

SUSTAINABLE ENERGY NEWS on EMAIL (SENSE) number 26

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

The SECCP office is abuzz with activity, as we plan various meetings, including a meeting of the Southern African Regional Climate Action Network (SARCAN) and a meeting of energy-related stakeholders (including members of the Energy Caucus) to debate whether the commitments made at the World Summit on Sustainable Development (WSSD) two years ago have been reached. This debate was motivated by the Department of Environmental Affairs and Tourism plans to hold a WSSD+2 anniversary event from 1-4 September at the Sandton Convention Centre. A critical question to be debated is whether there is anything to celebrate? Find out in the next edition of SENSE, at the end of September.

Remember too that we're always looking for news and views on energy issues to include in SENSE. So, if you have anything you want to share please send it to me at: Claire@earthlife.org.za

Sustainable Energy Briefings launched

The first of a series of Sustainable Energy Briefings, aimed at lobbying and empowering readers has been developed and sent to various government officials, including Ministers, Deputy Ministers, MPs, MECs and Director Generals.

Sustainable Energy Briefing 1 focuses on the Electricity Pricing Policy that is currently being developed by the DME (Department of Minerals and Energy). It noted that while the draft policy document claims that developing an electricity pricing policy suitable for South Africa entails “striking a balance between affordable electricity prices to households and low-cost electricity for industrial sector,” the policy fails to do this. Instead it prioritises low-cost electricity for industry, thereby failing to contribute to social and environmental equity – two critical objectives underpinning it.

The Briefing then notes that currently, electricity pricing favours big electricity consumers, like industry. The more electricity you use, the more you benefit. This is because the price paid for electricity includes less than half of all the costs incurred in producing it. Externalised costs that are not integrated in the sales price include public health costs for pollution-related illness and environmental damage such as acid rain and climate change.

Unlike big electricity users, smaller electricity users, especially the poor, don't benefit from the externalisation of electricity prices because they don't use enough electricity.

The briefing then argues that the draft electricity pricing policy under review fails to change this practice, and still favours big electricity consumers.

This has two major consequences:

1. It makes big electricity consumers less likely to use electricity efficiently. If electricity is so cheap, why should industry introduce measures to become more efficient?
2. Poor electricity users cannot pay for their electricity. This completely undercuts the Department of Minerals and Energy National Electrification Programme, under which a total of almost 3 million homes have been electrified since 1991.ⁱ Yet this push to expand access to electricity has been undermined because it's not affordable. This in turn has led to increasing debt, as well as cut-offs. The findings of a 2002 survey of households in Sowetoⁱⁱ clearly illustrate the reality of this:
 - 89% (178) of the 200 households surveyed had some level of electricity debt.
 - Due to this, 61% (122) of households had had their electricity cut off within the past 12 months of the survey.

In order to strengthen the Electricity Pricing Policy, SECCP recommended that two changes be made:

First, that a Stepped Block Tariff be introduced, where the initial block of electricity is charged at a lower rate, becoming more expensive the more that is used – as shown in the diagram below:

Proposed stepped block tariff for residential electricity use

Note: A different fee structure would be developed for business, with special rates for SMMEs

Block 4 500 - 1000 kilowatt hours 40c per kW/h

		Block 3 201 - 500 kilowatt hours 35c per kW/h	
	Block 2 51 – 200 kilowatt hours 20c per kW/h		
Block 1 1 – 50 kilowatt hours Free			

Having a stepped block tariff would correct the negative consequences of current electricity pricing:

1. It would correct the unfair benefits enjoyed by big electricity consumers. Currently, they are using the vast proportion of SA's electricity without having to pay for any of the costs associated with producing this electricity.
2. It would encourage the efficient use and conservation of electricity. The need for increased efficiency and conservation is especially relevant this winter in which large parts of Johannesburg have experienced power blackouts, as the electricity distribution system can't cope with increasing demand.

Second, SECCP recommended that the government provide Free Basic Electricity (FBE) on a per person basis instead of per household. Currently each household is granted 50 free Kilowatt-hours of electricity per month – which is enough to run a two bar heater for approximately 25 hours or a security light (250Watt) for 200 hours. As, the Soweto survey referred to above found, 50 Kw/h per month is less than 10% of average household use, and so has little impact on a household's electricity bill.

