

SUSTAINABLE ENERGY NEWS on EMAIL (SENSE)

Welcome to the second edition of the email newsletter – Sustainable Energy News (SENSE) – a service of the Sustainable Energy and Climate Change Project (SECCP), a partnership between Earthlife Africa, Johannesburg, and WWF, Denmark.

SENSE will be published monthly and we welcome any feedback and submissions. Erika Schutze, employed as Research and Information Co-ordinator, will edit it. Mette Nedergaard will be assistant editor based in Denmark. Please let us know if you wish to be removed from this list or suggest recipients for the list.

Also, please indicate if you would like to receive our separate Climate Change email newsletter, edited by the climate change facilitator, Mamashoabathe Noko.

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1. SECCP News

1.1 “Energy Sustainability Indicators for SA”

SECCP has commissioned the Environment and Development Research Centre (EDRC) to undertake a study entitled “**Energy Sustainability Indicators for SA**”. This will help measure progress toward sustainability as well as provide a resource of publicly available data non-existent at present. Even where data exists on the performance of the sector, this is not tracked, used to benchmark South Africa's performance, or linked to policy debates. We propose to bring together a set of accessible data on sustainability for the energy sector, as well as write this up as a report on the sector, based on the Helio International Sustainable Energy Watch indicators (see www.helio-international.org).

1.2 Policies and Measures for renewable energy and energy efficiency in South Africa

The SECCP has revised its research programme and has finalised the focus of its main research programme. The objective of this study is to present a portfolio of Policies and Measures (PAMs) for realising the potential for renewable energy and energy efficiency in South Africa. Also, the study will show how the Government's policy on renewable energy and energy

efficiency as presented in the White Paper on Energy Policy can be met through the application of specific policies and measures.

As highlighted in a recent article in ESI Africa by Glyn Morris, Chief Executive of AGAMA Energy, a number of issues need to be resolved before a green electricity market can be developed in SA. This includes opening the sector for competition; making the transmission sector accessible to all suppliers; electricity generators must be free to choose to contract with any one or more generators; there must be retail competition to enable customers to choose service product offerings; and a certification process for all electricity must be established to ensure that retailers are in fact honouring their product descriptions.

The SECCP study will argue that renewable energy (RE) and energy efficiency (EE) are main components in an effective climate change response strategy and it will estimate impacts of RE and EE in terms of potential greenhouse gas reductions. It will also identify and make well-substantiated projections of sustainable development benefits related to realising this potential including job creation, access to energy, local environment and health, based on international experience (eg: China & India) as well as looking at developing country experience. Presently we are finalising the terms of reference and aim to appoint a lead agent by 18 February.

1.3 Free resource materials

We have a stunning **poster** on Climate Change, produced in collaboration with the Ecocity Project, urbanSEED and the City of Johannesburg, to give away.

Still confused about the semantics and bodies involved in Climate Change? Then you need our **booklet** called "*Getting to Grips with Global Climate Change Governance*".

Also available shortly: one-page fact sheets on renewable energy and climate change.

Email seccp@earthlife.org.za should you want to make arrangements to collect any of the above.

3. SA's renewable energy progress

Electricity restructuring plan to go before cabinet

A final plan to restructure the R25bn electricity distribution industry is due to go before the cabinet early March, finalising the establishment of six regional distributors.

This will end almost a decade of discussion between industry, government and labour on how best to reshape the fragmented and ailing sector.

Nelisiwe Magubane, chief director of electricity at the minerals and energy department, said all the relevant issues and the concerns of stakeholders were dealt with at an industry-wide meeting. The final proposal was to go before a meeting of the SA Local Government Association, while other industry players were also considering it.

The plan involves the establishment of six regional electricity distributors by merging the functions of Eskom and more than 250 municipalities.

Regional distributors (REDs) are to fall under an interim company, EDI Holdings, now being established. After five to seven years it is expected to be dissolved, and regional distributors will become freestanding entities. The first of the new distributors is expected to come on stream by March, and the process is due to be completed by 2005.

"The restructuring will (result in) some municipalities losing revenue (they receive from electricity distribution), and we must ensure that local government is not left worse off. "

The Cape Town municipality has warned the city will not give up its right to distribute electricity without a fight. The city relies on profit from power distribution for nearly 34% of its income. –

Jan, 21, 2002, Business Day, (edited) www.businessday.co.za

Research prepares the way to make SA buildings energy efficient

“Evaluation of the South African Energy and Demand Efficiency Standard through a Case Study” – L.J. Grobler and C.A. van der Merwe

The South African Energy and Demand Efficiency Standard (SAEDES) is an energy-efficiency guideline developed by the Department of Minerals and Energy. This guideline aims to reduce the energy consumption and/or demand of commercial buildings. A pilot project is currently underway to evaluate its applicability and practicality in South Africa.

