

SUSTAINABLE ENERGY NEWS on EMAIL (SENSE) number 20

Welcome! SENSE is a service of the Sustainable Energy and Climate Change Partnership (SECCP), a project of Earthlife Africa Johannesburg in partnership with WWF, Denmark.

SENSE is a monthly publication, edited by Elin Lorimer. 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

Meetings in February

SECCP is taking the lead in organising a week of meetings in the third week of February, at the Alpha Centre, just north of Johannesburg. A venue easily accessible from Jhb Int'l Airport was chosen as two of the meeting are regional.

Energy Caucus

Monday (16th) and Tuesday morning will be the second meeting of SA civil society Energy Caucus, established last year and comprised of organisations ranging from unions and faith groups to rural community-based organisations. The Caucus is essentially a common platform to promote a just transition to sustainable energy, without a centralised structure or representative role. Participation is open to all not-for-profit organisations that subscribe to the defining principles.

To receive an invitation or copy of the defining principles, contact the current convening committee:

Elin Lorimer (Jhb) – e-mail: elin@earthlife.org.za, tel: (011) 339 3662;

Elias Mkhwanazi (Nelspruit) e-mail: elias@ejnf.org.za, tel:(013) 656 3264;

Leila Mohamed (Cape Town) e-mail: leila@sustainable.org.za, tel: (021) 7023622;

Renewables 2004 preparatory workshop

Earthlife Africa Jhb and the Heinrich Böll Foundation will be co-hosting a workshop titled "renewables2004 – Southern African Civil Society Preparatory Process", from 17 – 19 February (midday to midday). The intention is to prepare for the International Conference for Renewable Energies from 1 – 4th June 2004 in Bonn, The German Government committed to host the conference at the end of the WSSD, when a coalition of "like-minded countries" formed the Johannesburg Renewable Energies Coalition (JREC) with the aim to push for progressive policies on RE, even outside the UN system. (see www.renewables2004.de for details).

In the lead-up to the conference, at an international NGO gathering last October at which a number of SA Energy Caucus members were represented, a Declaration was developed that calls for specific commitments and actions by governments, financial institutions and other stakeholders. The declaration 'The Future is Renewable' is available in various formats and languages (see www.boell.org/docs/ures_declaration_engl.pdf). A new coalition was formed to monitor energy-related international processes: Citizens United for Renewable Energy and Sustainability (CURES). African members of the coordinating group are Stephen Karakezi (AFRIPREN); Sheila Oparaocha (Energia) and Richard Worthington (Earthlife Africa).

We believe the SADC meeting can be of great value for networking and strengthening civil society in the region, as well as contributing to the success of the international conference and attaining multi-lateral agreements for deployment of renewable energy technologies for affordable energy services. The recommendation of a review commissioned by the World Bank, that the group phase out financing of oil and coal over five years, should give impetus to demands for development banks such as DBSA to direct their financing to sustainable energy activities.

Financial support is available for a limited number of participants. To receive an invitation, please contact Makume Tlaleane at the HBS office: Email: makume@boell.org.za; Tel: ++27-11-447 8500.

SARCAN Meeting

The second meeting of Southern African Regional Climate Action Network (SARCAN) is planned for Thursday afternoon and Friday (19 –20), with Saturday morning available for working groups. The South African network will have a short meeting on the Friday morning.

In addition to reporting back on the 9th Conference of the Parties to the UN Framework Convention on Climate Change, held in Milan last month, the meeting will finalise a 3-year funding proposal and develop a plan of action for 2004. The first SARCAN meeting prioritised Adaptation to the adverse impacts of changes in climate (e.g. changes in rainfall and growing seasons) with a primary focus on water resources. Adaptation and assessment of vulnerability is also a required theme of the Second National Communication – production of which is a commitment under the convention; while Lesotho has already developed their 2nd Communication, South Africa will be initiating the process early this year.

Organisations interested in joining the network please e-mail: richardw@earthlife.org.za

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2. SA's sustainable energy progress

City Energy Strategies Conference

By Elin Lorimer

November was a busy month in Cape Town for supporters of sustainable energy, and one of the first major events was the Cities Energy Strategies Conference. The conference was held from 19-21 November at the new Cape Town Convention Centre, and attracted 300 participants from a range of organisations including local and national government, NGOs and the business community.