In summary, SECCP alerted readers of the briefing that:

- The DME has indicated that the deadline to make written submissions on the Electricity Pricing Policy has ended, and that the only way the public can influence the policy is if parliament allows public hearings to be held.
- More information about the status of the Electricity Pricing Policy within the DME, could be gotten from David Mahuma, Director of Electricity Pricing and Analysis, tel: (012) 317 9210, e-mail: david.mahuma@dme.gov.za

SECCP briefs Environmental Affairs and Tourism Portfolio Committee

Eight members of the Environmental Affairs and Tourism Portfolio Committee met with community and NGO representatives in Vanderbijlpark on 3rd August. The meeting was aimed specifically at getting comments on the Air Quality Management Bill. Richard Worthington, SECCP's co-ordinator, used the opportunity to link the Bill to broader waste to energy projects, noting that:

- Incineration is not waste disposal, but rather waste concentration and dispersal:
 - While burning waste reduces its volume, it concentrates the toxicity of the waste e.g. in ash, which then needs to be disposed of at a hazardous waste site.
 - In the process of incinerating waste, new pollutants are formed, including the most toxic pollutants known, such as organo-chlorines (including dioxins and furans) which are bio-accumulative, which means that they generally remain in the fatty tissues of the body for life, although they will be passed on through breast milk, meaning that children breast-fed by mothers who have had high exposure will receive concentrated doses of these toxins, which include hormone disruptors.
- Waste to Energy is not recycling and is seldom an efficient way to utilise materials. It tends to entrench poor waste management practice, rather than moving towards sustainable development.

- We create 'waste' by mixing together a wide variety of materials that could otherwise be re-used or recycled. If municipal waste management kept different materials separate, less than 5% would need to go to landfill. All organic wastes could be bio-digested, producing both methane (natural gas) and compost (fertiliser). Bio-digestion will capture virtually all of the gas produced, while landfill gas recovery captures a quarter to a third of the methane (a powerful global warming gas).

Richard then identified opportunities for parliamentarians, including:

- Strengthening the **Energy Efficiency Strategy**, which is currently being finalised. Richard noted that the targets contained in this are modest for the timeframe given, yet are described as "aspirational." In addition, they comprise a wish list rather than commitments – they would be made meaningful only if they were minimum requirements. Finally, he argued that the strategy doesn't establish energy efficiency norms, much less set any standards, and no market mechanisms are detailed. While a strategy need not detail the actual mechanisms for achieving the objectives, it should at least provide a mandate and plan for their development, with time frames.
- Introducing **air pollution charges**, as these would be the simplest means of providing incentive for energy efficiency, by beginning to account for externalised costs of energy use.
- Ensuring that the new round of **Integrated Energy Planning** includes triple-bottom-line accounting

Call for research proposals

SECCP has funding to undertake two research projects:

1. Quantification of externalised costs of fossil fuel use in South Africa.
2. An overview of recent research relevant to energy planning and proposal of a possible transition to sustainable energy based on the findings.

For more details see www.earthlife.org.za/seccp/

The deadline for submission of initial proposals: noon of **30 August 2004**.

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2. SA's sustainable energy progress

REEEP in southern Africa

Claire Taylor

SECCP attended a seminar for the REEEP - Renewable Energy and Energy Efficiency Partnership - in Southern Africa on 4th August 2004. The seminar was held to inform stakeholders in the Southern African region of:

- The establishment of an international and regional secretariat in Southern Africa for the REEEP. An International Secretariat has been established in Vienna and Dr Marianne Osterkorn has been appointed as the International Director. SA-based AGAMA Energy has been appointed to establish and administer a regional secretariat for the Southern African region.

- To give an update on the status of the REEEP projects which are currently underway in the region. These included:
 - Tradeable Renewable Energy Certificates, which aims at evaluating the effectiveness of using TRECs or green certificates to promote the renewable energy market. Agama Energy is currently assessing the potential for TRECs in pilot projects, and looking at voluntary schemes.
 - Renewable Energy Financiers Network, which aims at linking various RE financiers that have different funding requirements, in order to share information and knowledge as well as co-finance projects. The Financiers Network has already got money from REEEP, so is operational, having already had its first meeting.
 - BE5 - Black Economic Empowerment Energy Efficiency Enterprises, which aims at encouraging black economic empowerment (BEE) participation in the expanding renewable-energy and energy-efficiency sectors. [Editor: See article "BEE firms encouraged to join renewable-energy push" below for more information.](#)
- The proposed programme of action for REEEP for Southern Africa until 31st March 2005. These include:
 - the establishment of the basic infrastructure for the Secretariat including a more representative steering committee
 - ongoing liaison with all stakeholders to develop a common agenda
 - the development and confirmation of financial support for the Sustainable Energy Regulation Network (SERN) for Southern Africa, which aims at connecting all networks and institutions involved in RE to promote RE.

Note from Editor:

While the seminar was well attended, participants were all from South Africa, despite it being a regional seminar. This was because regional reps could not afford to take the time off work, or the price of transport to attend the seminar. If the REEEP is going to be functional regionally, money needs to be set aside to involve all stakeholders.

