

SUSTAINABLE ENERGY NEWS on EMAIL (SENSE)

Number 34

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

SENSE is a regular publication, edited by Nkosana Rakitla. 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**.

CONTENTS

1. **SECCP News:** Become an Energy Activist, Update on the Earthlife Africa Energy policy unit
2. **SA Sustainable Energy progress:** State Hydro plant seeks clean-energy accreditation, surplus maize to be turned into ethanol.
3. **SA Unsustainable Energy:** Eskom Watch - Matimba B power station EIA process, Komati Power Station, Court Gags ELA of Eskom's "Leak"
4. **SA's General Energy News:** Alcan delays SA smelter decision, South Africa second Regional Electricity Distributor by 2006
5. **SA Energy Policy:** Integrated Energy Planning II, SA Electricity Regulation Bill, National Electricity Regulator to develop a multi year price tariff for Eskom
6. **Sustainable Energy News from around the world: Africa:** Oil prices impact on people in West Africa **The rest of the world:** Indonesia Pushes Palm to Capture Green Fuel Pie, Soaring Oil to trigger Renewables Boom
7. **Events**
8. **Appendix 1:** Sustainable Energy Briefing 7: National Energy Bill

1. SECCP NEWS

Note from the editor

Dear readers

I would like us to reflect back to September 2004 when the South African cabinet approved the release of the Draft Energy Bill (NEB) for public comment. This legislation looked important to effect a number of the provisions of the White Paper on Energy

policy for South Africa of 1998 (WPEP), including the establishment of the National Energy Advisory Committee NEAC) and requirements for sound energy planning, development and use.

So where is it? It has not been to the State Law Advisors, to establish whether it is in conflict with other legislation nor has been to the Department of Minerals and Energy Parliamentary Portfolio Committee.

Although national energy bill is a step in the right direction in implementing energy policy and makes many essential provisions, but for the bill to be more effective it needs to fully reflect the intentions expressed in the 1998 White Paper and other policy documents relating to environmental health, access to essential services and in particular the provision for integrated energy planning, research and development priorities and public participation.

To read more about the national Energy Bill scroll down to appendix 1. 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: nkosana@earthlife.org.za

Become an Energy Activist

We are delighted to report that the Sustainable Energy and Climate Change Project first round of the capacity building course for energy activist has been completed. This is an eight days participatory approach-learning course focusing on Energy Resources and Policy, Environmental Justice and Activism.

Congratulations to the participants who have successfully finished the course namely: Patrick Mashile and Thembisile Mlambo of Daveyton Environmental Youth Counsel, Themba-Tshepo Mkhwanazi and Masala Beauty Mudau f Soweto Electricity Crisis Committee, Ndade Mxunga and Lerato Maregele of Jubilee Gauteng, Jodi-Anne of SECCP of Earthlife Johannesburg, Itumeleng Mogatusi and Desiree Motapi of Inji Ya Uri, Zandile Mabaso of Green House Project and Betty Mathapelo Modukanelo of NECTEC Earthlife Africa Johannesburg.

Update on the Energy Policy Unit

We regret to announce the resignation of Sekgametsi Mandhlazi from the SECCP Energy Policy Unit (EPU) at the end of the "probation" period, due to insufficient fit of person and programme requirements. We have received an encouraging response to advertising of the position and are confident that the EPU will be back in operation this year.

SECCP will up-hold the commitment to providing capacity building on policy processes and the opportunities for intervention in the energy sector, although this will now be in November rather than this month.

For details contact Nkosana Rakitla: nkosana@earthlife.org.za
011 339 3662

2. SA Sustainable Energy progress

Free State Hydro plant seeks clean-energy accreditation

Source creamer's media

The Bethlehem hydropower plant in the Free State, construction on which is scheduled to start early next year, is in talks with the World Bank regarding possible funding for certified emissions reductions (CERs), as a result of the estimated 25 000t of carbon savings which stands to be achieved through the projects.

Under the Kyoto Protocol's Clean Development Mechanism (CDM), projects, which significantly reduce greenhouse gases (GHG), can qualify for CER, which in turn make them eligible for special funding from bodies such as the EU or World Bank.