The conference was an inspiring event, as it highlighted many of the positive activities taking place in cities in South Africa and internationally on the energy front. Presenters from as far afield as Rio de Janeiro, Barcelona, Leicester and Seattle discussed their experiences with implementing energy strategies and doing progressive work with sustainable energy either in addition to or even in spite of a lack of national policy to support this.

One of the major outcomes of the conference was the Cape Town Declaration on Energy for Cities, which challenged South African city municipalities to strive for a number of concrete targets with the support of other stakeholders. The participants agreed to the following targets for cities:

- Develop an integrated energy strategy for their cities by 2006
- Diversify their supply to include renewable and cleaner energy sources with a target of 10% by 2020
- Implement green procurement policies by 2006
- Reduce energy consumption by at least 20% in all municipal operations by 2005
- Pass legislation requiring solar water heaters and insulation in all new middle to high income housing by 2005
- Ensure that all low-income formal housing has insulated ceilings – new housing by 2005, retrofit existing by 2007, and build houses to be energy efficient.
- Include dedicated bicycle lanes on at least 20% of roads, and enforced bus-lanes by 2010.
Develop public demonstration centers and programmes for sustainable energy.

View Cape Town Declaration: www.greenclippings.co.za

City of Cape Town leads the way to clean energy

The City of Cape Town was proud to announce at the Cities Energy Strategies Conference that they will be the first African City to develop an energy strategy aimed at promoting sustainable energy. Councilor Saliem Mowzer said that the City had completed its State of Energy Report, which would be used to provide direction for the development of an integrated energy strategy for Cape Town. In the future Cape Town will focus on using various energy sources including renewable energy such as wind.

At the World Wind Energy Conference it was announced that Cape town would be the first city in South Africa to offer green electricity to customers when the Darling wind farm comes on-line in 2004. Customers will have the option to pay a premium for green electricity as the City has agreed to buy power from the Darling wind farm. A survey conducted by the council indicates that there is considerable demand for green

electricity, and the City will initiate a concerted marketing drive once the green power becomes available. The Darling 5MW wind farm, which is due to begin construction in February, will act as a case study for renewable energy independent power producers in South Africa, helping to create awareness and test the demand.

For more information see:

[**Business Report**](#)
[**Engineering News**](#)

Electricity sector BEE charter to be circulated for comment

Source: [**Engineering News**](#)

The draft black empowerment (BEE) charter for the electricity sector, which has been compiled by a range of stakeholders, will shortly be made available for comment. After these comments have been incorporated in the charter it will be presented to government with the aim of having it implemented by the end of 2004.

One of the key issues noted in the charter is the R30-billion in electricity assets expected to be transferred to BEE and foreign companies by Eskom. As BEE firms are likely to experience trouble accessing financing for this transfer, the charter proposes a new BEE Energy Fund be set up for this purpose. The fund would be underwritten and managed by the Industrial Development Corporation (IDC), the Development Bank of South Africa (DBSA) and the Public Investment Commissioner. The proposal is that the fund cover the majority of the empowerment transfer, which would be repaid out of future profits, while the remainder is funded by vendor financing, domestic and international grants and foreign direct investment.

The charter looks at each sub-sector in turn and covers issues such as ownership. It proposes that the existing electricity generation capacity be ring-fenced and clustered for the possible total sale of power stations to BEE or Strategic Equity Partner consortia with strong technical capabilities. The electricity transmission sector is seen as a strategic natural monopoly, which would transform into a regulated corporatised government-owned entity, operating independently of Eskom. However, some BEE participation is envisioned in non-strategic transmission, power line construction and non-core support services. Broad-based ownership in various sectors is defined as including employees, which will assist with securing their expertise and commitment. The charter also calls for continued low-cost energy, with the aim of keeping the South African economy competitive, but notes that the sector also needs to be environmentally sustainable.

The charter will be taken forward by 14 key stakeholders in the industry, including national, local and municipal government, the electricity regulator, Eskom, private companies, energy-intensive users and trade unions. Before being finalized, however, the charter must still go through an extensive consultative process with all stakeholders.