Mutual Park is one of the demonstration buildings chosen to implement and evaluate SAEDES upon. The Initial SAEDES Prescriptive Evaluation produced a compliance of about 68%. If the building is upgraded to comply with SAEDES prescriptions, a possible saving of 9.2% of annual energy bill could be achieved. Overall, the evaluation of Mutual Park indicated that SAEDES Prescriptions are practical and achievable even on existing buildings. However, better compliance results would have been obtained if SAEDES were used to evaluate the design of the buildings, thereby eliminating costly refurbishments. – *Journal of Energy in SA*

Construction begins on Greenhouse Centre in Joubert Park, Johannesburg

Construction of the Greenhouse offices kicked off early January and signals the start to a new chapter for the Project. The first phase of the construction will see the old potting shed at the Wolmarans Street entrance transformed into the project’s new offices for the five GreenHouse Centre staff members. Ultimately, the Greenhouse will be a comprehensive environmental resource centre based in Joubert Park, which will serve all those in the Greater Johannesburg region, providing a base for environmental CBOs and NGOs in particular. Being able to move on site as early as April this year will strengthen the ties the Project has forged with other NGOs and CBOs already operational in the area. It could possibly also be an ideal venue to host lectures, workshops and conferences during the World Summit.

Being physically based in Joubert Park will also mean that GreenHouse Project staff can step up their involvement with other stakeholders and residents who live in the Park precinct. One of the most valuable lessons that has been learnt is that communication, creativity and keeping an open mind is what works best when various stakeholders get together to achieve shared goals. Desmond Khumalo of SEED – The Sustainable Energy, Environment and development Programme – has played a pivotal role in first engaging with communities around their most urgent needs. The broad objective of the SEED Programme within the GreenHouse Project is to transform Johannesburg into a “Green City” which effectively implements Local Agenda 21 network with relevant stakeholders in housing and build their capacity to integrate sustainable energy and environmental guidelines into the local government housing strategy and establish community Energy Committees in the inner city.

In the long term, plans for Joubert Park are to have a permanent exhibition hall and reception area, an on-site canteen and shop and a food garden planted according to permaculture principles, as well as an outdoor amphitheatre for hosting educational events and a recycling depot. If approved, there will also be composting toilets on site.

The GreenHouse Project plans to showcase demonstration models of sustainable and green building practices. The first building itself will incorporate the use of recycled tiles, make use of timber and other natural materials, use lime for paint finishes and include an example of a straw-bale structure.

The Greenhouse Project has had to use contingency money from project funders, Danced, in order to start with the first phase of construction which is expected to cost around R550 000. Fund raising is still underway to raise money for the phases of development that will encompass

the entire GreenHouse Project site in Joubert Park. The total costs are expected to be in the region of R25 million.

The Greenhouse Project is currently acting as secretariat on for the Joubert Park Coordinating Forum. There have also been fruitful association with the other organisations working in the precinct. These include a permaculture project with the mothers of the Lapeng Child & Family Resource Centre. The Greenhouse Project will also be involved with the "Park Ambassadors' plan" which is an initiative put forward by the Joubert Park Co-ordinating Forum. Park ambassadors will be local residents appointed to assist people visiting the park, carry out basic security functions and educate park users about waste. The move could go a long way in creating a greater sense of ownership and belonging for those who live right on the Park's doorstep.

Demonstration wind farms undergo environmental impact assessment studies

In January, the Darling National Demonstration Wind Farm Project and the Eskom Demonstration Wind Farm Project went into the final stages of approval for Environmental impact assessments (EIA). This entailed the publication of the final draft EIA reports and termination of comment period for Interested and Affected Parties (I&AP).

For the Darling wind farm, the EIA found that the site on Moedmaag Koppie at Windhoek farm has been researched scientifically for its wind resources. Furthermore, the long term (14 months) measurements that have been taken are in accordance with international standards, and yielded the following results: a mean annual wind speed at 50 m hub height of between 7,5 and 9,5 m/s; a capacity factor for modern Megawatt class turbine: 34 % equals 2944 full load hours per annum.