Sibusiso Ngubane renewable energy commercial manager for the Energy Development Cooperation (EDC) a division of the state-owned Central Energy Fund (CEF) said that all the necessary formalities, barring the power generation licence, power – purchase agreement and environmental impact assessment and land lease have been finalised and that negotiations for outstanding agreements are in the final stages.

The Bethlehem Hydro is to have access to nonseasonal water source generated by the Lesotho highlands water project and there are possibilities for acquiring a long-term power purchase agreement from Eskom, which is an important stakeholder because of the long-term investment finance so that investors can be sure of recouping their funds.

The plant also has access to concessionary finance from the Dutch based project developer NuPlanet, due to the sustainable nature of the project as a renewable energy source. Ngubane added that the project is complimentary to the targets of supplying 10000 GWh of power within the next ten years.

The Power Station will produce a cumulative 3,9 MW of electricity, with yearly output of 86 GWh. The renewable energy commercial manager said he expected the annual sales of some R4, 6 million with a return on investments of 16%. Ngubane noted that one of the challenges facing the project was acquiring water use agreement from government, as policies at the Department of Water Affairs and Forestry are geared up for consumption rather than reuse water applications. However the project has changed the department's thinking to a certain extent.

Surplus maize to be turned into ethanol

Source The Business Day

Energy Development Cooperation, division of the state-owned Central Energy Fund is in line for a 25.1 % stake in Ethanol Africa, the company that commercial farmers have set up to spearhead a project to turn surplus maize into Bio-fuel.

The project is aimed at reducing the country's maize surplus, which has contributed to the low maize price. The farmer's body Grain SA will have surplus stock of about 4.5 million tons at the end of the marketing season in April next year.

The project will see ethanol, which is an alcohol-based alternative fuel produced by fermenting and distilling starch crops such as maize, produced using the surplus. Ethanol can be used as an additive to petrol.

South African commercial farmers have seen the maize price slump from more than R1 000 a ton in November last year to just more than R700 a ton. Some farmers will

struggle to recover their costs. It is thought that many commercial farmers will probably respond by planting less maize the coming season.

Commercial banks and agriculture companies providing funding have said that they will back the farmers in this instance.

The mooted ethanol project will see the construction of eight ethanol plants in the traditional maize producing provinces of the Free State and North West. The plants are to be built at a cost of R630million each and are expected to be operating in April 2007. Some of the ethanol produced in these plants will be exported to countries such as Japan. Grain SA chairman said the plant will have use up about 2-million tons of maize if they were to boost the commodity's price.

3. SA Unsustainable Energy

Matimba B Power Station EIA Process

By Nkosana Rakitla

The proposed Matimba B Power Station has a maximum capacity of 4 800 MW, it is proposed to be constructed at Lephalale (previously Ellisras) in the vicinity of the existing Matimba Power Station. Eskom has appointed Bohlweki Environment to manage the environmental impact assessment process, to view the stakeholders meeting minutes to go www.bohlweki.co.za / project.

Bohlweki Environmental have informed SECCP that the specialist are currently in the process of finalising their reports for the scoping study and it will be made available for public review. Initially the Environmental Scoping Report for the Matimba B project was to be made available for the public review in September, but so far Bohlweki has informed us that it will be available first week October 2005.

As an Interested and Affected Party Earthlife Africa JHB made submission to the Matimba B Power Station raising concerns; that it is not acceptable for Eskom to put forward only one technology option (Pulverised Fuel) as the best available technology option to be used at the Power Station, the decision is based on a pre-feasibility study.

Eskom need to consider that it is a legal requirement of the EIA regulations that alternative technology must be considered, including independent assessment of the technology options as part of the Scoping process.

The background document of the project reports that recent advances in technology such as the possibility of using a higher efficiency combustion process (i.e. supercritical combustion) will result in the new station's thermal efficiency being up to 40% (compared to approximately 34 % of older power stations), resulting in less coal required to be burned to produce the same amount of energy.

However the project needs to consider alternatives, including Integrated Gasification Combined Cycle (IGCC), which could be up to 30% more efficient than the technology currently proposed by Eskom. IGCC is far better than Pulverised fuel Technology, it (IGCC) is compatible with further reductions of local pollution and climate change migration, it can provide up to 25% reduction of all air and atmospheric pollution on efficiency alone.