Seminar participants were told that in order for partners to sit on REEEP's finance committee, and thus have a say in how money is spent to promote RE and EE, they would henceforth have to pay €50 000. This is completely discriminatory, and allows those with money to buy voting power, opening the way for corruption and mismanagement.

What is REEEP?

Launched by the UK government at the World summit on sustainable Development (WSSD), the Renewable Energy and Energy Efficiency Partnership is a worldwide coalition of progressive governments, business, financiers and other organisations including civil society. For more information, see www.reeep.org

BEE firms encouraged to join renewable-energy push

Summary of article by Jenny Furness, Creamer Media's Engineering News, 2 July 2004

Public purpose investment company E+Co recently hosted a workshop in Midrand, Gauteng, aimed at encouraging black economic empowerment (BEE) participation in the internationally expanding renewable-energy and energy-efficiency sectors.

This is one of a number of workshops that will take place throughout South Africa in the coming months, in order to make budding entrepreneurs aware of the assistance that

E+Co can give when attempting to develop an innovative renewable-energy or energy-efficiency idea into a business.

In the 10 years since it started, E+Co has invested over \$2-million in 26 projects in 11 African countries. It is structured in such a way as to allow entrepreneurs to approach it with renewable-energy-project ideas, which it will then consider supporting. Should the project pass muster, the company helps the entrepreneur with a start-up loan of between \$25 000 and \$250 000 after having established whether the idea is feasible through intensive market research termed the risk-mitigation phase.

"We focus on promising ideas when choosing who to finance, not the security that person can offer us," Gavin Watson, investment officer for E+Co, said. "If the idea is indeed viable, we will finance the project."

For more information contact E+Co at Tel: 012 665 0883, Website:

www.energyhouse.com

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3. Unsustainable Energy

Green power rejected at Athens games, claims Greenpeace

Summary of article in Refocus Weekly, 4 August 2004

Organizers of the Olympic Games in Greece have failed to fulfill their commitment to incorporate renewable energy into the event facilities. "Green energy is the most striking failure for the Athens Olympics," says Nikos Charalambides of Greenpeace Greece. "It was the intention that all electricity used by related premises and users during the Olympics in 2004 should be generated by renewables."

"For a country that markets itself as a country of endless sunshine, solar energy for the games shouldn't be so difficult," he adds. "But green energy at the Games is close to zero."

Australia set a "major breakthrough for the environment" in 2000 when the International Olympic Committee said the environment will be the third pillar of the games. In its bid, Greece presented a series of commitments and promises to exceed the 'Green Games' of Sydney.

"So the lack of green commitment in Athens is even more shocking," says Charalambides. "This list of failures in the environmental performance of the Athens 2004 Olympic Games shows that when there is no strong political will, failures will override wins."

Greenpeace has assessed the environmental performance of the Athens games, and its detailed analysis of the 'green promises' of the local organizing committee shows that "Athens is disqualified from the race for environmental excellence."

World Bank agrees to continue oil, gas lending

Adapted from article by Laura MacInnis, Reuters News Service , 5 August 2004

The World Bank agreed to continue making investments in oil, gas and mining, setting aside an independent review's recommendations that it phase out lending for such projects.

The bank's board of directors lent its support to a management proposal to encourage selective investment in extractive industries, including a greater focus on how projects may impact local communities. "The proposals of management are built around the central theme that our investments and policy advice in the extractive industries should benefit the poor first and foremost," said World Bank President James Wolfensohn.

Wolfensohn had in 2000 commissioned an independent review of the bank's support for the extraction of oil, coal, gold and natural gas in poor nations, following concerns the lender was contributing to poverty instead of easing it. The review, led by Indonesia's former environment minister Emil Salim, recommended the bank radically change its approach to funding such projects and even stop supporting some. Salim had called for an end of oil-related loans by 2008.

The World Bank Group's management responded in June by saying it would continue to fund oil, gas and mining projects but would require high environmental and social standards. It also said it would boost its support for environmentally friendly renewable energies and clean energy sources like natural gas.

This week, Wolfensohn said that energy and mining resources are essential to many poor countries' development goals, and should not be excluded from the bank's remit. "The harsh reality is that some 1.6 billion people in the developing nations still do not have electricity, and some 2.3 billion people still depend on biomass fuels that are harmful to their health and the environment," he said in a statement. "That underscores the need for our continued but selective engagement in oil, gas, and coal investments."

