakeholders that the environmental sector is solidly behind his proposals to regulate the use of plastic bags but not any detail of whom and how they have 'signed on'. COSATU is developing an alternative proposal, designed to avoid job losses and involving, inter alia, promotion of recycling – with the possibility of a non-profit company (section 21) being established – a refundable levy/charge for plastic bags charged by retailers which should embrace imported bags; stimulating demand for recyclate (pellets produced by recyclers) possibly through regulating a minimum percentage in garbage bags and certain piping; looking at alternatives to plastic.
COSATU will send out a document detailing their proposal soon and would like to determine the potential for support from environmental / social justice organisations. They would like to hold a meeting by the end of the month. Interested parties are invited to contact Tanya van Meelis: tanya@cosatu.org.za, Ph: (011) 339 4911.

3. WSSD

Storming and looting – what did the Summit deliver?
In the UN's attention to the needs of the poor, compromising for the U.S., and placating the global corporations, the heavy ecological footprint of the planet was not addressed enough by officials. With its emphasis on poverty alleviation, strides were made on water and sanitation. But compared to industrialised lifestyles, poor people place very little stress on ecological resources anyway so resources will continue to be consumed by the industrialised countries at an alarming rate with dire consequences for the poor.

Much has been said of the failure of the Summit to deliver effective targets for renewables and the general failure to deliver milestones and timelines. The weak outputs also give more endorsement to clean coal than to renewable energy. At the international level South Africa either bowed to, or facilitated OPEC influence (and other business-as-usual apologists) to get the 'G77 & China' group to abandon targets for renewable energy, and delete any measurable commitment to reform/rationalise subsidies to fossil fuel and nuclear power. Iran and Iraq sided with the US in rejecting renewable energy since both have vested interests in oil.

Some cite the proposal calling for the phase out of subsidies to fossil fuels making it to the official table as a success. This led to the Chair telling DME to speak to NGOs about subsidy reform in SA – we're waiting. There was pressure on the UN to set up some mechanism by which countries can report on subsidies as a basis for target development since this was deleted from the text. (The International Energy Agency is supposed to be doing a study on subsidies.) The strong sanitation target should be linked to the use of sewerage treatment facilities as sources of renewable energy.

Arguably, it was in side events, seminars and street activities that the real action was taking place. In such fora the heavy ecological footprint of the North in particular was highlighted and the links were made between consumption of resources locally and the impacts thereof globally. Emphasis was placed on the need for enforcement of the "polluter pays principal", "ecological debt" and the enactment of "common but differentiated responsibilities". The failure of the structural adjustment programmes of the World Bank and IMF in meeting development challenges and pressure to ratify the Kyoto Protocol were common rallying cries. The slow pace of land redistribution gave impetus to the Landless People's Movement that found alliances with many similar South American land movements and together they took centre stage at the march from Alexandra to Sandton held on August 31 attended by 20 000 people. Repeatedly, fears were expressed that NEPAD might entrench the trend toward the privatisation of services and emphasise foreign direct investment at the expense of Africa. Community, NGOs and social movements vowed not to relent in their watchdog roles but there was very seldom collaboration between Northern and Southern NGOs.

An exception was Groundwork's Corporate Accountability Conference (culminating in the Greenwash Awards) that made clear the need for rules for big business. Testimonies by representatives from communities all over the world who have been affected by unregulated companies – Dow (Union Carbide) in Bhopal, Total/Unocal in Burma, Cape PLC, and so on – drove the point home. Friends of the Earth International said the Plan of Implementation (the main output) was disappointing because it set no rules for corporate accountability and called for a UN conference on corporate accountability by the end of 2003. The Global Forum's Energy and Climate Change Commission, chaired by the Black Environmental Justice Networking Forum (USA), had speakers and the floor (notably National Union of Mineworkers) condemning nuclear power, Shell's destruction of Nigeria and other such examples of multinational abuse of people. Strong representation was made by Alaskan representatives whose livelihood is directly threatened by the melting of ice due to global warming.