Return to service of Komati Power

By Nkosana Rakitla

Eskom has identified the need to for return to service of Komati Power Station and is currently in the planning phase of the project, which includes negotiations with suppliers and determining the final technology and/or minor design changes, which are required to be made.

As part of the project-planning phase and in accordance with the requirements of the Environmental Conservation Act (Act No 73 of 1989) and the associated Environmental Impact Assessment regulations, discussions have been held with the Mpumalanga Department of Agriculture and Land Administration (M DALA). An application for exemption from undertaking an Environmental Impact Assessment (EIA) has been submitted to M DALA together with an Environmental Management Plan and Environmental Risk Management for return to service of Komati Power Station. A public participation process has been initiated based on the ERA and EMP and the outcome of the public participation will influence the M DALA to grant or not grant Eskom the exemption for conducting a full EIA process.

Komati Power Station is a coal fired power station situated on the farm Komati Power Station No 56 (Registration Division IS), approximately 37 km from Middleburg, 43 km from Bethal and 40 km from Witbank via Vandyksdrif. The power station comprises 9 coal fired units designed to generate 1000 MW with five units 100 MW and four 125 MW and the electricity produced is fed to national electricity grid.

The refurbishment and servicing of all components within the power station and the use of new technology and/or small-scale design changes must consider best available technology to reduce emissions and waste from the power station and total energy input against output - and thus the overall energy efficiency of operation. The implementation of best practice methods that include water requirements for pollution remediation activities that may be considered as a future option to meet air quality standards (e.g. scrubbers); this will result in improve water quality associated with run-off from water treatment plant, ash dams and coal stock pile areas.

To achieve the above stated refurbishment and servicing requirements it is important that a full Environmental Impact Assessment be considered as it will provide a strong base for the investigation of alternatives, at least technology options, both in terms of plant operation e.g. possible upgrades of boilers to more efficient technology and mitigation e.g. end of pipe pollution control provisions.

Court gags Earthlife on Eskom “leak”

Source: The Business Day

Power utility Eskom won an interim order at prohibiting social - environmental group Earthlife Africa from publishing information on the Pebble Bed Modular Reactor (PBMR) project that Eskom mistakenly sent to Earthlife Africa in June.

The Johannesburg High Court also extended the ban to media organisations that received these documents from Earthlife. Judge Francois Malan ordered Earthlife and media organisation not to publish the documents until a hearing on October 18 into whether they should remain confidential is held.

The document contained information given at Eskom board meetings on the nuclear reactor project as well as business plans and cost estimates. Eskom said it would

retrieve the confidential information supplied, and replace it with the documentation that the company had undertaken to provide.

The utility's lawyer by mistake sent Earthlife Africa minutes of the board meetings intended for its own use in preparation for a case brought by Earthlife Africa. In August Eskom defended an application in which Earthlife demanded the release of Eskom board minutes on financial, commercial and technical aspects of the project.

Earthlife Africa has already delayed the project by obtaining a Cape High Court order in January 2005 to set aside government authorisation of the modular reactor. The court accepted Earthlife Africa's argument that the environmental affairs director – general had not afforded it a fair hearing before deciding to authorise the plant in 2003. The PBMR project forms part of Eskom's plans to meet the demand as its surplus electricity capacity begins to run out. The development entails building a demonstration reactor project at Koeberg near Cape Town and a pilot fuel plant at Pelindaba, near Pretoria.

Responding in the Earthlife Africa's application in the Johannesburg High Court, Eskom said the project was in the developmental stage, and revealing technical information could reduce the competitive advantage South Africa held in the nuclear energy sector.

Earthlife Africa wanted technical and financial aspects of the project, as it believed safety concerns over the modular reactor had not been addressed and economic benefits had not been demonstrated. Earthlife also wanted to know how Eskom justified its investments in the project.

4. SA's General Energy News

Alcan delays SA smelter decision

By Bernard Simonin Toronto

Alcan has again pushed back a decision on a proposed aluminium smelter on the east coast of South Africa after deciding that the project is viable only on a far bigger scale than previously planned.