Environmental and social groups criticized the World Bank decision for shying from meaningful reform. "By largely ignoring the review's recommendations, the bank's management has ensured that the poverty pipeline will continue to flow," said Keith Slack, an extractive industries policy advisor at Oxfam. "The bank's unwillingness to change means that this process will likely result in precious little for the poor communities affected by oil and mining projects around the world," Slack said.

Rashad Kaldany, director of the World Bank Group's oil, gas, mining and chemicals department, pointed to the bank's decision to disclose more information about revenues and evaluative measures as a sign of real progress. "This is a large and very significant step forward," he told reporters.

The World Bank Group lends about \$500 million to \$600 million per year - about 3 percent of its total commitments - on extractive industries projects, Kaldany said.
Editor: Our sources indicate this figure is closer to \$3 billion a year!

In the past year, World Bank affiliates helped fund two criticized private sector oil projects - the Chad-Cameroon and the Baku-Tbilisi-Ceyhan pipelines - which both carry crude thousands of kilometres overland to the sea.

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3. General Sustainable Energy News

South Africa

Jo'burg house has answers to SA's energy woes

Claire Taylor; The Star, Interbuild Africa 2004, 2 August 2004 and Nicola Mawson, Creamer Media's Engineering News, 30 July 2004

While many beat the past winter cold with hot baths and steaming showers, for others the water didn't seem to keep the heat for very long as it battled the cold and increased power failures across the country.

One 'house' in Honeydew, west of Johannesburg, is unaffected by power failures. The 'house' is not connected to an electricity grid but instead draws its power from the elements. The Editor, along with other members of the public, did a tour of the 'house', to view its solar and wind-powered facilities.

The facility is not a house in the traditional sense of the word, but does have facilities that one would expect in an ordinary house.

- Power for lighting is provided by two wind turbines
- Heat from photovoltaic panels is used for underfloor heating and to pump borehole water.
- Solar cookers and an outside shower are on display

There are also six solar water-heaters on stands, most of them locally produced, on display and in full working order. The solar geysers are better insulated than conventional electric geysers, which need to continuously reheat, consuming more power. According to Dylan Tudor Jones, managing member of Solar Heat Exchanges responsible for the 'house'/ education centre, "The minimum standard for geyser insulation in South Africa allows a ridiculous 25% heat loss over a 24-hour period. This means that our badly-insulated geysers immediately start to lose heat as soon as power is not available."

Jones goes on to note that, "conventional geysers are the largest contributors to household electricity consumption, and because they are automatically controlled by a thermostat, they are the only household appliance that cannot be switched off. To give an example, one can burn ten 40-watt light bulbs for 24 hours and still use the same amount of electricity as it takes to heat a 200-litre geyser only once. Editor: Which makes one wonder why Eskom is promoting energy efficient light bulbs but not energy efficient geysers?"

The solution is simple - where there is sun, there is energy.

Members of the public, as well as developers, engineers and architects, are invited to the centre to view the benefits of renewable energy first hand, including an introductory talk, and a tour of the facilities, with plenty of opportunities to ask questions. In addition, plumbers receive training once a month in the installation of the solar geysers, as well as viewing old failed solar geysers to learn how not to install and to see why they failed. Principles the plumbers are taught include that geysers should be above the panels, face north and not be in shade. After a theoretical introduction, plumbers physically install the solar geyser on a training roof at the centre.

For more information about tours or Solar Heat Exchangers, contact: Tel: 011 462 0024, E-mail: info@solarheat.co.za WebPage: www.solarheat.co.za

Court date set for PBMR challenge

Adapted from press release by Earthlife Africa, 15 July 2004

29th November 2004 is the date set for the PBMR (pebble bed modular reactor) case to be heard in the Cape high court.

Since 2000, Earthlife Africa has been trying to participate meaningfully in a complex process, which aims to assess the risks and benefits of the proposed nuclear reactor from an environmental, economic and social point of view.

When it became apparent that it was not possible to gain a fair hearing during the Environmental Impact Assessment, Earthlife Africa was forced to resort to court action. With the assistance of the Legal Resources Centre, Earthlife Africa Cape Town launched review proceedings against the EIA Record of decision taken by the Director General of the Department of Environment and Tourism in 2003. This decision had given the PBMR the go-ahead in terms of the EIA.

"Earthlife Africa is respected as an environmental lobby group acting in the public interest, and our lawyers, the Legal Resource Centre, are confident that we have a strong case." says Sibusiso Mimi, nuclear campaigner for Earthlife Africa Cape Town. "The legal route is exhausting, complicated and very time-consuming. It is a pity we have to resort to this."

The implications of an expansion of the nuclear programme within South Africa and Africa are quite sobering. The European Committee on Radiation Risk recently found that the health impacts of low dose radiation were much more serious than the nuclear industry has historically put forward. The economic viability case for the PBMR has yet to see the light of day and no investors for this white elephant can be found.