The Eskom SABRE-Gen wind energy demonstration facility at Groot Oliphantskop Farm (to the west of the N7 national road, which runs northwards from Cape Town to Malmesbury in the Western Cape) was established to test different types and makes of wind turbines under South African conditions. The main positive aspect of the facility lies in the involvement of a national utility in Renewable Energy applications.

South Africa Wind Energy Association (SAWEA) and overseas experts maintain that wind power electricity generation is already a well-developed and proven technology. SAWEA further identified a misleading statement on page 39 of the report that states that South Africa's wind climate is not suitable for large-scale wind electricity generation. "SAWEA wishes to point out, that this statement is based on an unpublished report based on a desk top study drawing the wrong overall conclusion of the wind climate and potential in South Africa."

SAWEA also criticized the location of the Eskom project on the grounds that it is too visible and that it is well known that wind turbine test fields are not attractive installations. This will create, from the outset, a negative reaction from the public and decision makers. Alternative sites were offered but rejected.

The project and its activities are in many aspects a duplication of the National Demonstration Wind farm in Darling and therefore an unacceptable waste of moneys charged to the consumer.

– Tel: SAWEA at (0)22 492 2806

Preparing for WSSD

Thabo Madihlaba, EJNF representative on the WSSD Civil Society Indaba, called a meeting of environmental NGOs for 16 January. The meeting was run by members of the Civil Society Secretariat and included many individuals who were new to the process. There was not much consideration of individual issues or the substance of input to the Summit, and no provision for breakaway groups, but before the end of the meeting a number of issues working groups (also referred to as task teams) were identified and individual representative from organisations volunteered and were given a mandate to lead or initiate a number of these working groups.

Richard Worthington will be driving the formation of an 'Energy Issues Working Group for WSSD'. Anybody interested in participating should send e-mail to: richardw@earthlife.org.za. Mamashoabathe Noko will be initiating a 'Climate Change Issues Working Group for WSSD' - maman@earthlife.org.za.

It is the intention of the SECCP to develop position papers for input to all processes and representative structures related to the Summit.

4. General Sustainable Energy News

Denmark – one step forward, two steps back with the donors

Traditionally one of the most progressive countries when it comes to renewable energy, having invented the world's first electricity generating turbine and obtaining 15% of its power from wind, it is also known for encouraging and funding renewable energy initiatives in SA. But the recent swing to the right in the elections is having repercussions across the globe. On Tuesday 29th of January, the release of the national budget for 2002 revealed that environmental funds have been cut by 50%. Prominent funder Danced has merged into Danida. Funds for South Africa have been reduced from 100 mio DKK to 66 mio. DKK in 2002. The new energy minister announced that he's cancelling three planned offshore wind parks. Furthermore, the Government has closed around 100 committees or withdrawn their financing.

The government's position is that experts (including NGOs) have been too dominant in political issues, and it wants to give back to the general public the right to decide their own positions. On the flip side, large companies seem to be recognising the formidable body of expertise that has been built up by years of supporting environmentally sustainable ventures and are still contacting the Denmark's World Wide Fund for nature (WWF), asking to be part of the international WWF campaign on reducing CO² emission.

European Union issues renewable energy directive

In September 2001, the EU adopted a Directive on the promotion of electricity produced from renewable energy sources in the internal electricity market. The Directive builds on an indicative target of 12% renewable energy for the Community as a whole by 2010 and requires member states to set national indicative targets for the consumption of electricity produced from renewable energy. Within the next 18 months, all the EU member states will be drafting and adopting legislation on renewables. The Directive leaves plenty of scope for interpretation, so the legislation may end up quite different in different countries. Furthermore, the renewables Directive lays down certain minimum conditions, and things that are ALLOWED. European NGOs will be following the work in the member states and put pressure on governments to be ambitious.

Bahia, Brazil: State pushes solar energy to address needs of rural populace

The Bahia State Government announced its intention to extend the rural solar energy program. It will install public lighting systems powered by solar energy in the agricultural regions around 45 cities in the state. The investment cost will be R\$ 4.43 million. A total of 687 systems are envisaged, of which 657 will be installed in small agricultural schools, benefiting 30,000 people. The plan is to install 141 systems by March 2002, with the installation of all 687 completed by June 2002.

"Our challenge is to take the electric energy to all the inhabitants of the rural areas of the state, where it would be too onerous and costly to extend the distribution network of Coelba. Instead, we are addressing the needs of the community through solar energy", explained the governor Cesar Borges. Bahia State is located on the north east coast of Brazil.