Long before any of the weak outcomes came to the fore, the International Anti-Globalisation Teach-In at Wits University concluded that the development of the social movements is the only avenue left for effecting any change. Speakers criticised the WTO and its neoliberal rhetoric, called for the cancellation of debt and condemned global capitalism. A candlelit march down town initiated by the Anti-Privatisation Forum resulted in police brutality and arrests of peaceful marchers. At least one positive outcome of the Summit was that Multilateral Environmental Agreements are not explicitly superseded by WTO trade rules.

The exhibitions provided practical examples for all kinds of environmentally friendly products and state-of-the art technologies. To cite a few: the Japanese stand at Ubuntu Village showcased the hybrid fuel-cell vehicle; the UNESCO stand showcased rooftop wind turbines, Solar Heat displayed cheap solar water heaters, The

Greenhouse Project in Joubert Park provided the largest source of PV power. The Greening the Summit Initiative provided Sandton and Nasrec with energy from renewables. And Greenpeace proved how weak security is at Koeberg nuclear power station.

Many partnerships were formed and initiatives launched. The powerful business lobby rejected the notion of international corporate accountability and was keen on partnerships with UN agencies and other groups. As a result, Type II partnerships became the order of the day, despite the fact that many NGOs had said that they would only be worthwhile if there were strong Type I initiatives, and that governments should not establish voluntary agreements until the ground rules are established.

Now the private sector has the added benefit of using Type II partnerships to attract donor funding to underwrite a portion of the investment to set up infrastructure while the public sector still pays for pollution induced health costs and NGOs have to beg for funds to continue their watchdog role. So companies like Shell and Eskom can continue to wreak havoc on the health of communities and get their profits and returns subsidised and guaranteed for further expansion.

Eskom's plans to extend electricity infrastructure throughout Africa is based on the business-as-usual philosophy that holds that long-value chain projects will have trickle down benefits for the community. Thus small communities are not the primary beneficiaries but industry is, with the promise that small communities will get jobs along the way. Shell pitched for a voluntary agreement for its rural electrification programme to roll out photovoltaic panels (PVs) all over Africa. (Shell does not seem to have taken cognisance of the fact that rural communities off-the-grid need energy for cooking and space heating primarily, not lights.) While Shell was extolling the virtues of its PV expansion plan, the South Durban Community Environmental Alliance was holding its alternative WSSD: The Wentworth Summit on Sickness and Death to highlight the fact that oil refineries in the area have led to asthma rates 29% higher than the national average.

UNICEF and MacDonalds have teamed up, giving substance to charges that the UN is another blue-washing exercise. Greenpeace and the WBCSD teamed up leading to street action in Barcelona and Amsterdam where organisations called this collaboration the UN Masquerade. The EU energy initiative is vague, the UK energy initiative (REEEP) is more focused and there are rumours that SA might buy into it. The African Energy Fund for African Development is ESKOM driven and should be watched for its business-as-usual tendencies. The U.S. calls its "Global Village Energy Partnership" a 'clean energy initiative' with its focus on increasing efficiency and changing vehicle patterns but it remains to be seen if this is just lip service. Germany's "Global Sustainable Energy Strategy" promises to share information, develop strategies together and build consensus. Government ministers from the EU; Germany in particular, repeatedly stressed their commitment to reducing the footprint of their countries by encouraging energy efficiency and the development of renewables. But their statements were characterised by general timidity, evidenced in comments about the rights of individual lifestyle freedoms over government intervention.

We still have a long way to go before we think globally as it's clear that international leaders remain committed to their respective election mandates and corporate vested interests bind their hands and continue to loot resources. Meanwhile, storms raged in Europe and starvation worsened in Southern Africa.

Zero Waste Project – at least one success story of WSSD

The Earthlife Africa (ELA) Zero Waste project, with support from the Global Alliance for Incinerator Alternatives (GAIA) far outperformed all the other summit venues with regard to minimisation and diversion of waste. Although preliminary figures show a diversion of between 70% and 80% at the Global Forum (NASREC), whatever the final figure, it will be far in excess of the total for the entire Summit – which is around the 25% mark.