News from DME

Adapted from article by Helene Le Roux, Creamer Media's Engineering News, 9 July 2004

Kevin Nassiep, the Chief Director of Energy at the Department of Minerals and Energy recently addressed journalists at a breakfast briefing hosted by the Heinrich Boell Foundation in early July. According to him:

- Later this year government plans to set up the National Energy Research Institute, which will, among other things, support studies into the commercialisation of renewable energy, new sustainable energy technologies and energy efficiencies.
- Government is looking into creating an incentive scheme for project developers active in the different fields of sustainable energy to encourage wider participation. This will initially take the form of once-off capital subsidies, to be replaced in the long term with other possible instruments, such as renewable energy certificates.
- A large number of RE projects are currently being proposed for South Africa. These include biogas projects at several landfill sites countrywide; a commercial windfarm near the Western Cape town of Darling; a 50 MW windfarm to be built by Spanish utility EHN elsewhere in the Western Cape; a 100 MW concentrated solar power plant using receiver technology earmarked for construction in Upington, in the Northern Cape, by 2007; a wind-assisted pumped-storage scheme in the Eastern Cape; and a minihydro plant in Bethlehem, in the Free State.
- Government's nongrid electrification programme, which has been implemented since 2001 and focussed on using renewable energy as a cost-effective solution to provide electricity to remote areas, is currently under review. "The programme, whereby concessionaires were appointed to supply rural communities with photovoltaic cells, could not provide sufficient electricity to fulfil the needs of domestic users, particularly their thermal needs. " We believe that a more

integrated approach should be followed, focusing on the use of hybrid mini-grids, such as demonstrated in the Eastern Cape, where a combination of wind and solar energy is used, with diesel generators as back-up supply," Nassiep noted.

Durban signs SA's first carbon-finance deal

Adapted from article by Tom Robbins, Creamer Media's Engineering News, 23 July 2004

The eThekweni (Durban) municipality has signed South Africa's first carbon emission reduction purchase agreement with the World Bank for a rubbish-to-power project based at outlying Marianhill and La Mercy landfills. The scheme, apart from generating electricity for the city, aims to reduce emissions of greenhouse gases, carbon dioxide and methane. Carbon dioxide emissions will be reduced by reducing the city's reliance on Eskom, and Eskom's coal consumption will be cut by approximately 80 000 t/y.

eThekweni will sell the 3,8-million tons in greenhouse gas reductions to the World Bank's Prototype Carbon Fund for \$15-million and expects to generate R91,4-million in electricity sales, giving a total revenue for the project of R205,4-million over the 12-year project.

Costs are expected to be about R105,3-million, made up of capital expenditure of R63,6-million and operating costs of R41,7-million.

While the first component of the project at the Marianhill and La Mercy landfills has been given the go-ahead, the EIA process for the second component located at the central Bisasar Road landfill has been delayed do objections by local residents. Community activist and neighbour to the landfill, Sajida Khan, says her objection to the project is based primarily on residential proximity to the landfill. Khan says there is no buffer zone between the community and the landfill, unlike the more modern Marianhill facility which has an 800 m buffer zone. Khan says she is not against the concept of removing greenhouse gases and putting them to good use but says burning the gases will lead to the by-product of carbon dioxide and other harmful gases.

At present the gas is flared, or burnt off, at the Bisasar Road landfill, Africa's busiest, receiving an average of 3 500 t of waste a day. The two other landfills do not flare methane at all at present, and as a result it escapes into the atmosphere. The plan is to use the methane to fuel large 16-cylinder spark-ignition combustion engines that will convert the gas into electricity, in the same way that car engines do. The engines will have to be imported as they are not manufactured locally.

New university-accredited course: Sustainable Energy Planning for Cities

The Sustainability Institute (University of Stellenbosch) and Sustainable Energy Africa (SEA) are offering an intensive 6-day accredited course on Sustainable Energy Planning - For Cities from 13-18 September this year.

This course can form part of the Masters Programme in Development Planning and Sustainable Development or it can be attended on its own as an Executive Course in the School of Public Management and Planning's Programme in Sustainable Development.

Cost: The full course costs R6 250 (lunch & supper included; accommodation not included)

How to **register** for this course: Fill in the registration form, which can be obtained from John van Breda: Tel: (021) 881 3196, Fax: (021) 881 3294, Email: john@sustainabilityinstitute.net

For more information about the course, please contact: Sustainable Energy Africa, Leila Mahomed: Tel: 021 702 3622, Fax: 021 702 3625 Email: info@sustainable.org.za

The rest of the world

Southern hemisphere's largest windfarm gets the nod

Adapted from article by Michael Bachelard, The Australian, 8 July 2004

The largest wind farm in the southern hemisphere has been given the nod three years after it was proposed for Victoria's windswept southern coast near the Great Ocean Road town of Portland.

