

SUSTAINABLE ENERGY NEWS on EMAIL (SENSE) number 30

Welcome! SENSE is a service of the Sustainable Energy and Climate Change Project (SECCP) a project of Earthlife Africa Johannesburg.

SENSE is a monthly publication, edited by Claire Taylor. We welcome any feedback and submissions. Also let us know if you wish to be removed from this list, know someone else who should be receiving SENSE, or if you'd like to receive our separate Climate Change email newsletter, CCEN.

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1. SECCP News

Note from SENSE Editor

Welcome to the first edition of SENSE for 2005. It's being sent out in early February, as there really wasn't much to report on in the first weeks of January. However, snippets of news have started arriving in my inbox from last week as people return to work. Please remember though, that I'm always looking for news to include, particularly

South African focussed updates – so if you have anything you think would be good for SENSE, send it to me at claire@earthlife.org.za

As usual, this SENSE has a number of interesting articles, but one that I do want to draw your attention to is a report on Tunisia encouraging solar water heaters through the provision of interest free loans. Clearly, the Tunisian government is defying claims made by various people, including our own Minister of Minerals and Energy, that renewable energy technologies are something that Europe wants to impose on Africa, rather than what Africans want. Instead of taking advantage of Africa's abundant sunshine, as Tunisia is doing, our Minister seems intent on burning up our fossil fuel reserves as fast as we can flog below-cost electricity.

News from the SECCP office is that Nkosana Rakitla from the Daveyton Environmental Youth Council has joined us as an Admin Intern. It's great having Nkosana on board, and the office is already running more smoothly.

We have heard informally that the DME has assured companies interested in tendering for construction and operation of oil-fired open cycle gas turbines (OCGTs) to serve peak demand (as reported in SENSE 29), that a complete and approved EIA will be on the table, along with a power purchase agreement signed by Eskom, in time for finalisation of a deal in the first half of this year. Given our finite capacity, and a feeling that on this issue government is immovable, we will not be engaging in the EIA process for this new generating capacity. . The two plants, using highly inefficient technology, should at least have a combined power generating capacity of 1000MW, with an expected investment requirement of R6 billion (US\$980 million).

One area that is getting our attention is building capacity on sustainable energy issues, as we are currently designing a capacity building workshop programme for community based activists. A first brainstorming workshop was held last week, which was well attended and which helped to identify the knowledge, the skills and the values and attitudes we would want as outcomes to the programme. I will be reporting more on the programme in future editions of SENSE, but if you'd like to be involved in designing the programme, please let me know.

Obituary: Martin Grosskopf

It is with great sadness that we report the passing of Martin Grosskopf, who was killed in the course of a robbery at his home on 7 January. In addition to being a wonderful friend, he was a highly valued member of Earthlife Africa and the SECCP, as well as an individual member of SACAN and a key member of the Board of the GreenHouse Project - all in a purely voluntary capacity.

Martin's friends and colleagues are holding a commemorative event on Saturday 12 February, from 3 p.m. at the GreenHouse Project in Johannesburg. The intention is to celebrate Martin's life, particularly his dedication to sustainable living and human development and his numerous voluntary activities supporting civil society work for a better world for all. For more information about the event or to RSVP email France@ghouse.org.za

Beat the Heat! Beat the Bush! Demo to mark entry of Kyoto Protocol

Elin Lorimer, SECCP

The South African Climate Action Network (SACAN) is organising a demonstration on 16th February outside the US Consulate in Johannesburg to call on the United States to

stop trying to block multilateral efforts on climate change and to ratify the Kyoto Protocol. This event is part of a global day of celebration, marking the entry into force of the Kyoto Protocol and at the same time calling for further action to prevent dangerous climate change.

The Kyoto Protocol will finally enter into force due to Russia's signing of the agreement last November, fulfilling the requirement that it be ratified by sufficient countries to represent at least 55% of greenhouse gas emissions from industrialised countries¹. This follows years of delay and concerns that the agreement would fail following the withdrawal of the US shortly after Bush's election in 2001. However, now that the multilateral approach has triumphed in the face of concerted corporate opposition, it is time for those most responsible for escalating climate change to join the global efforts and take measurable action to reduce their greenhouse gas emissions.

JOIN US!

When? 12h30 – 13h30, 16 February 2005

Where? Outside the US Consulate in Johannesburg: No. 1 River Street, Killarney

What can you do? Hold placards and banners as part of a picket outside the US Consulate and hand over a letter of petition to the Consular General.