World's largest offshore wind farm for Irish sea

In January, two hundred wind turbines were approved for Ireland's east coast in a new development that will be the largest offshore wind power project in the world. Irish Marine & Natural Resources Minister, Frank Fahey, gave the go-ahead for the construction and operation of the 520 megawatt wind farm in an area of the Irish Sea known as the Arklow Bank. There are currently only 20 offshore developments worldwide, all in northern Europe. When completed, the Arklow Banks project will have three times the combined capacity of all offshore wind farms currently in production in the world. The wind farm application, which had been subject to full public consultation, had received no objections from members of the public. Fahey expects considerable revenue for Ireland from this development – \$1.7 million each year within five years of completion.

The development will contribute to the ability of Ireland to meet its greenhouse gas reduction target under Kyoto Protocol, an instrument of the UN Framework Convention on Climate Change that was approved politically during negotiations in 2001. Ireland has agreed to reduce its emission of CO² by 8% during the period 2008 to 2012. – *ens-news.com*

New Wind Farm Coming to Western Wales

England's energy minister Brian Wilson recently approved a project that will create the United Kingdom's (U.K.) largest wind farm. The Cefn Croes wind farm in western Wales will feature 39 turbines and will generate enough power for 40,000 homes.

Wind farming upstages nuclear in the UK

Britain could almost double its renewable energy capacity once a plan for a Hebridean island gets underway. There are advanced plans for the world's largest onshore wind farm acting as a catalyst to attract wave and tidal power stations.

The project's first stage would see 250 of the world's largest wind turbines towering over thousands of acres of land near Stornoway on the island of Lewis.

Environmental campaigners say a new generation of nuclear power stations may not then need to be built. The giant project, which will not be officially unveiled for several weeks, would provide as much "clean" electricity as a medium-sized nuclear station. The electricity generated would be "exported" via a 350-mile undersea cable, possibly to Merseyside or North Wales.

The international consortium planning the development says there is a potential to generate more than 2,000 megawatts of electricity – as much as three nuclear stations – from Lewis alone. <http://www.guardian.co.uk/Archive/Article/0,4273,4307266,00.html>

Municipal energy company recognized for top renewables program

The Los Angeles Department of Water and Power (LADWP) recently announced that the Financial Times has named LADWP as its "Renewable Company of the Year Award" for the utility's Green LA Program.

Financial Times representatives said that LADWP was selected for the award because it has exhibited a diverse energy portfolio and offers its customers a choice within the renewable energy space. The company has also used solar rebates and other incentives to promote the adoption of renewable energy technologies.

Nigerians urged to seek electricity off grid, especially in rural areas

About 40% of Nigerians have access to electricity, with the majority of unserved households being in the rural areas. Professor I.H. Umar, director general, Energy Commission of Nigeria made this known at a national workshop on "Creating demand and removing barriers to renewable energy development in Nigeria".

He noted that as a result of logistic problems grid extensions alone would not be able to meet the national rural electrification objectives in an affordable and sustainable manner. This, he said, has left the economic potential of the rural populace untapped.

He further submitted that the nation must, in addition to extending the national grid, embrace other options including off-grid renewable energy based systems such as solar photovoltaic wind and small-scale hydropower system for remote areas and independent mini grids. Umar said that his commission established a number of pilot renewable energy projects in various locations throughout Nigeria, developed a number of policy recommendations in favour of renewable energy technologies in the draft national energy policy as well as documented a number of recommended policy incentives for the development of renewable energy markets in the country, all of which are currently before the appropriate committee of the National Assembly for consideration.

Umar stated further that for renewable energy to successfully play its role, all barriers and strategies for their renewal must be identified in order to allow greater market penetration.

www.solarbuzz.com

Siemens Solar Introduces Earthsafe Solar System

California-based Siemens Solar Industries recently unveiled its "Earthsafe" 20 solar electric power system. The Earthsafe system will allow home users to send any excess power to local utility companies. The company said Earthsafe is the first standard system available that converts solar energy into utility power, and can also be used as an emergency backup power system. In an emergency backup mode, the Earthsafe system can function for up to four days, depending on power use and system configuration.

Siemens Solar said there are other additional applications for the Earthsafe system in offices, as well as in remote areas. – <http://www.siemenssolar.com>.

California promises to pay renewable energy producers

Officials with Southern California Edison (SCE) recently announced plans to repay the majority of the \$400 million that the utility owes to renewable energy producers. The new repayment scheme replaces plans reached earlier this year in an effort to help the utility avoid filing for bankruptcy.