When it is finished in 2006, 120 large turbines will push 195 megawatts of heavily subsidised electricity back into Victoria's power grid - making it almost four times the size of the country's present largest wind farm. When the wind is blowing strongly it will generate enough energy to power 100,000 homes according to Premier Steve Bracks.

The \$270million project will also provide almost 20 percent of Victoria's target of 1000mW of renewable energy by 2006.

But Pacific Hydro, the company building and running the wind farm, is still negotiating with energy retailers to buy the power. It is also still negotiating with aluminium manufacturer Alcoa to use its high-voltage switch to connect to the electricity grid.

The announcement prompted another attack on the federal Government's decision to limit the subsidies given to renewable energy under the Mandated Renewable Energy Target. Pacific Hydro managing director Jeff Harding said John Howard's energy policy would "jeopardise future (wind farm) projects." "The (federal) government target is so low that the likelihood of sufficient demand of more than 1500mW nationally is in question," Mr Harding said. He also said the Prime Minister's technological approach to reducing greenhouse emissions, geosequestration, or burying carbon dioxide underground, would create the equivalent of "toxic waste dumps".

Spain to invest Euro 450 million to build 18 windfarms

Adapted from article in Refocus Weekly, 21 July 20-04

The largest electric utility in Spain will build 18 windfarms in Valencia as part of the green power program approved by the regional government last year. ENDESA has won a tender for projects in three of the 15 areas set aside for the construction of windfarms. By the time all projects are completed, the region of Valencia will have 2,300 MW of new wind capacity, generating 5,500 GWh of power.

Currently, the region has 21 MW of wind capacity.

The work will involve an investment of Euro 450 million and result in 500 MW of installed capacity. ENDESA has signed a Euro 300 million contract with Gamesa for the supply of wind turbines and a plan to define the implementation of the various windfarms.

The operation is part of the 2002 agreement through which Gamesa acquired ENDESA's turbine manufacturing subsidiary, MADE. The agreement outlined the supply of up to 1,000 MW of turbines.

UK should join solar revolution, says Secretary for Wales

Adapted from article by Paul Brown, The Guardian, 3 July 2004

Every new home in Britain should by law be fitted with solar panels on the roof to produce electricity, says Peter Hain, the secretary for Wales. He said Britain was falling behind in the solar revolution, and building regulations should be altered so every new development was required to have solar electricity and water-heating panels.

Mr Hain, a former energy minister, was speaking at the opening in Wrexham, Clwyd, of a production line for photovoltaic panels used to produce solar electricity. The production line at the Sharp factory will work around the clock to meet the demand from Germany and other European countries. The company said that to cope with the demand a second line would open in October, effectively doubling the factory's production.

Mr Hain said his cabinet colleagues were discussing the change in building regulations as part of the government's plan to catch up with the solar revolution in Germany. Germany has increased its target of covering roofs in solar panels from 10,000 to 100,000, and spent £66m last year to get 121 megawatts of photovoltaic panels installed. Nearly all Wrexham's production will go there.

Although the UK has invested £25m in solar power- £9m this year - only 10 megawatts of electricity was produced in 2003, about the same as a small wind farm and only 1% of the output of the Sizewell nuclear power station in Suffolk.

Mr Hain described solar technology as "the future" and noted that, "if we do not switch to green energy, then our whole future as a human race is in jeopardy, or even more simply, we are doomed."

Sunny future: 400 solar panels on UK flats

Adapted from article in The Evening Chronicle, 10 July 2004

Newcastle has taken Mr Hain's advice to heart – one of the largest domestic solar energy installations in Britain has been completed at a three-storey tower block in Newcastle. More than 400 solar panels have been installed on the roof of the block at Trevelyan Drive and Mortimer Avenue, on Newbiggin Hall Estate, in Westerhope.

The £250,000 project forms a field trial of the Department of Transport and Industry's renewable energy programme. The panels are expected to produce about 28,000 kilowatts of electricity every year.

The council says the system could save residents of the 25 households in the block £2,300 every year. The scheme will be monitored for two years as environmental benefits are monitored.

Presidential contender promises 20% from green power in U.S.

Refocus Weekly, 5 August 2004

The presidential candidate for the Democratic Party has promised to generate 20% of U.S. electricity from renewables by 2020. "To create an energy-independent America,

we will have to do more than use existing energy sources more efficiently," John Kerry says in his energy policy. "To grow our economy, tap our ingenuity, and protect our environment, we will also have to explore and develop new energy sources."