For more information and to confirm your participation contact:
Elin Lorimer: (011) 339 3662 or 084 503 4300

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2. SA's sustainable energy progress

Victory for Earthlife Africa on PBMR – “red light for nuclear reactor”

Earthlife Africa Cape Town

The Cape Town High Court last week decided in favor of Earthlife Africa and set aside the approval for the Environmental Impact Assessment (EIA) of the Pebble-Bed Modular Reactor (PBMR). Earthlife Africa and other interested parties will now have their chance to challenge Eskom's version of the truth.

Eskom, the second respondent in this case wishes to construct a demonstration model 110 Mega Watt class PBMR at the site of the only existing nuclear plant in South Africa near Cape Town. On 25 June 2003, the Director General of Environmental Affairs and Tourism, Dr Olver, awarded a requisite authorization in terms of section 22 (3) of the Environmental Conservation Act 73 of 1989 (ECA).

Earthlife Africa had argued that the Director General was obliged to afford them a fair hearing before taking the decision to grant the authorisation and failed to, that he failed to properly address the problems posed by nuclear waste and he abdicated responsibility to properly consider safety issues by deferring to the national nuclear regulator. Furthermore, the group had argued that the Environmental Impact Report (EIR) on which Olver made his decision contained a substantial number of documents that were not previously made available to the public, with ESKOM maintaining that they were commercially confidential.

¹ Countries listed in Annex 1 of the UN Framework Convention on Climate Change, and which have emissions caps specified in the Protocol, which is the legal instrument of the Convention.

Judge Ben Griesel handed down a 40 page judgement document in which he judged in favor of Earthlife Africa Cape Town, saying that "the DG should allow Earthlife Africa and other interested parties an opportunity of addressing further written submissions to him". He also noted that the DG should consider those submissions before making a decision on the mini-reactor.

Earthlife is "very happy" with the Judgment said Liz McDaid the spokesperson of Earthlife Africa Cape Town. "We believe that the PBMR will now be exposed for what it is - a white elephant where Eskom planned to use the people of Cape Town as guinea pigs to test a dubious technology. With so many pressing social needs in our country, Earthlife believes that once Eskom's information is critically reviewed, it will be obvious to Government that R15bn would be better spend on energy efficiency and implementing alternative energy options."

As a next step, it will be vitally important that this time around, all relevant information is made available to ELA and other interested parties to enable them to comment meaningfully. This should include the feasibility report produced by an international panel of experts. This report has been kept secret and Earthlife Africa is now calling on Eskom and Government to release the report. "Eskom is owned by the state, the PBMR is funded with tax payers money and we believe that the public have a right to know."

Editor: As congratulations pour in from around the world in response to the news, we need to note that the Cape High Court's ruling merely provides for another round of comment on the final Environmental Impact Report. We recognise that powerful elements in our government are committed to the PBMR regardless of the cost. This is verified by Eskom's spokesperson Fani Zulu, who said immediately after the ruling "Our view is that the judgement can only delay the project, but will certainly not have the effect of bringing the PBMR project to a halt. We still think there is a very strong case in favour of proceeding with the PBMR project." (Reported by SAPA, 26 January 2005). He would – he is paid to do so.

2nd invitation to provide non-grid electricity and energy services concession *Department of Minerals and Energy www.dme.gov.za*

The DME recently advertised a second invitation to pre-qualify for the provision of non-grid electricity and energy services concession in the North West Province and the Eastern Cape.

The 2nd invitation is due to an increase in the finance available from the German government through KfW to the South African government, making a total of approximately € 20.0 m available to subsidise the investment costs of photovoltaic equipment.

The overall objective of the project is the "improvement of living conditions by way of environmentally friendly and cost-efficient energy supply to poorer segments of the South African population in the project area(s). The objective shall be achieved through the installation, operation and maintenance of solar homes systems (SHS) for basic lighting and power and modern thermal fuels (MTF) for thermal requirements in homes, and by the installation of photovoltaic (PV) systems in schools and clinics within the service areas, by a non-grid energy service provider."

Health resort taps into the sun

'What's Hot' Solar Heat newsletter, December 2004 www.solarheat.co.za

In January 2004 **solar heat** installed a hot water system at the Alpine Heath Resort in the Drakensberg and has been monitoring its performance over the last 12 months. Peak demand has been shifted to off peak periods and the kWh consumption reduced by 55%. After 1 year of monitoring, the projected IRR (internal rate of return) of 27% is going to be achievable. In addition, an annual reduction of 43.73 tons of greenhouse gas emission has already been achieved.

Looking towards an African Cities Energy Network

A report on the Sustainable Energy for Environment and Development (SEED) Network Meeting, November 2004

Megan Anderson, Sustainable Energy Africa

Sustainable Energy Africa (SEA) brought together the SEED (sustainable Energy for Environment and Development) partners for a four-day Network Meeting in Boksburg, in November last year. Participating organizations included the City of Cape Town, Ekurhuleni Metro, Tshwane, The Green House Project, Development Action Group, SALGA, Group for Environmental Monitoring and the Department of Housing.