"We reaffirm our effort to pay all of our past-due obligations with interest during the first quarter of 2002," said SCE president and CEO Stephen Frank.

In addition, the deal establishes a fixed price of 5.37 cents per kilowatt hour for SCE to purchase electricity from renewable energy producers over the next five years.

Solar energy for poor region in Tibet

An area of Tibet, known as the highest point of the "Roof of the World", has an average elevation of 4,500 meters. The annual sunshine of the region is 3,370 hours on average.

As the region is sparsely populated and residents scatter in various parts, 11,000 households with 70,000 people have no access to electricity. The local government invested 60 million yuan this year to initiate an electricity project.

Ngari Prefecture in Tibet is expected to end the history of no electricity next year in the wake of application of solar energy. Ngari has built 60 small photovoltaic stations with a combined generating capacity of 250 Kw and spread the use of 3,000 solar energy ranges.

NY mayor insists on car pooling

Carpooling is being encouraged in New York after tighter security restrictions have caused greater congestion in the city. Environmentalist groups have welcomed this restriction after New York Mayor Rudy Giuliani decreed that cars carrying just one person would be barred from most

river crossings into the city during the weekday morning rush hours, between 6 am and noon. The crack down on single occupant cars comes after commuters being grid locked on highways for hours caused the traffic to spill over from major routes and clog smaller streets and residential areas. The restriction has prompted thousands to share a ride or to take public transport.

Zafarana wind farm, Egypt begins official operation

In mid-October, Nordex officially handed over the 63 MW Zafarana wind farm to the Egyptian energy ministry. The farm, located about 200 km south-east of Cairo, is the largest ever built in the country, and comprises 105, N43/600 kW turbines. Generating 40 million kWh annually, the site should meet 0.5% of Egypt's current electricity requirements.

Germany's largest solar plant under construction

In September, German firm Voltwerk began construction of the country's biggest power plant in Soechtenau, Bavaria. The company had earlier in the year signed a local supply agreement for 3 MW with Conergy. The first stage in the project will be a 600 kW PV unit, due to be linked to the Isar-Amperwerke grid during November.

Soybean oil may soon fuel jet planes

Cleaner jet fuel is on the way. Soy bean oil has been successfully used to power cars, buses and boats, and now researchers at the US federal government's Agricultural Research Service have found a way to blend the bean-based oil with jet fuel.

The payoff will be cleaner air and larger profits for U.S. soybean growers when this oil, known as biodiesel, is functioning in the engines of jet aircraft.

Recent amendments to the US Clean Air Act call for a reduction in harmful emissions from commercial and military aircraft, and considering that oil imports cost the US \$60 billion per year, explorations into domestically produced bio-diesel fuel are attractive.

Biodiesel performs like petroleum diesel fuel. It is safer to handle, and offers greater lubrication for engines and produces lower emissions. It is biodegradable and compatible with current engine and fuel distribution systems.

<http://wire0.ises.org/wire/CurrentAffairs/RENews.nsf?OpenDatabase>

Global solar electricity prices stable against backdrop of soaring energy prices

Since California privatized its electricity supply, not only have there been recurring power blackouts and soaring energy prices, but energy prices have risen across the USA. In contrast, global solar energy prices have risen only 2% over the past twelve months according to the latest survey by Solarbuzz Inc. (see its new solar energy portal web site at www.solarbuzz.com.)

Zero emission bus invented

Electric Fuel Corporation (EFC) recently announced the first on-road demonstration drive of the zero-emission electric bus based on the company's zinc-air fuel cell technology. The demonstration is part of a two-day event to be held in Las Vegas, NV, showcasing the vehicle to transit operators and industry representatives from around the country. EFC said the demonstration marks the public debut of the first full-sized electric bus offering an affordable alternative to diesel fuel. The bus is designed to eliminate pollution as well as health problems associated with diesel fuel emissions. Contact: EFC, website <http://www.electric-fuel.com>.

Renewables Benefit from Energy Funds

Funding from power companies in Pennsylvania have helped turn the state into the number one generator of wind power in the U.S. west of the Mississippi River. These Sustainable Energy

Funds (SEFs) help finance the start up of green energy companies and assist power users in developing cleaner energy.

The SEFs were created as part of Pennsylvania's electricity market deregulation. The dominant power companies in the state, PP&L, PECO, GPU and West Penn Power, were all compelled to create their own funding mechanisms. e-mail ppltsef@aol.com.