"A key priority will be ensuring that the federal Production Tax Credit for wind and biomass is applicable to the full array of renewable technologies, since the unpredictability of frequent short term extensions of the PTC has greatly hindered investment and expansion of the industry in the U.S.," he explains. "No single solution can meet all of our society's future energy needs - we will need a diverse group of energy technologies. Predictable and stable federal policies are critical to achieving this goal."

Kerry and vice presidential candidate John Edwards, say domestic renewable energy reduces oil dependence, creates electricity and enhances markets for electricity, "and growth in these new technologies will create quality jobs, as well as goods and services for export." They will increase funding to research renewables, "offering the prospect of both technical advances and the development of an enhanced supply chain."

"Like any other business development, clean energy technologies and projects need capital to get off the ground," and they will improve access to financing for renewables and work with the investor community to find ways to encourage additional investment.

"America will commit its technological and industrial prowess to developing and sustaining clean, renewable sources of fuel," the policy says. "These new sources will not only dramatically reduce our dependence on foreign oil, they will also create new industries, new jobs, and new ways to protect our environment."

The plan calls for an increase in the use of domestic green fuels, such as ethanol, by five billion gallons by 2012, to increase the use of waste biomass, and to provide funding and financing mechanisms for further research. It also involves development of domestic oil supplies in the western and central Gulf of Mexico and the National Petroleum Reserve in Alaska, in order to diversify the world oil supply to include non-OPEC suppliers.

Training Opportunity on Small Hydro Power

The United Nations and Chinese government are sponsoring a 10-day training workshop on small hydropower (SHP) at the Hangzhou Regional Centre in China.

Objectives of workshop: To master the basic theory and principles of small hydro power development, to know more about the serialization and standardization of Chinese SHP equipment, and to master the method of equipment selection, operation and maintenance

Date: 12 October to 22 November 2004

Venue: Hangzhou Regional Centre for small hydropower, Hangzhou, China.

Medium of Instruction: English

Requirements for Admission: Applicants should be under 45 years old, have graduated from a technical school and have two years SHP practice

Costs: Money is available to cover the costs of training, boarding and lodging, local transportation, limited international airfares, and per diems

Application process: Applicants are requested to fill in the Application Form, which can be obtained from Mr. Pan & Ms. Shen Xuequn, Hangzhou Regional Centre (Asia-Pacific) for Small Hydro Power Hangzhou, P.R. China, 310012; Tel: 0086 571

88086586; Fax: 88062934, E-Mail: dapan@hrcshp.org WebSite: www.hrcshp.org

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5. SA Energy Policy

Draft Energy Efficiency Strategy

Claire Taylor

SECCP spoke to Tony Golding, the Deputy Director for Energy Efficiency in the Department of Minerals and Energy to get clarity on what the status of the Strategy is. He reported that there's been no final decision about what happens to the Strategy, but there are two options:

- That more consultation is undertaken with other departments, e.g. around efficiency in the transport sector. This is a major gap in the EE strategy, arising because CABEERE doesn't allow the DME to look at efficiency in this sector. More consultation would allow the strategy to include the findings of research being undertaken on this sector by the Petroleum industry.
- Wider consultation will only be possible if the Minister agrees to a delay. However, if the Minister wants the Strategy to go through soon then the draft that was published will be the final draft and the Strategy will be finalised in the near future.

For more information contact Tony Golding: tel: 012 317 9213, e-mail: email:

tony@mepta.pwv.gov.za

The Draft Energy Efficiency Strategy is available on the Department of Minerals & Energy website www.dme.gov.za/energy.html

Electricity Pricing Policy

Claire Taylor

The submission deadline for commenting on the Electricity Pricing Policy was 18 June 2004. SECCP contacted David Mahuma, the Director of Electricity Pricing and Analysis at the Department of Minerals and Energy, who reported that while the deadline for commenting on the policy was over the policy still needs to be approved by parliament, which is another opportunity to influence the policy. To do this, readers are encouraged to lobby parliament to have public hearings on the policy. Contact the secretary of the Minerals and Energy Portfolio Committee – Shanaaz Isaacs at 021 403 3706 for details on how to do this.

Energy Draft Bill

Contact Trust, 2 August 2004 www.contacttrust.org.za

The Energy Bill aims to promote research and development within the energy industry. The draft Bill will cover all aspects of energy and aims to ensure that the supply, conversion and utilisation of energy are efficient, economic and environmentally sound. Integrated energy and resource planning, the utilization of environmentally sound energy sources, energy use efficiency and data collection are some of the issues the Department of Minerals and Energy is hoping to deal with in the draft Bill.