The initiative entailed modifying bicycles by attaching trailers, providing bins for separating waste and liasing with caterers to avoid the use of plastics and training an already ardent staff. Not only does recycling waste cut down on landfill build-ups, but it also cuts down on the use of energy in the production of new goods. "This not only dramatically shows the merits of Zero Waste as an organizing principle, it shows that NGOs are also capable and competent agents of delivering innovative environmental services" says Muna Lakhani project co-ordinator from ELA Johannesburg. "This innovative system has proven that, with comparatively minimal

resources, but with a good plan and a dedicated team, large diversions of waste from landfills and incinerators can take place."

The Zero Waste project at the Global Forum began by attempting to avoid as much waste as possible to start with, (particularly plastics, with a focus on PVC and polystyrene) and then put into place educational information systems; emission-free waste collection (on specially designed tricycles); and deployed an enthusiastic team of workers within the system.
Under normal conditions at Nasrec, the waste system that the Zero Waste team re-designed, would only have created about six jobs for the duration, and no permanent employment. Zero Waste systems create employment: the system at the Global Forum created 90 part time jobs, and will leave behind an ongoing local benefit of about 40 and support for 10 existing full time jobs. All these jobs are for Black South Africans. Some attempts to design waste out of the system were not wholly successful, as water was still sold in PET (plastics) bottles, and lids and straws were still used, despite Coke's initial agreement not to use these products.
Some Government departments and organisations "imported" unsustainable waste, mainly in the form of polystyrene containers. It is estimated that between 8% and 12% of the total waste stream was "imported", leading to a lower figure than would have been possible.
Reducing hazardous wastes is a vital part of Zero Waste Systems. The minimising of the use of toxic chemicals, by analysing the products normally used, and designing alternatives that are orders of magnitude less toxic, also contributed to the program's success.
Already, many businesses, government departments (especially local government) and community groups have shown a keen interest in actively promoting the Zero Waste concept to reduce waste. – *Contact: Muna Lakhani, (0834-717276) muna@iafrica.com; Ann Leonard, GAIA, USA, (office) +1-510-524-4000, aleonard@essential.org*

4. General Sustainable Energy News

IEA International Energy Outlook 2002 released
The OECD International Energy Outlook 2002 was released on September 19. It is a long-term scenario, up to year 2030, and will be widely read and used in government circles. The *International Energy Outlook 2002* can be seen, and used, in two ways. Either it just shows what will happen in the absence of new policies (and in fact it also offers and "alternative policy scenario", which however is only slightly less frightening as regards CO2). Or it is a self-fulfilling prophecy and a defence for the indefensible. It will certainly be used in the latter way by the anti-Kyoto crowd, and by the inert bureaucrats and politicians in most nations.
Among the highlights:

- World energy demand will grow by two-thirds in the next 30 years;
- That fossil fuels will continue to dominate the energy mix;
- That nearly two-thirds of the growth in energy demand will arise in developing countries;
- That electricity use will grow faster than any other energy end-use;
- That the proportion of the world's population without access to electricity will fall by a third; or, conversely, that 1.4 billion people will still lack access to electricity in 2030;
- That, on the basis of present policies, C02 emissions from energy use will continue to grow steeply

"Global energy-related emissions of carbon dioxide will grow slightly more quickly than primary energy demand. They are projected to increase by 1.8% per year from 2000 to 2030 in the Reference Scenario, reaching 38 billion tonnes in 2030. This is 16 billion tonnes, or 70% more than today. Two-thirds of the increase will come in developing countries." (That clearly means a huge increase of CO2 in the rich countries as well, some of it from increased use of coal power. But of course the third world is the real problem!)
Other interesting items:
The role of *nuclear power* will decline markedly, because few new reactors will be built and some will be retired. Nuclear production will peak at the end of this decade, then decline gradually."
Carbon sequestration and storage technologies hold out the long-term prospect of enabling fossil fuels to be burned without emitting carbon into the atmosphere. These technologies, however, are unlikely to be deployed on a large scale before 2030. They are at an early stage of development and are very costly." – *F. Lundberg, www.vetenskapsjournalisterna.se*