The smelter, to be built at Coega, near Port Elizabeth, would be one of the biggest industrial investments in South Africa since the end of apartheid. It would also anchor a new industrial development zone in one of the most impoverished parts of the country. South Africa's state-owned Industrial Development Corporation said earlier this year that it would probably take a 15 per cent stake in the US\$2.5bn project. Alcan inherited the project when it took over Pechiney, the French aluminium producer, at the end of 2003. Coega was billed as an opportunity for the Canadian group to test a new smelting process developed by Pechiney, which Alcan hopes to sell to other aluminium producers.

Coega's capacity was originally set at 460,000 tonnes a year

Alcan said last year that it might build the plant in stages, with an eventual capacity of 600,000 tonnes. But Travis Engen, the Canadian group's chief executive, said in an interview yesterday that Coega needed an output of 800,000 to 900,000 tonnes to be competitive. The increased scale has necessitated a fresh review of other aspects of the project, such as power supplies and other infrastructure.

"The project is going through a process of re-examination," Mr Engen said. No timeline had been set, he added, "but by year-end we'll have a much clearer picture of what we're looking at".

Alcan is currently pressing ahead with smelter projects in China and Oman. The head of its primary metal group, Cynthia Carroll, cited access to competitively priced long-term energy supplies as a key challenge for the industry. Alcan also told investors that it was pushing back to 2008 from 2006 its goal of reaching a return on capital sufficient to cover the cost of capital. It blamed higher raw material costs and the impact of the weak US dollar. While aluminium is priced in dollars, the bulk of Alcan's expenses are incurred in other currencies. According to Alcan executives, the company's overall return on capital has also been temporarily depressed by the acquisition of Pechiney and the disposal earlier this year of the rolled products business, the company's strongest performing division.

South Africa second Regional Electricity Distributor by 2006

Source The Business Day

The company responsible for the implementation the government's regional electricity distribution (RED) project has indicated that the second RED will be launched next year (2006).

Electricity Distribution Industry (EDI) Holdings said that the 'RED Two' would service Ekurhuleni Metropolitan area of Gauteng, also span the Motheo, Mangaung, Matjhabeng, Maluti-A-Phofung, Metsimaholo, Sol Plaatjii, Gamagara and Dikgatlong municipalities.

In a speech to the National Members Assembly of the South African Local Government Association (SALGA), CEO of EDI Phindile Nzimande said that the sequencing of the launch of the second RED was been finalised and that the Department of Minerals and Energy (DME) would soon make an official announcement.

The project involves the restructuring of South Africa's R50 billion electricity distribution industries into six regional electricity distributor, or REDs. The process will see Eskom and 187 municipalities transfer all related assets, liabilities obligations, staff and rights to the RED, in order to streamline electricity distribution.

REDs will distribute electricity bought from Eskom to at wholesale prices to be determined by the National Electricity Regulator (NER) – and pass on revenue from the power tariffs to the relevant local authorities.

The first RED was launched in Cape Town on July 1, this year, and a further five are planned in the Johannesburg, Pretoria, Durban, and Port Elizabeth and Ekurhuleni areas. At the launch of RED one Nzimande said that government aimed to consolidate industry capitalising on economies of scale, financially viable distributors, rationalised and competitive tariffs to the relevant, efficient service provision, improved reliability of supply, access to electricity across the board and cross pollination of best practice between utilities through the ongoing restructuring process.

EDI Holdings, which is responsible for the implementation of restructuring process, is 100% owned by DME and has board representatives from SALGA, Eskom and National government. So far according to government information service BuaNews 33 municipalities had signed cooperative agreements for the RED system by January this year and that 25 are in negotiations.

In light that other municipalities are sceptical of joining the REDs, in fear of losing assets and revenue, the Electricity Regulation Bill which will regulate the implementation of REDs in the context of the wider electricity reform process, raises the question of whether the constitution will have to be changed to force municipalities to give up their right to supply and distribute electricity to the hand of the REDs. At the same breath labour are expressing concerns that jobs will be lost during the merger of the power distribution business units of Eskom and municipalities.

5. SA Energy Policy:

Integrated Energy Planning

BY Nkosana Rakitla

The Department of Minerals and Energy is currently forming a steering committee to influence the Integrated Energy Planning II process.

The process is at a stage where the department is assessing the names of the people to sit in the steering committee, and will soon give approval. DME has informed us that there is a possible workshop on the Integrated Energy Planning around the 1st December 2005.