The programme provided a platform for sharing amongst SEED energy practitioners. Establishing key partnerships, both internally and externally, was identified as critical in promoting new, integrated energy planning approaches. Finding attractive “hooks” to get buy-in from all sectors and tackling people’s barriers to change were also identified as challenges to be met in 2005.

Inputs were made by national departments on important strategies, policies and legislation affecting integrated energy planning for cities. The importance of SEED links being present at Network meetings was made clear in the outcomes by Bea Drost of Housing. Bea made a commitment to revive the Environmentally Sound Sustainable Housing Forum, which has fallen into disuse and will also look to incorporating the DME Energy Strategy into the Department of Housing.

An input by Geoff Stiles of CBLA looking at drawing business and industry into the city energy planning process identified that it is invaluable for municipalities to lead by example. Municipalities are also best placed to motivate for voluntary action through, for example, the provision of information, conferences, or, cleaner production centre development. This can lead into encouraging and facilitating local energy efficiency business charters.

A number of SEED advisors present at the meeting have been with the SEED programme since its inception in 1998. The meeting formed a natural “graduation” for them as a couple have, or will be, moving on into other jobs (where the skills and approaches developed through the SEED programme will continue to be well utilized). The meeting used this to focus thoughts on exploring the network into the future. The need for an expanded information network was raised and the concept of an African Cities Energy Network was explored.

An African network would ensure that the lessons, models and insights from integrated energy planning within South Africa could be extended into rapidly urbanizing Sub-Saharan Africa. This network would provide technical information and be supported by opportunities for capacity building and training of relevant officials and development workers across the continent – including our existing SEED Advisors and those moving into new areas of work, but wishing to remain supported and informed in the area of

integrated, sustainable energy approaches. Sustainable Energy Africa will be taking this concept forward as we move in to 2005.

Meeting South Africa's RE Targets

Thomas Alfstad, Energy Research Centre in reCOMMEND 2, Volume 1, December 2004

While the South African government has a renewable energy target of 10 Twh by 2013, which includes at least 4 Twh from the electricity sector, to date no detailed plan has been announced for how this target will be met.

In response, ERC undertook a study to evaluate the options and costs available to meet various renewable energy targets for the electricity sector. To do this, ERC compared the costs of a non-renewable reference scenario with the costs of scenarios with renewable targets.

According to Thomas Alfstad from the ERC, only costs relating to electricity generation were included. These costs were broken down into investment, fixed operation and maintenance costs; variable operation and maintenance costs and fuel costs.

Findings

- The results show that to reach the minimum requirement of 4 Twh, an additional R10bn will have to be spent over the next 9 years – an increase of 8% over the reference case. Clearly, achieving SA's renewable targets will involve significant economic costs. However, when calculating these costs, the researchers did not quantify the positive benefits associated with reductions in greenhouse gas emissions and other pollutants that would result from displacing electricity generated from coal-fired power stations with renewable electricity resources.
- Wind generation has the largest potential, but isn't cheap.
- Co-generation from biomass is competitive.
- The costs of hydro installations vary widely, but there's substantial potential to generate electricity at reasonably low cost.
- While solar thermal generation is costly, International Energy Agency predictions of price reductions mean that this technology could become highly competitive the closer 2013 draws.

According to Alfstad, "this study highlights some of the difficulties in introducing renewables in a country where fossil fuels are available in huge quantities and at very low cost. Indeed, the electricity produced in South Africa is among the cheapest in the world. In part, the low costs reflect the fact that significant environmental costs have not been included. Full accounting for the greenhouse gas and air pollution impacts of coal will undoubtedly make renewables look more attractive."

For more information about the study, contact Thomas Alfstad:

talfstad@ebe.uct.ac.za

SECCP's Richard Worthington comments: "It is disconcerting to hear ERC sounding increasingly like apologists of conventional energy and taking up the approach of government energy planning to date, of ignoring externalized costs in the development of scenarios. If ERC studies are to have value to society as a

whole, any scenarios developed should take into account the full costs and benefits to all of society.”