European Parliament votes in favour of mandatory targets for biofuels

Meeting on 4 July 2002, Members of the European Parliament voted on the first reading of a Proposal for a Directive on the promotion of the use of biofuels for transport, expressing clear support for mandatory targets for the use of biofuels. The European Parliament's decision - which endorses the Commission's original proposal - acknowledges the urgent need to reverse the increase of greenhouse gas emissions from road transport and to reduce the EU's dependence on crude oil imports. With this vote, MEPs also confirmed that the EU will require a strong and ambitious regulatory framework if it is to develop its biofuel industry.
The European Committee for Biofuels (CEB) called upon all Member States to take due account of the European Parliament's decision and recalls that this vote took place only two weeks after all Member States reached a political agreement on the proposal for a Directive amending Directive 92/81/CE, which aims to introduce a different taxation system for biofuels. – *www.jxj.com*

California passes strong renewables standard
California has passed a bill establishing a state-wide renewable energy portfolio, and requiring electricity retailers to increase their use of renewable resources by at least one percent per year. By 2017, retailers must produce at least 20% of their retail electricity sales from renewable sources such as solar, wind, geothermal and biomass energy.
Governor Gray Davis signed the legislation mid-September along with a host of other environmental bills, saying they will help protect California's environment and quality of life. The renewables bill (SB 1078), drafted by Democratic state Senator Byron Sher, establishes the California Renewables Portfolio Standard for California. California officials said the 20% renewable requirement, which will nearly double the state's existing base of wind, geothermal, biomass and solar resources, will be the strongest renewable portfolio in the nation.
At least two of the major utilities serving California customers - Pacific Gas & Electric and Southern California Edison - already come close to the requirements of the new law, producing 12 to 15% of the electricity they sell from renewable sources. But smaller utilities, which rely more heavily on traditional power sources, may have trouble meeting the 2017 deadline for the 20 percent renewable portfolio. – *www.ens-news.com*

China's solar thermal operations compete with European market
China now has a well-established solar thermal industry with over 1000 factories manufacturing and selling systems. Most of these collectors are used to heat water and are sold without subsidies.
Significant growth in the Chinese solar water heater sector would capitalize it for entry into the European market – a source of competition, or opportunities, for European companies. However, the inconsistent quality of product and the fragmented nature of the solar industry frequently impede overall market penetration and long-term market growth.
The success of such technologies in China could be attributed to government promotion of renewable energy; the Chinese government, governmental agencies and sector associations sponsor and organize trade fairs. At a recent trade fair for renewable energy in rural areas, held in Beijing, most (115 out of 177) of the exhibitors were from the solar water heater (SWH) industry.
International organizations, such as the International Finance Corporation, are also very interested in the Chinese SWH sector, as it is the leading industry in the commercialisation of renewable energy. – *www.jxj.com*

Collapse of British nuclear energy company proves nuclear power is not only dangerous but also uneconomical
In the latest financial year, British Energy lost GBP 518 million and is already heavily in debt. The company started urgent talks with the Government early September after warning that it faced insolvency without immediate financial help. The company runs eight nuclear power stations in the UK and said the collapse in the price of electricity meant it now cost more to generate power than it could get for selling it. Ministers admitted that only massive Westminster support could prevent the UK's biggest electricity supplier going bust. But they promised there would be no "blank cheque" to shareholders and claimed it was not a repeat of the Railtrack fiasco.
But shareholders insisted the two cases were similar and were demanding Government compensation.
And a senior figure within the industry warned that British Energy could be only the first UK electricity generator to require Government aid as the wholesale price of power continues to drop.
Meanwhile, environmental campaigners demanded that the Government should refuse to bail out the company with Scottish Greens, saying the Torness nuclear power station in East Lothian should remain closed for good because of possible "design flaws".