To know more about Integrated Energy Planning Steering Committee contact tshiphiri.ramakokovhu@dme.gov.za

National Electricity Regulator to develop a multi year tariff for Eskom

South Africa National Electricity Regulator (NER) has begun what it regards as the most important decision making process in its history. In the past, it has always determined the price of electricity to be charged by Eskom on an annual basis.

Now that Eskom faces the need for massive investment in electricity generating capacity in order to meet the growing electricity demand of the South African economy, it is important that it faces a stable regulatory environment to help it finance the capital investment.

Therefore NER is intending to move to the first multi-year agreement on the level of Eskom's prices. As from April 1 next year pricing arrangements will be in place. The massive investment programme will put upward pressure on electricity prices, but NER's objectives is that customers should have the lowest prices consistent with Eskom being able to finance its business.

In an effort to involve all key stakeholders in the process, NER is inviting all interested and affected parties to comment on the Consultation Paper prior to submitting the proposed mechanism to the National Electricity Board to approve multi-year pricing mechanism.

The consultation paper for the development of a multi-year pricing mechanism has been made publicly available on the NER website www.ner.org.za
Source: Creamer's media

SA Electricity Regulation Bill

By Nkosana Rakitla

The National Electricity Regulation Bill is published as introduced in the National Assembly as a section 75 Bill, explanatory summary of the Bill is published in the government gazette NO 27984 of 31 August 2005.

The Bill is set to establish a national regulatory framework for the electricity supply industry; to make the National Energy Regulator the custodian and enforcer of the national electricity regulatory framework; to provide for the licences and registration as the manner in which generation, transmission, distribution, trading and import and export of electricity are regulated; to provide for the establishment of the National norms and standards to regulate reticulation; and to provide for matters concerned therewith.

Mr N Mthethwa, MP, Chairperson: Parliamentary Portfolio Committee on Minerals and Energy issued an invitation for public comments on the Electricity Regulation Bill, a summary of the Regulation Bill can be download on www.dme.gov.za, submissions must reach Shanaaz Isaacs, Committee Secretary, PC on Minerals and Energy, 3rd Floor, 90 Plein Street, PO Box 15, Cape Town, 8000 by no later than Wednesday, 19 October 2005.

6. Sustainable Energy News from around the world: Africa

Oil prices impact on people in West Africa

The price of a barrel of oil has risen from \$40 at the beginning of the year to \$70 on the 30th August this year. This resulted in thousands of people taking to the streets in Nigeria protest of the 30% fuel price hikes. Across West Africa, some of the world's poorest are also feeling the brunt, struggling to cope with the record-breaking cost of crude oil, and the knock-on effect it has had on basic goods.

The average West African person does not own a car, or even a bicycle. However, high fuel prices have forced transportation costs to rise, making most goods, including food more expensive. Since many products are imported and have to be transported, increasing fuel prices have repercussions on the costs of all of these products.

This region hosts six of the poorest countries in Africa. Across this region, kerosene lamps are widely used for lighting and cooking in homes, which have no electricity. Because of the rising price of fuel, people cannot afford to use kerosene. Many people have resorted to use wood and palm husks as fuel, since kerosene has become too expensive. In Senegal, taxi drivers and fishermen are forced to exude the weight of fuel prices. They cannot increase their prices, as people cannot afford to pay.

Government across West Africa for the past decade, have been calling for a halt to fuel subsidies, under pressure from donors demanding market liberalization. These fuel subsidies cost The Nigerian government \$ 2 billion a year. Although Nigeria has rich oil resources, the country does not have the refining capacity to meet domestic demands. Nigeria therefore has to re-import consumable refined oil at a premium. However, many Nigerians believe that access to affordable fuel is a right.

Indonesia Pushes Palm to Capture Green Fuel Pie

Source by Sambit Mohanty

JAKARTA - Indonesia will proceed with plans to sharply boost palm oil output over the next three years to quench the thirst of bio-fuel makers, despite opposition from environmental groups, the agriculture minister said on Monday. Anton Apriyantono added that Indonesia would aim to sharply cut sugar imports in 2006 following a bumper domestic sugarcane harvest. Jakarta is also studying the benefits of growing genetically modified crops.