Jatropha as an alternate energy resource

*Brett Dawson, Director of Renewable Energy, Department of Minerals and Energy:
Brett.Dawson@dme.gov.za*

Responding to an e-mail debate on the commercial potential of biomass as a sustainable energy source, particularly using Jatropha to produce biodiesel, Brett Dawson, the new Director of Renewable Energy at the Department of Minerals and Energy reports that, “there is a Joint Implementation Committee (JIC) for the commercialisation of biodiesel which meets once a month. Reporting to this committee is Work Group 2, which focuses on “Alternative oil-source feedstocks.” *J. Curcas (Jatropha)* is on the list of candidates being investigated. To date no conclusions have been made. There are three representatives from the Department of Agriculture, one rep from ARC (Agricultural Research Council) and one rep from Grain SA. If readers feel that there are other stakeholders who can make a contribution to the evaluation of *J. Curcas* as a source please let me (Brett) have their names and contact details and I will pass these on to the leader of this working group, who can then discuss their contributions.”

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3. SA’s Unsustainable Energy

Promise of free electricity backfires as costs spiral

Political Correspondent, Business Day 19 January 2004

One of government's flagship poverty-relief measures is in crisis, sounding warning bells ahead of local government elections later this year.

Government's policy of providing free basic electricity for the poor has been lauded as one of the successes of the fight against poverty, but it has now been shown to be poorly run and failing dismally to reach those it is intended for.

Ompi Aphone, chief director of electricity in the Minerals and Energy Department, said that only 12% of the poor had received the free electricity benefit in the 18 months since its launch, while expenditure on the initiative had ballooned to about R750m; 2,4 times more than budgeted. “The issue (of nondelivery of free basic electricity) will explode very soon as we go into the (local government) elections”, Aphone warned in a briefing to Parliament's minerals and energy committee.

“The programme is not reaching its objectives,” he said, noting that the constitutional autonomy of local government was creating difficulties, as national government could not force the implementation of its policies on other spheres of government.

Only 322 000 of Eskom's 1,9-million poor, qualifying customers were receiving the benefit, while municipalities which had only 1,3 million poor to cater for were distributing it to 3-million consumers. This meant, said Aphone, that 1,7-million consumers or 88% of all municipal customers, most of whom who did not qualify for it were getting free basic electricity.

Implementation of the programme started 18 months ago, with R300m allocated to municipalities in the form of a conditional grant from national government for the first financial year, and R500m this year. In the first year, municipalities spent R710m on the programme, dipping into their other sources of income. Last year Eskom, which is responsible for rural areas and the bulk of the poor, had spent only R46m.

Aphane said the main problem was poor targeting and big leakages, with many relatively well-off households receiving it, while the majority of the poor did not. Many municipalities also did not have the capacity to implement it. Of SA's 284 municipalities, 57 had not signed funding and service agreements with Eskom for it to provide free basic electricity. These agreements were necessary, Aphane said, because Eskom was not constitutionally mandated to provide electricity in municipal areas.

Disputes between municipalities and Eskom had also created problems. Two municipalities had refused to implement the free basic electricity programme on the grounds that they disagreed with it.

Richard Worthington, SECCP's Project Co-ordinator wrote (published in Business Day, 24 January 2005): "Acknowledgement of shortcomings of the free basic electricity programme should prompt a major re-think and amendment of the draft Electricity Pricing Policy to provide for the possibility of an escalating tariff. It is disgraceful that Eskom, while enjoying huge profits, only provides free power to 12% of their customers who qualify.

The "...lack of beneficiary lists and a technical basis for identifying the poor" was well known from the outset. This led some distributors to provide the first 50 units (kiloWatthours) free to all households, with the perverse result that members of smaller, more affluent households derived greater benefit than the poor. This led to calls by the civil society Energy Caucus for allocation on a per person, rather than per household basis, as well as a larger allocation.

We have long been advocating a 'stepped block tariff' as a more equitable and cost-effective approach to improving access for the poor. If all domestic customers receive their first monthly portion of electricity free, the second at or below cost, with additional usage charged at an escalating rate, the poor can limit costs while a high mark-up on luxury use by the affluent could cover the costs of free provisions.

Allocation could still move to a per person basis, either by getting accurate household information or through a card system. Perhaps pre-paid meters would be more acceptable if individuals could thereby access free and subsidised allowances and were assured of never paying higher tariffs than the affluent.

The high mark-up on luxury use would also encourage energy efficiency, while any resulting drop in sales would be justified by reduced need for new generation capacity. As the Pricing Policy is under discussion, make it provide for a system that will benefit the poor, and possibly those practicing efficiency, while reigning in unnecessary costs."

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4. SA's General Energy News

Johannesburg needs R800m to power up

Political Correspondent, Business Day 19 January 2005

Government is considering a once-off major capital injection into Johannesburg's dilapidated electricity infrastructure, which has been plagued by escalating blackouts.

The city experienced a series of outages over the festive season, affecting businesses mainly restaurants negatively.