Distribution networks suffering neglect

The state of the country's electricity distribution network is of much concern, which was highlighted at the "Maintenance Summit" hosted by the National Electricity Regulator (NER) in November. This has led to the NER to focus more attention on the issue, and they are currently considering a range of penalties and incentives to encourage distributors to meet their end of the deal and maintain their networks.

Minister of Minerals and Energy Phumzile Mlambo-Ngcuka had a clear message to the conference: "most electricity distributors are spending a lot less on the maintenance of infrastructure than we would like to see," and "the general condition of the networks is a grave concern - there is not sufficient recapitalisation of these networks". Recent years have seen a decline in the quality of supply and service of electricity distributors, and widespread and extended outages due to the distribution sector.

The NER presented the findings of a consumer survey which indicated that 53% customers were not happy with the service they receive in terms of reliability, availability and outages. 48% of customers were not happy with response times for repairs, 28% felt they were not adequately consulted about outages and 47% felt the power quality was not adequate. Many customers felt that the situation was deteriorating. The NER also pointed to a lack of information from the distributors themselves, many of whom failed to send information to the regulator or sent information of a poor quality indicating a lack of monitoring of the performance of the distribution networks.

The NER argued that distributors should set aside at least 2% of the replacement cost of the assets for maintenance, a figure which is considered fairly conservative. As there was some indication that the state of disrepair was due to a lack of funds, the NER noted that future applications for tariff increases must clearly show this expenditure if it is to be taken into account. Another important factor in the neglect has been the delays and uncertainties in the electricity distribution industry restructuring, which will need to be speedily addressed in the new year.

For more information see:

www.ee.co.za
Engineering News

NER firm over Eskom increase

Eskom has expressed great unhappiness with the 2,5% electricity price increase granted by the National Electricity Regulator (NER) for this year. Eskom initially requested an 8,5% increase, and when the NER refused to revise their decision upon consultation, lodged a formal appeal with the Department of Minerals and Energy (DME) and requested that an independent body assess their increase. The NER rejected this suggestion, and warned that this might call into question their credibility as an independent body set up for this purpose, and set an unwelcome precedent for future price disputes.

The NER has noted that the 2,5% increase will still allow Eskom a reasonable rate of return, with a 4,5% increase in revenue in 2004. They point out that the Eskom application for an 8,5% increase is intended to cover their R50-billion expansion plan including the upgrading of transmission lines and recommissioning of mothballed power stations. However, since the electricity sector is undergoing restructuring, the NER believes that customers should not have to contribute to the cost of future power stations that they might not be serviced by and points out that new market entrants might in fact foot the bill for new generation capacity. As Eskom earned returns in excess of those approved by the NER in 2002, the NER views the current increase as relatively generous. Furthermore the NER has pointed out that there are various opportunities for greater efficiencies within Eskom which could help bolster their profit margins. NER CEO Xolani Mkhwanazi has noted that Eskom will have to implement the lower increase from January 2004, and are unlikely to be successful in their appeal.

For more information contact:
Dr Xolani Mkhwanazi

Chief Executive Officer: NER
(012) 401-4619
082 373 1979

Mandela Metro to install energy saving geyser controls

Source: **EP Herald**

The Mandela Metro Council in the Eastern Cape announced last year that it plans to install 120 000 geyser control units in an energy-saving partnership with Eskom. The system, which will cost an initial R150 million, and is expected to cut household energy bills by R15m per year. A feasibility study is currently under way. The project was announced at an exhibition during Local Government Week, where special presentations were held to inform residents of the benefits of installing the system.

SECCP comment: *This amounts to R1 250 per electric geyser, so that Eskom can interrupt power supply during peak periods when they struggle to handle the load, with minimal impact on their sales volume. This is not an effective approach to “energy-saving”. The funds would be better spent setting up a fund to help finance installation of solar water heaters, which would save far more energy; as long as any electric back-up is controlled by a timer, it will also ensure less demand during peak periods.*

Also, how long do we have to wait before introduction of time-of-use tariffs becomes mandatory? This could stimulate consumer awareness to the point where people would install their own timers on electric geysers to avoid peak charges.

Cabinet plans to recommission mothballed plants

Source: **Sunday Times**

Cabinet has been considering its options for providing sufficient electricity generation capacity beyond 2007. Government spokesperson Joel Netshitenzhe announced in December that the strategy will include recommissioning some of the older mothballed power plants “as and when the need arises”. Maximum use will also be made of interruptible load and other demand side measures and competitive bidding will take place for new generation.