Northwest Consortium to Examine Wave Power

The U.S. Northwest Energy Innovation Center (NEIC) recently announced that a consortium will invest money into research and development of a project that seeks to demonstrate the viability of power harnessed from waves. A one-megawatt demonstration project will be developed near the town of Neah Bay, WA, using buoys to capture the motion energy from wave action. The energy will pressurize seawater, which will be directed to power a one-megawatt turbine. NEIC said the project, which will cost between \$1.5 and \$2 million, will generate about 1.6 gigawatt-hours of electricity annually.

Philippines Hopes to be Geothermal Energy Leader

The Philippine government is examining ways to generate more of its electricity using domestic sources, in an effort to reduce reliance on imported oil. The Pacific nation gets its power from coal, natural gas, and diesel and fuel oil, as well as hydroelectric and geothermal sources. As for geothermal, assistant energy secretary Cesar Ramirez said his nation hopes to greatly increase its power share from this renewable resource. "Right now, we are next only to the United States," said Ramirez. "But we aim to be number one."

The Philippine National Oil Company also has plans to build a 40-megawatt wind plant in Ilcos to be ready by 2005. The National Power Corporation may also be restructured in an effort to end its monopoly on supply and prices.

Canada introduces "green" labelling of renewable low-impact electricity

Government officials in Canada said the country is continuing its campaign for cleaner air with two new draft guidelines – one to encourage the use of renewable energy sources and one that will work to lower emissions produced by new power plants.

The government plans to release a guideline designed to help consumers identify electricity generated from renewable energy sources with low environmental impact. The draft guideline on renewable low-impact electricity will formalize licensing and certification criteria under Environment Canada's Environmental Choice Program.

Green Groups Call for New U.S. Energy Plan

Environmental groups in the U.S. are urging the Bush administration to revisit its energy plan taking into account the impact of the terrorist attacks in September, and the resulting war in Afghanistan. The Institute for Energy and Environmental Research (IEER) and Friends of the Earth have drawn up an alternative energy strategy that aims to lessen the nation's dependence on fossil fuels. The Bush plan, in contrast, would increase the use of coal, oil and natural gas through 2040. IEER's energy proposal calls for drastically reducing dependence on oil and coal, while at the same increasing the use of wind energy. It also outlines a shift to smaller, more efficient power generation facilities.

The group also wants nuclear power to be eliminated by 2030, and does not support further research into pebble bed reactor technology, which is designed to prevent nuclear plant meltdowns.

Funds Develop A Taste For Clean Green Energy

Green really is the colour of money. Investments in new energy technology, the power behind renewable energy, are booming as fund managers discover the potential of these verdant industries.

The headiest estimates currently value the energy technology market at \$7 billion and according to research consultants Clean Edge, based in the heart of the high-tech Silicon Valley, the figure will blossom to \$82 billion by 2010. London-based fund managers say they are eager to buy large portions of companies that make fuel cells and wind turbines, solar energy technology and offshore power generation. Robin Batchelor, head of energy at Merrill Lynch, has just launched the investment bank's second fund, the New Energy Technology Fund focusing on alternative energy-providers. The fund includes a range of stocks that span renewable energies like wind, wave, solar and biomass, onsite energy generation, energy storage and the engineering that 'glues' all the technology together.

Renewable energies are projected to be the fastest growing energy sector of consumption across the world, according to figures from the industrialised world's energy watchdog, the International Energy Agency.

Electric bicycles encouraged in Canada

The Electric Vehicle Association of Canada (EVAC) recently launched a campaign which urges Canadian provinces to accelerate the development and passage of regulations for electric bicycles (EBs). The new campaign is titled "Help Us Bring Electric Bicycles to Canada!" E-bikes are zero emission and affordable.– <http://www.evac.ca>.

5. SA Energy developments

5.1. Merger of Soekor and Mossgas

The Government recently announced that Soekor and Mossgas had been merged to form a company with the unofficial name of Petrosa. Mr M Tsume was appointed as the newly elected CEO of the company. The current status of the merger is as follows:

- Legal, commercial, and financial integration is well under way
- Integrated business plans are in the process of being completed by management for consideration by the boards
- Consultations, in accordance with the company's legal obligations are being conducted with staff.

The Department of Minerals and Energy recently undertook an analysis of Soekor and Mossgas, which concluded that there was a lot of duplication in the functions of the two companies. Contact Kanyo Gqulu at (012) 317 9086.