The minerals and energy department's chief director of electricity Ompi Aphane said talks between his department, national treasury and the provincial and local government department were taking place to deal with the issue. He said he hoped that an initiative would be launched this year, but cautioned that there were many competing claims on the national budget and that the project would have to be evaluated alongside other priorities.

Aphane said after a briefing to Parliament's minerals and energy affairs committee that a minimum, once-off sum of R800m was needed to invest in electricity infrastructure in Johannesburg to stop the blackouts. Power failures in the country's industrial heartland were a source of great concern to government, he said, because of their economic effect and threat to investment. A department study found that Johannesburg would need R2bn over five years as a "first prize" but a minimum R800m once-off investment would get the electricity network to the right level.

To deal with the problem in all of the big metros would cost R3 to R4bn, Aphane said. Johannesburg's problem was the most serious as its network was very old and supplied major industries.

Aphane said the blackouts in Gauteng were caused by a lack of investment in electricity networks, and not by demand-supply disparities of the kind that lay behind ongoing electricity failures experienced in California after it privatised its electricity networks. A percentage of the electricity tariff paid by consumers was meant to be used for maintenance, but municipalities used this money for their other services instead, he said. The municipalities claimed that the money allocated to them by national government each year from the national budget was not enough for them to perform their functions.

Aphane said that national government could not force local governments to invest in their infrastructure, because they were constitutionally independent. Comments made repeatedly by Aphane during his briefing suggested the constitutionally entrenched independence of local government was seen by the minerals and energy department as an obstacle to the effective implementation of government policies in many areas.

City Power to spend R300m to end cuts

Khulu Phasiwe Business Day, 12 January 2005

City Power has said that it will spend about R300m this year to upgrade Johannesburg's ageing and erratic electricity distribution network.

City Power's acting CEO, Silus Zimu, said the company would spend up to R300m to upgrade its network this year. He said an additional R100m would be spent on a maintenance programme "to ensure that we have a sustainable network in future."

City Power said internal audits of the electricity network had found that more than 70% of the infrastructure was between 20 and 40 years old, with 7% of it older than 40

years. The audit also found that the networks in the central and southern regions were in the worst condition, with almost 80% of the overhead network requiring replacement. Upgrades were impossible on equipment that had been maintained beyond its life span.

City Power said R460m was spent last year on infrastructure maintenance and refurbishment "in the problem areas." These included the suburbs of North Riding in Randburg and Weltevreden Park in Roodepoort. More than R500m had been spent in the past two years to upgrade power networks in Alexandra, Lenasia, Randburg and Midrand.

City Power said its immediate focus would be on improving its response time, removing illegal connections, eliminating faults in consumers' installations and improving communication with its customers.

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5. SA Energy Policy

Integrated Energy Planning: progress

Claire Taylor

SECCP has been in consultation with Jeff Subramoney from the Department of Minerals and Energy to get an update on Integrated Energy Planning 2. As reported in previous editions of SENSE, the DME has committed to undertaking a second round of Integrated Energy Planning – the White Paper on Energy Policy requires a new round at least once every five years. We are attempting to ensure that the shortcomings of the last round (many acknowledged in section 8) are addressed this time round and that externalised cost and social impacts such as employment are factored into planning. Jeff asked SECCP for a list of questions, which were sent to him last week. Watch this space for government's response on progress so far and details of the process.

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6. Sustainable Energy News from Around the World

Africa

ENERGIA African Regional Network Co-ordinator

ENERGIA News, Volume 7, Issue 1, December 2004

Fatma Denton from ENDA Tiers Monde in Senegal has been appointed as ENERGIA African Regional Network Co-ordinator. To contact Fatma e-mail Enda Tiers at energy2@enda.sn

Lesotho to pilot solar PV electrification

Business Day, 21 December 2004

The Government of Lesotho recently advertised for expressions of interest to install and service solar PV. The so-called Linakaneng project aims at testing the “provision of electricity by non-grid service providers” using solar PV systems in order to make recommendations on “how solar PV can be used for Lesotho.”

Tunisia encourages solar water heaters

Renewable energy world, November-December 2004, volume 7, number 6

Tunisia’s national renewable energy agency (ANER) has announced a series of new measures designed to encourage the use of solar water heaters. Measures include interest free loans to buy solar heaters, with repayments collected by the national utility.

The rest of the world

Australia proceeding on \$75 million ‘Solar Cities’ initiative

Refocus Weekly, 15 December 2004

The Australian Greenhouse Office is concluding a consultation on the Aus\$75.3 million initiative, ‘Solar Cities.’

Solar Cities will showcase a new energy scenario “where the uptake of solar power and energy efficiency measures by households and business, and innovative approaches to energy markets that deliver more effective signals to energy users can contribute to Australia's sustainable energy future,” explained the Energy White Paper, ‘Securing Australia's Energy Future,’ when it was released in June 2004.