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3. Unsustainable Energy

National Nuclear Regulator calls for community representative

The National Nuclear Regulator (NNR) is calling for nominations for a candidate to serve on the Board of Directors representing the interests of communities affected by nuclear activities. This follows a recent vacancy in the post. The NNR establishes safety standards and regulatory practices to protect people, property and the environment against nuclear damage. The candidate should be a person of recognized standing in a community living close to a nuclear installation.

Nominations should be submitted before 31 January 2004 to:

The Director General, Department of Minerals and Energy, Private Bag X59, Pretoria, 0001,

for attention Mr T B Maqubela, Chief Director Nuclear.

Further enquiries can be directed to the Chief Director Nuclear, telephone (012) 317-9008, fax (012) 320-0713.

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4. General Sustainable Energy News

Samsø introduces rapeseed oil for sustainable energy transport

Source: [The Copenhagen Post](#)

Samsø, Denmark's Renewable Energy Island, has moved one step closer to sustainable energy self-sufficiency. The island has just introduced its first rapeseed oil press as a demonstration project, in an attempt to convert the notoriously tricky transport sector to run on renewable energy. Although the island's initial scheme to introduce electric vehicles proved unfeasible due to technical problems, the new biodiesel plan should be both cheaper and simpler to implement. Diesel vehicles can be converted fairly easily to run on the oil for an estimated DKK 500 (670 euros). There are also additional benefits such as the by-products of the biodiesel production – the rapeseed kernels can be used as a protein feed for cows without any further processing. Rapeseed is a crop widely grown for its high oil content, including in South Africa, and is often used as a filler crop between regular crop plantings.

Samsø's rapeseed press will have the capacity to process 30 kg of rapeseed per hour, producing 10 litres of oil and 20 kg rapeseed cake. After being filtered the oil will be ready to use in diesel motors and oil tanks. One hectare of rapeseed will be sufficient to run one vehicle for a year, and one farmer has already begun experimenting with converting his tractor to run on the oil. Current plans are to hold a seminar next spring teaching farmers to convert their diesel vehicles to run on the oil, and the Island's Energy Office will show tourists the facility along with other sustainable energy initiatives. Biodiesel is just the latest of Samsø's sustainable energy initiatives which have brought the island up to its current level of meeting 100% of its electricity needs and 60% of its heating needs with renewable energy.

World Bank report call for phasing out of fossil fuel funding

A World Bank internal report has called for them to phase out funding of coal and oil projects by 2008 to comply with Kyoto Protocol guidelines. The Extractive Industries Review is an independent review headed by former Indonesian environmental minister Emil Salim. It was commissioned in 2001 by bank president James Wolfensohn after heavy NGO criticism of the World Bank's current funding practices.

The report recommends that the World Bank focus its limited resources on funding renewable energy and other projects that reduce energy-related greenhouse gas emissions. Before the 2008 deadline, the report recommends that funding of oil and coal projects before 2008 "should be exceptional, limited only to poor countries with few alternatives" and also recommends steering clear of coal mining projects.

Although the World Bank says it will take the findings seriously, further consultation will be conducted with stakeholders, including member countries, before the recommendations are adopted. Although not bound to comply with the findings, there is considerable NGO pressure on the bank to reform its funding practices and a response can be expected early in 2004.

The Australian, European, UK and US Business Councils for Sustainable Energy have sent a letter of support for the recommendations on sustainable energy made in the report. A copy of the letter will be available at: www.bankwatch.org

For more information see:

<http://www.seen.org>
[Reuters](#)

Online educational game on RE released

Source: [PR Newswire](#)

Taking renewable energy education to a new level, Artificial Life, a Hong Kong-based company, has released their first educational online game to promote renewable energy sources. The game, called "Eco Champ", was released in December in English and Chinese.

Eco Champ is an attempt to encourage learning about renewable energy in an enjoyable environment, and is particularly targeted at schools and Asian students between 12 and 18. The player is challenged to maintain the power level of a virtual island by tapping into renewable energy sources of 6 kinds: wind, solar, wave and tidal, hydro, geothermal and biogas. Appropriate locations have to be selected, taking into account the most efficient use of resources, and players also have a limited amount of a virtual currency to fund installations and access information at a "consulting fee". The game is subscription based and is available at <http://www.ecochamp.com>.