5.2. Integrated Energy Plan (IEP)

The Department of Minerals and Energy (DME) will be holding a "National Integrated Energy Planning Workshop" to present and discuss the interim final report on the Integrated Energy Plan from the Energy Research Institute, UCT. This will be on 19 February 2002, 08:00 – 17:00, Conference Room 2B, DME, Pretoria. The draft report titled, *Preliminary Energy Outlook for South Africa* aims to provide a background to energy supply and demand in South Africa and form the basis for South Africa's future energy model. Revisions and alterations will be made according to comments received from interested parties and new data and information collected. The Report looks at energy demand in five main sectors: industry; commercial; agricultural; residential; and transport. It further identifies South Africa's present energy sources and the possible transformation options in respect of alternative energy sources. Contact Ruse (Ms) Moleshe at (012) 317 9284.

5.3. Regional Electricity Distributors (REDs) Establishment Bill

The Bill is currently being drafted by the Department and has not yet been published for comment. The Department hopes to publish it for comment within the first quarter of 2002. The Government is currently restructuring South Africa's electricity distribution industry (EDI). The Regional Electricity Distributors Establishment Bill aims to fulfil the following key elements of the EDI restructuring programme: establish Regional Electricity Distributors (RED); transfer assets, liabilities, staff rights and obligations to the REDs by operation of law; create the new regulatory regime to be administered by the National Electricity Regulator and to strengthen this institutions powers and accountability; create the necessary legal framework for the EDI which will involve amendments to the existing legal framework to modernise it and to reflect the new structures and functions that are being put in place (e.g. separation of distribution from retailing); and design special provisions that may be necessary to achieve specific policy objectives (e.g. cross-subsidies to support low income customers). Contact David Mahuma at (012) 317 9519

5.4. Renewable Energy Strategy For South Africa

The Department of Minerals and Energy is scheduled to release the White Paper for public comment in early February 2002. The commenting period is to last until the end of February where after the Department will consider the comments received and amend the strategy where appropriate.

The aims of the White Paper are to: provide support for the development, demonstration and applications of renewable energy sources for both small and large scale applications; to support renewable energy technologies for application in specific markets on the basis of researched priorities; to promote the development of appropriate standards and guidelines and codes of practice for the correct use of renewable energy technologies; to establish suitable information systems of renewable energy statistics.

The Government's objectives and challenges it seeks to address in the Strategy include: ensuring implementation of economically feasible technologies; ensuring that an equitable level of national resources are invested in renewable energies; addressing constraints on the development of renewable energy industry measures to be employed; establishment of a renewable energy fund supported from the fiscus fund to be administered by Central Energy Fund; institutional support for manufacturers, investors and consumers; to encourage large scale local manufacturing subsidies to support market penetration; awareness creation; and information dissemination. Contact Ms Lisa at (012) 3179203

5.5 Bio-Diesel Incentives

The National Treasury has agreed to drop the tax and levy normally payable on bio-diesel as a first step to facilitate the increased manufacture of bio-diesel in South Africa. For the first time there will be a distinction for tax purposes between bio-diesel and diesel made from crude oil. Several government departments, headed by the minerals and energy and finance, are to launch a probe into aspects of commercial production of bio-diesel this year. The main aspects under investigation will be the economic effect of making and using bio-diesel, "energy considerations" and marketing the environmentally friendly fuel. Contact Hein Baak at (012) 3179221

5.6. National Strategy for Sustainable Development

The Department have almost completed the Second Draft of their Synthesis Report. The Synthesis Report provides an analysis of 20 principles addressed by Agenda 21, these principles having been identified as core principles by the Department of Environmental Affairs

and Tourism. The Report furthermore identifies critical gaps in South Africa's compliance with these principles and provides recommendations regarding their implementation in South Africa. Contact Hanna Andersen at (012) 310 3885

5.7. Regulations restricting the use of plastic bags.

Cabinet approved the regulations in principle on 22 November 2001. The State Law Advisor is currently scrutinizing the Regulations, and it is uncertain when they will be published in the Government Gazette.

The collection and disposal of plastic bags is a growing problem in South Africa. The use and free availability of plastic bags has increased significantly in recent years and large amounts of bags have resulted in the pollution and degradation of the environment. Thin non-reusable bags are indiscriminately dumped and not collected for recycling or disposal since they have little commercial value. The problem is severe in low-income areas where waste collection services are inadequate. The aim of the regulations is to restrict the production of non-reusable plastic shopping bags and to promote re-use and recycling. Contact Howard Benkenstein at (012) 310 3704.