“Throughout Australia, there is a rising demand for electricity, particularly at peak times where it is being driven largely by demand for air-conditioning,” says environment minister Ian Campbell. “Solar Cities is a long-term strategy to find optimal ways for businesses and communities to work together to give consumers more informed choices about the energy they use, and where all Australians have opportunities to implement change in the way they use energy.”

He has released the ‘Solar Cities Statement of Challenges & Opportunities’ to set the scope of the program and provide draft guidelines for comment by stakeholders as a trial in Adelaide and at least three other grid-connected urban sites around Australia are selected through a competitive process. The document provides information about the program and allows interested parties to seek potential consortia partners, and serves as a basis for public consultation.

“The aim is to demonstrate the economic and environmental costs and benefits of the mass installation of solar energy technology, energy efficient measures and smart meters on electricity supply and demand profiles and infrastructure needs,” explains the background documentation.

The Solar Cities program will run until 2013, and the trials “will demonstrate ‘real world’ options for clean and reliable energy supply and reduced demand,” says Campbell. The initiative, which includes solar thermal and photovoltaic technologies, “forms part of Australia’s long-term greenhouse response in the energy sector to move towards integrated use of low-emission supply technologies, distributed generation, significantly enhanced energy efficiency and markets that deliver responsive and effective wholesale price signals

The trials will enable collection of data to assess the impact that a critical mass of solar technologies measures on electricity supply and demand profiles (in particular peak loads), investment in electricity network augmentation, GHG emissions intensity and the physical operation of the electricity system in the region.

Electricity demand has doubled in the past two decades, and power generation is the single largest source of GHG emissions in Australia. The federal government estimates that net electricity demand will rise by 50% by 2020 and summer peak load of 2,600 MW is almost double the average demand of 1,500 MW, while demand for electricity on a hot summer day can exceed demand on a mild summer day by 1,000 MW.

“The Australian government recognizes that Australia has developed cutting-edge solar technologies, particularly in the photovoltaics sector, and wishes to facilitate the expansion of the domestic market through increasing distributed electricity generation as a contribution to managing Australia’s growing electricity demand and GHG emissions,” the document explains. “Export opportunities also exist, as demand for photovoltaic and other solar technologies in the Asia-Pacific region is potentially large.”

Although solar PV can mitigate high spot electricity prices during summer peak periods, and PV systems can reduce the exposure of retailers to high prices, “the market generally reimburses the owners of PV systems for only the flat rate retail price for any surplus electricity they export back to the grid (which can be as low as 5-10% of the peak price),” it explains. The relatively small size of the Australian market also reduces the cost-competitiveness of solar technologies compared with centralized generation.

China suspends 26 power projects

BBC News, <http://news.bbc.co.uk/go/pr/fr/-/1/hi/business/4186561.stm> 19 January 2005

China has ordered a halt to construction work on 26 big power stations, including two at the Three Gorges Dam, on environmental grounds. The move is a surprising one because China is struggling to increase energy supplies for its booming economy. Last year 24 provinces suffered black outs.

The State Environmental Protection Agency (SEPA) said the 26 projects had failed to do proper environmental assessments. Topping the list was a controversial dam on the scenic upper Yangtze River. "Construction of these projects has started without approval of the assessment of their environmental impact... they are typical illegal projects of construction first, approval next," said SEPA vice-director Pan Yue, in a statement on the agency's website.

Some of the projects may be allowed to start work again with the proper permits, but others would be cancelled, he said.

Altogether, the agency ordered 30 projects halted. Other projects included a petrochemicals plant and a port in Fujian. The bulk of the list was made up of new power plants, with some extensions to existing ones.

The stoppages would appear to be another step in the central government's battle to control projects licensed by local officials. However, previous crackdowns have tended to focus on projects for which the government argued there was overcapacity, such as steel and cement.

The government has encouraged construction of new electricity generating capacity to solve chronic energy shortages which forced many factories onto part-time working last year. In 2004, China increased its generating capacity by 12.6% to 440,700 megawatts (MW).

The biggest single project to be halted was the Xiluodi Dam project, designed to produce 12,600 MW of electricity. It is being built on the Jinshajiang - or 'river of golden sand' as the upper reaches of the Yangtze are known. Second and third on the agency's list were two power stations being built at the \$22bn Three Gorges Dam project on the central Yangtze - an underground 4,200 MW power plant and a 100 MW plant.