Trade and Industry Secretary Patricia Hewitt said: "There is no question at all of taxpayers writing a blank cheque to British Energy and its shareholders." She said the main reason for getting involved with the company was because of the Government's responsibility to ensure the safety of nuclear power. As the crisis deepened and share trading in British Energy was suspended, union leaders sought urgent talks with the company and the Government over fears that jobs could be lost among the 5200- strong workforce.
David Porter, of the Association of Electricity Producers, said British Energy was not the only company in difficulty. "We have an extremely competitive wholesale electricity market and this is a market that now leaves us with blood on the carpet," he said.
SNP shadow environment minister Bruce Crawford called for any Government bail-out of the company to be a prelude to "a structured phasing out" of nuclear power.
"British Energy finds itself on the brink of insolvency, proving beyond any doubt that nuclear power is not only dangerous but also uneconomic," he said. – *www.energycentral.com*

Kilometre-tall power tower approved
Plans for a one-kilometre tall "Solar Tower" that would provide clean energy for up to 200,000 homes have been approved by the Australian government. But some environmental campaigners are questioning the practical benefits of the scheme.
The 130 metre-wide tower would produce electricity using currents of air heated by the sun's rays. A vast greenhouse would surround the tower itself, seven kilometres across. Hot air inside the greenhouse would be effectively sucked up the tower through turbines at its base. Heat-storing material inside the greenhouse would continue to heat air during the night.
The massive structure would be visible from 80 kilometres away. Australian company EnviroMission plans to build it in the desert on the border between New South Wales and Victoria. Australia's federal industry minister put the £308m project into a fast-track planning process.
EnviroMission says the building would generate 760 Gigawatt-hours of energy per year.
Roger Higman, senior climate campaigner for Friends of the Earth, is concerned that construction costs could outweigh the potential benefits. "If they're planning to build a truly enormous tower they could use a lot of fossil fuels," Higman said. Higman adds that a conventional wind farm could produce a comparable amount of power without requiring so much construction work.
A smaller 200 metre tall prototype Solar Tower was built by a Spanish and German team in Spain in 1982. If the New South Wales state authority gives approval for the new tower, construction work could begin in 2003 and the structure could be completed by 2005. – *http://www.newscientist.com*

5. SA Energy Bills & conferences

Workshop on Energy Centres
"Institutional Structures and Capacity Development for Sustainable Energy Projects"
The aim of this workshop is to develop a realisable plan for implementing a national network of Energy Centres (EC). This follows the idea of the White Paper on Energy (December 1998) as well as the Draft White Papers on the Promotion of Renewable Energy and Clean Energy Development (as of 21 June 2002).
Energy Centres can have multi-fold tasks such as information dissemination, capacity building and awareness building, but also realising projects. They can be funded from public money (national and international) but also do commercially viable projects. The overall idea is to implement institutional structures that are appropriate to support both energy efficiency and renewable energy projects. Another idea is to close the missing link between policy and strategy, which helps to implement sustainable energy projects.
In a one-day seminar with stakeholders we intend to develop an outline that specifies the location, structure, and to discuss tasks as well as financial sources for such energy centres. An internet-based forum shall allow pre- and post-workshop discussions.
The workshop will build on the broad and long-lasting experience and expertise from Germany and in Mexico. We invite experts in implementing national, regional and local energy agencies in different contexts. They will help to identify critical issues and possible solutions to these problems. *Contact: Barbara Praetorius, Email: bpraetorius@diw.de*

Training programme for wind power technology in developing countries

The ÅF Group has been commissioned by the Swedish International Development Cooperation Agency (SIDA) to develop and lead a course for international participants interested in the small-scale production of wind power. Entitled "*The Management of Wind Power Development*", the course is aimed at delegates from developing countries, primarily from organisations working actively to promote sustainable energy supplies in rural areas, government authorities, established cooperatives, private entrepreneurs, networks, representatives from municipal and regional authorities and research-oriented institutions. The private sector, including commercial power companies and state-owned energy and development organisations, also forms part of the target group.
The main focus of the training programme will be small and medium-sized wind farms, taking special account of the prevailing conditions in many developing countries, where there is often a shortage of electricity and insufficient resources for transmitting and distributing energy supplies. The course will run over a period of five weeks in 2003 and will be held in Malmö, Stockholm and Visby. Two more courses are already planned for 2004 and 2005. The ÅF Group is developing this project in collaboration with Sycon International AB and the Gotland College of Higher Education in Sweden. *For further information: Project Leader, Bertil Ahlbeck +46(0)40-375000 or visit www.af.se*