LEDs hit the lighting market

Source: [Ananova](#)

Light emitting diodes (LEDs) hit the market this year in the form of a blue Christmas light in the UK, indicating another step in this rapidly advancing technology. Already in use for dashboards, torches, toys, mobile phones and laptops, LEDs could be replacing light bulbs for domestic lighting in 10 years' time. Although individually very small, measuring half a millimeter in width, LEDs emit a very bright light. As they have no filament to burn, LEDs are long-lasting and highly efficient, which could lead to massive electricity savings and reduced greenhouse gas emissions.

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5. SA Energy Bills

RE White Paper passed and RE Strategy underway

The White Paper on Renewable Energy has been approved by parliament and is now available on the DME website.

With this in place, a task team has been set up to draft the Renewable Energy Strategy, and a first draft is due to be completed by February 2004.

Download: [White Paper on RE](#)

Energy Regulator Bill introduced to parliament

Source: [Contact Trust](#)

The Energy Regulator Bill has been approved by Cabinet and was to be presented to Parliament in December. This Bill relates to the institution of a single National Energy Regulator to replace the current regulatory structure for electricity, gas and petroleum.

For more information contact Alison Bullen at (021)426 1446 or email:
alison@contacttrust.org.za

Air Quality Management Bill progress

Source: **Contact Trust**

The Portfolio Committee for Environmental Affairs and Tourism will be holding public hearings on the new Air Quality Management Bill on the 3rd, 4th, and 10th February. To make submissions and for further enquiries contact Sabelo Mzanya at 021 4033848 or email: smzanywa@parliament.gov.za

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6. Events

- Jan 18 – 23** International Union for Electricity Applications
ICC, Durban
Conference fee: R3990-R4503
Contact: Bambanani Communication Strategies & Event Management
E-mail: dplatt@icon.co.za
Fax: (011) 465 4390
Website: www.uie-conference-africa.com
- Jan 27 - 28** Power Deliverability and Reliability 2004
Park Hyatt Hotel, Rosebank, Johannesburg
3 separately bookable post-conference workshops 29th January
Case-study driven conference
Contact: George Makanta, IQPC Delegate Sales Manager
Tel: (011) 707 9200
Fax: (011) 707 9211
Cell: 082 971 8620
E-mail: george.makanta@iqpc.co.za
Website: www.iqpc.co.za
- Feb 16 -17** Energy Caucus Meeting
Alpha Centre, Johannesburg
Contact: Elin Lorimer
Tel: (011) 339 3662
Fax: (011) 339 3270
E-mail: elin@earthlife.org.za
- Feb 17- 19** Renewables2004:
Southern African Civil Society Preparatory Process Workshop
Alphas Centre, Johannesburg
Contact: Makume Tlaleane at the HBS
Tel: ++27-11-447 8500
Email: makume@boell.org.za
- Feb 19 – 20** SARCAN workshop and SA-CAN meeting
Alpha Centre, Johannesburg
Contact: Richard Worthington
Tel: (011) 339 3662

Fax: (011) 339 3270
E-mail: richardw@earthlife.org.za

Feb 23 - 25

Enviro-Legal Compliance for Sustainability
Park Hyatt Hotel, Rosebank, Johannesburg
Contact: IQPC
Tel:(011) 707 9200
Fax: (011) 707 9219
E-mail: registration@iqpc.co.za

March 1 – 2

Coaltrans South Africa
Arabella Sheraton Grand Hotel, Cape Town
Registration Fee: US\$1045
Contact: Coaltrans Conferences Ltd
Tel: +44 20 77798945
Fax: +44 20 7779 8946
E-mail: coaltrans@euromoneyplc.com
Website: www.coaltrans.com

March16-18

Power Generation World Africa 2004
Conference with case studies and Exhibition
Gallagher Estate, Johannesburg
Contact: Brian Shabangu, Terrapinn
Tel: (011) 463 6001
Fax: (011) 463 6903
E-mail: brian.shabangu@terrapinn.co.za
Website: www.powergenerationworld.com

A full calendar of energy events for 2003, local and international, is available on request from: seccp@earthlife.org.za

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