The Three Gorges Dam has proved controversial in China - where more than half a million people have been relocated to make way for it - and abroad. It has drawn criticism from environmental groups and overseas human rights activists. The damming of the Upper Yangtze has also begun to attract criticism from environmentalists in China.

In April 2004, central government officials ordered a halt to work on the nearby Nu River, which is part of a United Nations world heritage site, the Three Parallel Rivers site which covers the Yangtze, Mekong and Nu (also known as the Salween), according to the UK-published China Review. That move reportedly followed a protest from the Thai government about the downstream impact of the dams, and a critical documentary made by Chinese journalists.

Decentralized energy generation cheaper

Aurelie Morand, World Alliance for Decentralized Energy and Jurgen Maier, German NGO Forum

As one of the fastest growing economies in the world, China has maintained an annual growth rate of over 7% in the past decade whilst its electricity demand has also experienced an unprecedented growth of 10% per year in the same period.

The World Alliance for Decentralized energy Systems (WADE) has produced a study (funded by the UK government) on the costs of various options to expand the Chinese electricity system. The result is that it would be more economical to pursue a strategy of decentralized generation rather than favour centralized large power plants.

While this analysis applies not necessarily to renewable energy alone, it clearly is a good reason to emphasize renewable energies since they are, apart from large hydro, decentralized.

The report can be downloaded at

http://www.localpower.org/pdf/WADE%20Model_China_report.pdf

Chinese Company Plans Asia's Biggest Wind Farm, Report Says

Associated Press, 13 January 2005

A private company plans to build Asia's biggest wind farm in the sea south of Shanghai, setting up 100 turbines in shallow coastal waters, an industry group said Thursday. The announcement of the 2 billion yuan (US\$250 million; euro190.27 million) project comes as China struggles with severe electricity shortages while also trying to reduce its heavy reliance on dirty coal-fired power plants.

Zhejiang Green Power Investment Co. is to build the project along the coast of Daishan County in Zhejiang, the province south of Shanghai, the China Electricity Council said. It didn't say when construction was to begin.

The wind farm is to have a generating capacity of 200 megawatts, according to the council, the main trade group for China's power industry.

At the end of 2004, China's total wind power capacity was 730 megawatts.

Wind farm takes off at former nuke base

Published on the Web by Independent Online, 14 January 2005

Paldiski, Estonia - On the site where border guards used to keep watch on the western outpost of the Soviet Union, Baltic European Union newcomer Estonia is erecting a wind farm to generate clean electricity.

The wind-swept Pakri peninsula, which juts into the Baltic Sea 60km west of the capital Tallinn, once hosted a training centre for Soviet border guards. The nearby town of Paldiski was a key Soviet nuclear submarine training ground. Today, sleek silver arms of the state-of-art wind power turbines dot the site which was off-limits to civilians throughout the five decades of Soviet occupation from 1940 to 1991. The first three windmills of the Pakri Wind Farm have just been put into operation, with five others to follow before the end of the month.

When the farm is fully up and running, it is expected to supply one percent of Estonia's energy needs, and about 10 000 Estonian households are expected to get electricity from the farm.

"Paldiski has been associated with the Soviet border guards and military pollution," said Hannu Lamp, managing director of the Tuulepargid company which is developing the wind farm. "From now on, it will have a new side to it, as a clean energy place." Tuulepargid is the Estonian subsidiary of Danish-based Global Green Energy.

The streamlined wind turbines with a hub height of 80 metres and rotor diameter of 90 metres, sit on top of the ragged limestone cliffs that soar from the sea. In one corner of the site, some ruins of the Soviet border guard barracks have been preserved as a tourist attraction.

The town of Paldiski, originally established as a naval stronghold by Peter the Great in the early 18th century, is pleased that the wind farm is taking shape in the wasteland between the town and the breathtakingly beautiful tip of the peninsula. "We are very positive about the wind farm," says Regina Ress, spokeswoman for the town. "It's the complete opposite to what we had in the Soviet time: green energy versus the nuclear submarine training centre and other military installations."

With an expected annual production of 56 GWh (GigaWatt hours), the Pakri wind farm will meet about one per cent of Estonia's net electricity consumption, and thus contribute to achieving Estonia's target of providing 5,1 percent of its electricity needs from renewable sources by 2010.

The total investment cost of the Pakri project is 24 million euros.

NGOs claim win as World Bank extends rules review

Emad Mekay, IPS –Terranova Europe, Civicus, 6 January 2005

Groups fighting for a more equitable global economic system are claiming victory over the World Bank after the international public lender said it would extend the deadline for consultations on some of its lending rules and standards and release more information to the public.

Friends of the Earth (FOE), which was spearheading a series of boycotts of the World Bank consultation process, said boycotts by non-governmental organisations (NGOs) forced the institution to extend the process, originally due to end this month, till the end of April 2005.