5.8. DRAFT PROGRAMME Parliamentary Committee on minerals and Energy (14/01/02)

JANUARY – MARCH 2002

Committees 14/01 – 25/01

Members Training 28/01 – 01/02

Party Training 04/02 – 07/02

Plenaries 12/02 – 25/03

Tue. 22 – Wed. 23 January Workshop for Members of the PPC with Department on Regulation of the Liquid Fuels Sector (Workshop for Members only)

Thu. 24 January Electricity Supply Industry and ESI Regulatory Bill

Wed. 13 February Electricity Distribution Industry and EDI Regulatory Bill

Wed. 20 February Electrification and non-grid electrification

Wed. 27 February Workshop with Department on Budget

Wed. 06 March MEETI Workshop on Mineral and Petroleum Resources Bill (*subject to Bill being Tabled*)

Wed. 13 March Legislation (*Petroleum Products / Petroleum Pipeline / Mineral and Petroleum Resources Bills – subject to Bills being Tabled*)

Wed. 20 March Legislation (*Petroleum Products / Petroleum Pipeline / Mineral and Petroleum Resources Bills – subject to Bills being Tabled*)

Legislation will be prioritised and additional meetings may have to be scheduled.

STILL TO BE SLOTTED INTO PROGRAMME:

Radioactive Waste Policy and Strategy

Update on PBMR Process

White Paper on Renewable Energy

5.9. Update on FEE conference, 11-12 February 2002

The First Annual Conference for the Forum for Economic and Environment (FEE) will take place on 11-12 February 2001 at the Breakwater Lodge, Graduate School of Business (GSB), University of Cape Town. The first morning will be devoted to key policy issues in environment and economics, including key note addresses by Dr. Crispian Olver, Director General of the Department of Environmental Affairs and Tourism, Professor Ogunlade Davidson, Director of the Energy & Development Research Centre, Professor Partha Dasgupta, leading international environmental & resource economist, and Dr Franz Tattenbach, advisor to Costa Rica's environmental management strategy. The following day and a half will consist of more than 40

peer reviewed papers - from local and international authors - on topics including climate change, valuation, policy-science linkages, water, and sustainable development. The Annual General Meeting of the FEE will be held the evening of 11 February at the GSB.

This conference promises to be an excellent showcase for linking economic and ecological thinking, as well as an opportunity to network with professionals in the field.

– *Thanks to Contact Trust for updating us on parliamentary proceedings*

5. Questions and Answers

Questions and Answers: What is the Clean Development Mechanism provision in the Kyoto Protocol and how could it benefit South Africa?

Wind power substituting coal in South Africa: A potential CDM Project

One of the Kyoto Protocol's most controversial features is the incorporation of market-based mechanisms, designed to allow developed countries to achieve their required emissions reductions at the least possible costs. The term "Flexibility Mechanisms" refers to the three co-operative mechanisms under the Kyoto Protocol- Joint Implementation, International Emissions Trading and the Clean Development Mechanism. While all these mechanisms will become increasingly relevant in the global approach to emission reductions, most of the attention has been directed towards the Clean Development Mechanism (CDM).

With the CDM, governments had created a framework for developed countries to claim credits for greenhouse gas emissions reductions, avoidance or off-sets achieved in cooperation with a host developing country. The CDM was also established as a means of involving developing countries in the effort to combat Climate Change and to ensure that these efforts contribute to global sustainable development. The CDM is presented as an overarching accord for organising, structuring and financing initiatives involving North-South collaboration, with the objective of addressing the global problem of Climate Change with mutual benefit to participating countries.

The CDM will encourage developed country companies to build wind, solar or other clean-energy projects in developing countries.

A company from an industrialised country invests in development of a renewable energy power plant in South Africa, in place of a coal power plant as previously planned. This results in lower national GHG emissions than would have been the case without the project investment. The avoided emissions (reduction relative to the business-as-usual scenario) are certified as credits (Certified Emissions Credits or CERs), and the developing nation and investing company determine how to share the credits. Through this joint project, South Africa acquires a more ecologically benign technology and capital investment in the plant. The company from the industrialised country acquires a share of CERs it can use to meet its emissions reduction commitments at home.

A quick calculation for a wind energy project, using coal-powered electricity as a baseline and a modest carbon price of US\$10 per ton of CO₂, shows a subsidy of US\$ 0.01131/kWh (at R8 to the dollar, this is over SA R0.09/kWh). Over the life of a wind energy project, this would yield a subsidy of over 20% of the capital cost, a considerable subsidy to a renewable energy project.