Update: The Energy Bill has been sent to Cabinet. Once approved, the bill will be released for public comment. This is likely to happen by the end of August.

For more information contact Dr Tony SurrIDGE, tel: 012 317 9204, e-mail:

surrIDGE@mepta.pwv.gov.za

Radioactive Waste Management Policy

Contact Trust, 2 August 2004 www.contacttrust.org.za

The Department of Minerals and Energy has been conducting public meetings on the draft Radioactive Waste Management Policy and Strategy in Pretoria, Cape Town and at Vaalputs near Springbok in the Northern Cape.

The DME has identified the need for more information about the Radioactive Waste Management Policy, based on the submissions received. Capacity building workshops are to be held for the public. A tender process is underway, inviting external organisations to run the workshops.

For more information contact: Tseliso Makobela, tel: (012) 317 9008, cell: 082 450 9224, e-mail: tseliso@mepta.pwv.gov.za

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6. Events

Africa

Sept 14 - 17 Libya Energy Week

Tripoli, Libya

Contact: Mahad Ahmed, ITE Group PLC

Tel: (+44 20) 7596 5053

Fax: (+44 20) 7596 5105

E-mail: mahad.ahmed@ite-exhibitions.com

Website: <http://www.african-events.com/>

Sept 15 - 17 Africon 2004

Conference on Technology innovation, IEEE Region 8

Gaberone International Conference Centre, Botswana

Registration Fee: R2100 - R3050

Contact: Prof GP Hancke

E-mail: Gerhard.hancke@eng.up.ac.za

Tel: (012) 420 3736

Fax: (012) 362 5000

Website: <http://eerc.up.ac.za/~ieee/>

Rest of the World

Aug 22 - 28 International Seminar on Renewable Energies & Social Change

Pola de Lena (Asturias, Spain)

Organized by Escanda and INFORSE Europe

(International Network For Sustainable Energy)

Contact: escanda-info@gmx.net

Aug 31 - Sept 03 7th International River Symposium

Brisbane, Australia

Contact: Brisbane City Council

Tel: (+617) 3846 7660

Fax: (+617) 3846 7660

E-mail: riversymposium@riverfestival.com.au

Website: <http://www.riverfestival.com.au>

Sept 05 - 10 19th World Energy Congress & Exhibition

Sydney, Australia

Contact: Emily Melton, WEC Australia

Tel: (+44 20) 7734 5996

Fax: (+44 20) 7734 5926

E-mail: melton@worldenergy.org or energy2004@tourhosts.com.au

Website: <http://www.tourhosts.com.au/energy2004/>

Sept 28-29 Green Power Central & Eastern Europe

Budapest, Hungary

Contact: Sarah Ellis

E-mail: sarah.ellis@greenpowerconferences.com

Website: www.greenpowerconferences.com

Oct 05 - 07 Power-Gen Asia Conference and Exhibition

Bangkok, Thailand

Contact: Seonid Thomas, PennWell

Tel: (+44 1992) 656 629

Fax: (+44 1992) 656 704

E-mail: powergenasia@pennwell.com

Website: <http://www.powergenasia.com/>

Oct 06 - 08 1st International Conference on Renewable Energy

New Delhi, India

Contact: G.N. Mathur,

Central Board of Irrigation and Power & National Power Training Institute

Tel: (+9111) 2611 6567

Fax: (+9111) 2611 6347

E-mail: cbip@cbip.org

Website: <http://www.cbip.org/>

Oct 18 - 20 Hydro 2004: A New Era for Hydropower

Porto, Portugal

Contact: Helen Green, NetWork Events Ltd

Tel: (+44 23) 9263 1331

Fax: (+44 23) 9263 1797

E-mail: hydro@networkevents.ltd.uk

Website: <http://www.networkevents.co.uk/>

Oct 21-24 RENEXPO 2004

International trade fair and congress for renewable energy
and energy efficient building and reconstructing

Fairground Augsburg, Germany
Tel: 0049 / 71 21 / 30 16 0
Fax: 0049 / 71 21 / 30 16 100
E-mail: redaktion@energie-server.de
Website: www.energy-server.com

Oct 27 - 29 Energia Forum 2004

Tampere, Finland
Contact: Jutta Kainua, Expomark
Tel: (+358 14) 339 0390
Fax: (+358 14) 339 0350
E-mail: jutta.kainua@kp-media.fi
Website: <http://www.expomark.fi/energia>

ⁱ Eskom's Sustainability Performance 2003 information pamphlet.

ⁱⁱ Fiil-Flynn, M. "The Electricity Crisis in Soweto," Municipal Services Project Occasional Paper 4, April 2002.