The minister told Reuters that Indonesia will consider incentives for the palm oil sector and of course the environment will be the number one priority, the minister said. Indonesia expects a rise in demand for food but also expects a huge market for bio-energy to open up. It is not clear what sort of incentives the Indonesian government was considering for the bio-fuel sector.

Apriyantono said Indonesia, the second-largest producer and exporter of palm oil, after Malaysia, would aim to boost the crop area under palm plantations to 8 million hectares in the next three years from the current 5 million. Currently Indonesia produced 12 million tonnes crude palm oil in 2004. Area under palm oil in Indonesia has doubled since 1999.

Plans by Indonesia to boost output come at a time when environmentalists are blaming the latest forest fires, and the haze that followed, on palm plantations. Critics say workers light the fires to clear land; an illegal practice they say has been largely overlooked by the government.

In addition, Indonesia is considering setting up the world's biggest palm plantation -- covering an area of 1.8 million hectares -- in Kalimantan, along the border with Malaysia. Bio-fuels are taking on renewed global importance as countries seek to cut hazardous emissions. Palm oil's emergence in the market comes decades after the introduction of ethanol, made from sugarcane, and other additives.

7. Events

South Africa

INVITATION TO THE SOUTH AFRICAN NATIONAL CONFERENCE ON CLIMATE CHANGE

South Africa will be hosting its first National Conference on Climate Change from 17 to 20 October 2005.

Venue: will be held at the Gallagher Estate Conference Centre in Johannesburg, and will be composed of two related parallel sessions: the Science Conference, scheduled to start on 17 October 2005 and the Consultative Conference scheduled to start on 18 October 2005.

Contact: Bridget Thovhakale
Global Climate Change Sub-directorate
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Electricity Regulation Bill [B 29 - 2005]: Submissions and Hearings

The Portfolio Committee on Minerals and Energy invites stakeholders and interested parties to submit written submissions on the Electricity Regulation Bill [B 29 - 2005].

Date for public hearings: Monday 31 October, Tuesday 1 and Wednesday 2 November 2005.

Venue: Cape Town Parliament

Contact: Shanaaz Isaacs, Committee Secretary, PC on Minerals and Energy

Tel: (021) 403-3763/3874

Fax: (021) 403-2808

E-mail: shisaacs@parliament.gov.za

Reform of the Electricity Industry

This is a two day seminar focusing on the restructuring of the electricity industry.

Dates: 3 - 4 November 2005.

Johannesburg, South Africa

Minerals and Energy Education and Training Institute (MEETI)

Tel: +27 11 709 4311

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E-mail: info@meeti.org.za

Website: www.meeti.org.za

The Rest of the world

Energy Convention 2005

Date: 26-28 October 2005

Venue: Groningen, the Netherlands

Contact: Energy Delta Research Centre of the University of Groningen, the Netherlands www.energyconvention.nl

Bio-Fuels Energy Conference

Date: 16 - 17 February 2006, Brussels

Contact: matthew.probyn@greenpowerconferences.com

Beijing International Renewable Energy Conference 2005

Second Round Notice for Non-Governmental Representatives

The Great Hall of the People, Beijing, China

November 7- 8, 2005

To register contact: Mr. Qin Haiyan or Mr. Wang Zhongying

Tel: +86-10-64228218

Fax: +86-10-64228215

www.birec2005.cn.

Windpower 2005: Conference and Exhibition

AWEA Wind Energy Fall symposium

Date: September 28 September – 01 October 2005

Venue: La Quinta California

AWEA Wind Power Finance and investment Workshop 2005

Date: October 25 – 26 2005

Venue: New York Marriott Financial Center

Appendix 1

Sustainable Energy Briefing 7: National Energy Bill can be downloaded from our website <http://www.earthlife.org.za/seccp/newarrivals>

Sustainable Energy Briefing 7: National Energy Bill

In September 2004, Cabinet approved the release of the Draft National Energy Bill (NEB) for public comment¹. This welcome and somewhat overdue piece of legislation, will give effect to a number of the provisions of the White Paper on Energy Policy for South Africa of 1998 (WPEP), including the establishment of a National Energy Advisory Committee (NEAC) and requirements for sound energy planning, development and use. The following objectives of energy policy are laid out in the 1998 White Paper:

- 1. Increasing access to affordable energy services,**
- 2. Improving energy governance,**
- 3. Stimulating economic growth,**
- 4. Managing energy-related environmental impacts, and**
- 5. Securing supply through diversity.**

Concerns regarding the Draft NEB

The main areas of civil society concern regarding the September 2004 draft relate mostly to the first, second and fifth objectives of energy policy:

- 1. Affordability is mentioned only once, in an introductory characterisation of planning, and is not carried through as an essential aspect of access;***
- 2. Extensive powers are vested in the minister without requirements that would ensure transparency, accountability and consideration of the inputs of stakeholders – leaving such issues purely to the discretion of a minister does nothing to improve energy governance;***
- 3. The small size of the NEAC does not allow for broad stakeholder representation – improving energy governance and diversity of supply requires addressing the dominance of vested business interests that to date enjoy greater access to officials and the Ministry than emerging sub-sectors and civil society;***
- 4. Provisions do not take advantage of this important and unique opportunity to address the on-going trend for business-as-usual in energy development, a particularly serious oversight regarding the programme of research.***

While intentions of the NEB are commendable, it is limited in alignment with government's stated objectives of poverty alleviation and job creation. Social and environmental concerns and opportunities are overshadowed by the domination of the economy by energy-intensive mining and commodities industries based on low-priced energy. The Bill is not sufficiently rigorous to ensure a change from the current focus on short term economic growth, which

neglects other objectives and inclusive analysis of macro-economic impacts and long-term sustainability.

In light of the tension between many of South Africa's energy policy objectives, a systematic and participatory process for ranking priorities and identifying key strategic choices would be of great value. Specific areas where the NEB could be strengthened are addressed in greater detail below, with a view to achieving the best legislation possible.

Status of the National Energy Bill

Post 1994, the policy formulation process embraced by the Government of National Unity actively pursued consultation with all stakeholders. This new approach was centred on the principles of transparency, building public confidence, clarity of accountability, clear and accessible communication of policy as well as the integration of policy processes. In light of the complexity of causal policy inter-linkages, a problem-solving approach was also proposed.

The NEB is an outcome of the process that started with a Green Paper (policy discussion document or draft), which was the subject of stakeholder consultations and document refinement before the approval of the White Paper on Energy Policy for South Africa by parliament in 1998. In September 2004, Cabinet approved that the Draft NEB be circulated for public comment. The draft was then published in the Government Gazette. Currently amendments are being made and these include strengthening the energy efficiency and renewable energy components of the Bill. According to DME officials, the Bill has not been to the State Law Advisors for establishing whether or not it is in conflict with other legislation nor has it been to the Minerals and Energy Parliamentary Portfolio Committee.

Strengthening the NEB

Objects of the Act (Chapter 2)

These should be useful as a benchmark against which performance of the department and ministry may in future be evaluated. The issue of affordability of energy services is not addressed, but would fit well in 2(e). to read: "provide for the universal and affordable access to appropriate forms of energy...".

National Energy Advisory Committee (NEAC) (Chapter 3)

The establishment of the NEAC should strengthen the role of stakeholders in policy development and implementation. With only 10 members the NEAC is likely to be dominated by business interests. More seats are needed to provide for broad representation of civil society and ensure that poverty reduction, job creation and long-term implications are highlighted in the NEAC's deliberations. Explicit provision for covering the full costs of participation is also desirable.

Provisions are needed requiring a minimal level of formal response by the minister to issues raised or recommendations made by the committee. A minimum number of meetings should be specified – no less than 3 annually. Reports of the NEAC should routinely be made publicly available, with the important provision in section 8 (9) applicable, i.e. if information is to be withheld from the public as "confidential, proprietary or commercial sensitive", a detailed justification should be required, with the

burden of proof resting with the party that wishes to withhold the information or exclude the public from a meeting.

National Energy Database and Information System (Chapter 4)

Informed policy development and implementation depends on accurate and comprehensive data that is provided on time. Section 13 (1) should make provisions to allow for independent verification of data to be provided, (e.g. powers for inspection of records). It is not clear why section 15(2) provides that limitation on information “must apply” under certain conditions, rather than making this a possibility that would need justification.