Ashden Award for Sustainable Energy
The Ashden Trust is inviting submissions for the Ashden Awards for Sustainable Energy 2003. Four first prizes of up to £30,000 each will be awarded to outstanding sustainable energy projects (three for developing countries and one for the UK). The awards are for community-based renewable energy and full details of criteria and application forms can be found on the new website: www.ashdenawards.org. The deadline is November 29, 2002. Contact: Jane Shepherd, jane.shepherd@sfct.org.uk

Gas Industry Bill
The company iGas has been formed in terms of Government's Central Energy Fund. iGas represents the government component of the Gas industry. POMPCO, a company of Sasol and the South African and Mozambique governments are in the process of constructing a pipeline from the Mozambican gas fields of Temane and Pande to Gauteng, where it will link with an existing pipeline. The first gas is scheduled to be delivered to South Africa in 2004.
The South Africa/ Mozambican Gas Commission has been formed to facilitate movement of gas across the border. They have already met about three or four times.
The Gas Bill (48/2002) has been signed by the President. The Money Bill (associated with the Gas Bill) which has yet to be presented in Parliament, sets up finance for the Gas Regulator which has been established in terms of the Gas Bill. For more information: Tony Surridge at (012) 3179181. – *Contact Trust*

Energy Draft Bill
The Bill is at this stage still being drafted. Although the Department is one month behind with the drafting process they do have an internal draft. It is at this stage unclear whether the Bill will be released for public comment directly after being drafted or whether it will first be submitted to Cabinet. The Bill is scheduled to be released for public comment soon thereafter. The draft Bill aims to promote research and development within the energy industry. The draft Bill will cover all aspects of energy. Integrated energy and resource planning, the utilization of environmentally sound energy sources, energy use efficiency and data collection are some of the issues the DME is hoping to deal with in the draft Bill. For more information: Tony Surridge at (012) 3179181. – *Contact Trust*

Free Basic Electricity Supply
The pilot projects that will focus on development nodal areas and selected urban renewal areas are still being piloted. Experience gathered from these pilot projects will assist Government in the ultimate roll-out of free basic energy that will begin in 2002/2003. The Department has made a few recommendations to Cabinet, but these are not yet final and no decisions have been taken yet. The Department hopes that the final document will be submitted to Cabinet by the end of October. The objective of free basic services is to provide social relief to those who earn less than R800 per month per household. This will affect paraffin, electricity and solar home systems. Poor households that are currently receiving electricity will qualify for free basic electricity. A basic amount of 50kWh per household per month has been considered as a national standard.
Regarding rural households currently using solar energy, a limited operation and maintenance subsidy to a maximum of R40.00 per household will be made available. The end user will pay any amount above R40.00

per month. In order to make paraffin more affordable, Value Added Tax (VAT) has been removed. For more information contact Mookelsane at (012) 317 9524. – *Contact Trust*

Bio-Diesel Incentives
The report on Bio-fuels by the DACST have not been made public yet. The Department of Finance hopes to incorporate this report in the minutes. The entire process will take about two weeks.
There will be another meeting by industry players, which will focus on cost benefits analysis. For more information contact Erwin Obermeyer at 012 315 5783. – *Contact Trust*

Electricity Supply Industry Regulation Draft Bill
The Department has confirmed that they have finalised the Bill internally after receiving comments from other departments. The Bill has now been forwarded to the Minister for approval for publishing for public comments. The Department hopes the Bill will be released during the third quarter of 2002. For more information contact Mookelsane at (012) 317 9524. – *Contact Trust*

6. Questions & Answers

What are practical ways for individuals to contribute to progressive energy targets?
Potential savings (energy conservation) through solar water heating (SWH) in the residential sector alone, operated with electric back-up, could contribute over 7 000 GWh per year, by 2012. A target in this area should embrace commercial and industrial use e.g. a total of 22 000 square meters of SWH panels installed within 10 years – saving about 21 000 GWh per year.
Renewable energy sources converted to liquid fuels, such as bio-diesel and ethanol, could add another 7 800 GWh *per year*; within ten years.
Passive solar design, simply building more smartly, can add another 11 500 GWh each year.