The consultations are about the 'performance standards' of the bank's private sector arm, the International Finance Corporation (IFC), the rules that borrowers and other companies benefiting from IFC funds must follow in completing development projects.

A World Bank official, speaking on condition of anonymity, confirmed the extension but denied that the IFC was changing plans because of pressure from civil society groups. Instead, the official said, the extension is to give clients and stakeholders more time to look at so-called 'guidance notes' interpretive texts that accompany the standards and rules.

According to the new schedule the Washington-based IFC will release the notes and a 'Draft of the Policy on Social and Environmental Sustainability and Performance Standards' on January 31, 2005. Public consultations on them will end April 29, according to the bank.

While the World Bank is the world's largest public-sector lender to developing nations, the IFC lends to companies whose projects are supposed to contribute to that development.

The standards and 'safeguard policies' are designed to ensure that the projects the IFC supports do not harm the environment or local communities. They cover issues including human and labour rights, resettlement, biodiversity protection and cultural heritage. The guidelines are particularly important because they set standards for other development banks as well as commercial banks and export credit agencies that lend to developing nations. This could involve billions of dollars in investments in developing nations every year.

The IFC has loaned 16.8 billion dollars worldwide since 2003. From its founding in 1956 through 2003, it has lent around 59 billion dollars to 2,990 companies that worked in 140 developing countries.

Its parent, the World Bank, an institution dominated by the group of eight most industrialised countries (the G8) is often accused of working on behalf of the interests of western-based corporations and local elites at the expense of the poor, the environment and social norms in developing nations.

The bank lent 20 billion dollars to developing nations in 2004 alone, giving it great sway over the economic, social and environmental policies of those nations, many of which, say activists, are not accountable to their own people.

Gender and energy training materials

ENERGIA News, Volume 7, Issue 1, December 2004

UNDP and ENERGIA have developed a gender and energy toolkit and resource guide, which aims at assisting practioners and planners to engender energy projects and incorporate gender and energy aspects into overall development planning.

Copies of the toolkit can be downloaded from
<http://www.undp.org/energy/genenergykit/index.html>

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7. Events

South Africa

Poverty Reduction Through Better Regulation

21-23 Feb

Conference to explore how better regulation can improve water and electricity access
Rosebank, Johannesburg, South Africa

Deadline for nominations to attend 14 January 2004

For more information about the nominations process to attend, contact Bryan Ashe,
Earthlife Africa-eThekweni: bryan@earthlife.org.za

Africa

Solar '05: 8th International Solar Energy and Applied Photochemistry Conference

20-26 February

Luxor, Egypt

Contact: Dr Sabry Abdel-Mottaleb

Tel: +202 634 7683

Fax: +202 484 5941

E-mail: solar05@photoenergy.org

Website: www.photoenergy.org

African Development Bank FINESSE Africa program regional consultative workshop

23-25 Feb

Tunisia, Tunis

Contact: Alois Mhlanga

Tel. (216) 71 10 3729

Email: a.mhlanga@afdb.org

Website: www.afdb.org

Rest of the World

RIO5-LAREF 2005: Latin American RE fair

15-20 February

Rio de Janeiro, Brazil

Tel: +55 21 22 335 184

Fax: +55 21 25 182 220

E-mail: info@rio5.com

Website: www.rio5.com

Genera 05: Energy and Environment International Trade Fair

23-25 February

Madrid, Spain

Tel: +34 91 722 3000

Fax: +34 91 722 5788

E-mail: genera@ifema.es

Website: www.genera.ifema.es

Asia Power 2005

1-3 March

Singapore, Singapore

Tel: 65 6322 2734.

E-mail: sylwin.ang@terrapinn.com.

Website: <http://www.terrapinn.com/2005/ap%5FSG/index.stm>

Power Gen Renewable Energy Conference: Moving Into the Mainstream

1-3 March

Las Vegas, Nevada, U.S.A.

Organized by: POWER-GEN Renewable Energy

Tel: +1 918 832 9245

Fax: +1 713 963 6280

E-mail: pgreconference@pennwell.com.

Website: www.power-gengreen.com

International Conference & Exposition on Renewable Energy

12-15 March

Kasturchand Park, Nagpur, India

Organized by: The Confederation of Indian Industry (CII) and the Ministry of Non Conventional Energy Sources (MNES)

E-mail: t.pramila@ciionline.org

ENEX – New Energy 2005: International Fair and Congress for RE and EE Construction and Rehabilitation

16-18 March

Kielce, Poland

Tel: +49 71 213 0160

E-mail: redaction@energie-server.de

Website: www.enex-expo.com