Energy supply, optimisation and utilisation (Chapter 5)

Integrated Energy Planning

Integrated Energy Planning (IEP) has been studied and debated extensively internationally and locally but it is poorly reflected in section 16. The list of issues to be taken into account would be more consistent with stated macro-economic policy goals if social equity and employment were added under 16 (2). IEP should also be consistent with the National Environmental Management Act (1998) thus a rigorous approach will include the principles popularly referred to as: Cradle to Grave Responsibility; Public Participation and the Polluter Pays Principle.

A twenty-year time horizon, which has been used in IEP to date, does not encompass more than half the lifespan of the majority of energy infrastructure and thus some consideration should be given to the longer term prospects for the sector. This would be consistent with the policy objective, under supply (7.1.1 of WPEP): to “achieve environmental sustainability in both the short and long-term usage of our natural resources”.

Given that data collection and scenario work should be on-going, that capacity is to reside with staff and that developments in the energy sector continue to gather pace, particularly with regard to fuel costs, production of a plan should be more frequent than every five years. An inclusive process is an important means for giving effect to the objectives of IEP and managing resistance of key stakeholders. The NEB should therefore specify that the plan will be released as a report that will be available for the public to comment on before finalisation.

Renewable Energy

The Bill is consistent with the White Paper on Renewable Energy Policy, but does not give effect to or support realization of broader energy policy including “ensuring that an equitable level of national resources is invested in renewable technologies, given their potential and compared to investments in other energy supply options” (WPEP 7.7). There has been a gradual retreat from renewable energy policy commitments and the target¹, which has been revised downwards over the years, is now worded to suggest that it is about 10 times^{SE Brief 6} greater than the actual commitment.

The provisions are somewhat ambiguous (section 17. (3)(c) could be seen as fairly open-ended), but the Bill seems to favour quotas for renewable energy and not to allow for a ‘feed-in tariff’, which option should not be excluded in such legislation. Amendment of 17 (3)(e) to read “may prescribe standards *and/or tariffs* for renewable energy” would keep this option open, even if it is never used. If the many proponents of a rate-of-return tariff for renewable energy are correct, its exclusion here would be a barrier to implementing existing policy.

Energy Efficiency

This section is probably the most comprehensive in giving effect to policy. It is hoped that on-going revision of this section will not in any way weaken powers to prescribe codes and standards. Powers to impose penalties for non-compliance to such codes and standards need to be added, with fines significantly greater than the costs of compliance.

Energy Access by Households

Substantial re-phrasing can be anticipated here, including reference to 'energisation' - an approach that starts with assessment of energy service needs, rather than emphasising the number of grid connections made. The list of issues to be taken into account (section 20 (2)), should include affordability, as well as the benefits of decentralisation, particularly for rural areas.

International Obligations

Wording suggests that meeting international obligations will be constrained by availability of resources, whereas such constraints of developing countries are recognised in such agreements. This section should indicate that approval of Clean Development Mechanism (CDM) projects by the Designated National Authority requires a finding that the activity assists South Africa in achieving sustainable development (as agreed under the UNFCCC). It should also recognise obligations under the African Union, including implementation of the recently ratified African Energy Commission (AFREC).

Energy Research (Chapter 6)

The energy research and technology development programme that the minister is required to institute must ensure "that an equitable level of national resources is invested in renewable technologies"(WPEP 7.7). Additional considerations to guide the use of research and development resources and focus efforts on realising policy priorities should include:

- take into account direct job creation potential of technologies;
- recognise and elaborate the potential for community participation in energy development;
- support local manufacture of renewable energy technologies;
- support decentralisation and diversification;
- support improved energy security at the local level;
- recognise and must avoid imposition of burdens on future generations.

Conclusion

The NEB is a step forward in implementing policy and makes many essential provisions, but it does not fully realize or reflect the intentions expressed in the 1998 White Paper and other policy documents, particularly those relating to environmental health and access to essential services, such as the Bill of Rights. In particular the provisions for integrated energy planning, research and development priorities and public participation and reporting could be strengthened.

A piece of legislation should not be built on trust in the minister, as the incumbent will change far more frequently than the law. The NEB should provide for effective interaction with all stakeholders and specify the modes of

accountability. Given the time-consuming challenge of promulgating legislation, adoption of the Bill in its current form would involve missed opportunities.

¹ See Sustainable Energy Briefing 6: PAMS Study