

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

SENSE is a regular publication, edited by Tristen Taylor. We welcome any feedback and submissions. Also, let us know if you wish to get more information from ELA Jhb, or know someone else who should be receiving SENSE. Please note that the material in SENSE (in particular the Editorial) does not necessarily reflect the positions or policies of Earthlife Africa Jhb and/or the SECCP.

Contacts:

Tel: +27 11 339-3662

Email: seccp@earthlife.org.za

To download a PDF copy of this SENSE edition, go to:

CONTENTS

1. Editorial
 2. SECCP News—Eskom Shreds the Economy, Eskom's Tariffs Explained, SECCP to Brief Parliament, Energy Cacaus Meeting, Energy Summit Recapped
 3. SA Sustainable Energy News—Solar Water Heaters and the Poor, Cape Town's Solar-powered Robots
 4. SA Unsustainable Energy—Industry Gets Some Stick, Transnet's Pipeline, Sugar Industry Punts Biofuels, SASOL to Expand Secunda Plant, SA's Enriched Nuke Addiction, Backdoor Privitisation of Eskom
 5. SA Energy Policy & Analysis—Ignoring Peak Oil, Peak Oil and the Militarisation of Africa
 6. African Energy News—Oil Bazaar in Tanzania, Uganda's Biofuels, Eskom Turns off the Lights in Namibia
 7. Events
-

1. Editorial

Nearly a hundred dollars for a barrel of oil. So much for the age of cheap oil, and welcome to the peak in global oil production. If many leading geologists and petrologists are correct, global rates of oil production are either in or about to begin terminal decline. Simply put, we are running out of oil on a global scale, and this is the underlying reason for the ever increasing price of oil; not market jitters over a possible Turkish invasion of Northern Iraq.

SENSE 47 Text

As any classical economist would tell you, when the supply of a good is less than the demand for that good, the price will rise. Under the standard view of resource scarcity, informed market consumers would then purchase an alternative resource or reduce their demand (i.e. consumption). Neither of these looks likely for oil. One, there is no alternative to petroleum as a major source of global energy at present. Two, demand will keep on increasing as the modern global economy is based upon using petroleum as an energy source (Will shipping, flying, agriculture, plastic manufacture stop? I think not.). Three, emerging economies such as China and India require additional petroleum to fuel economic growth. Therefore, the price will continue to rise.

Nor are biofuels and coal to liquid technology the solutions. In regards to biofuels, we simply do not have enough arable land available for biofuels production to replace petroleum to a significant degree. End of story. SASOL-like technology is incredibly inefficient, produces massive CO₂ emissions (trading oil supply woes for the greater headache of climate collapse), and will hasten the crisis of Peak Coal (another finite resource). The only worthwhile future is a transition away from a fossil fuel economy on a global scale, and no one is talking about that.

What does this mean for South Africa & Africa? In the SA Energy Policy & Analysis section of this edition, the Association for Peak Oil South Africa gives its predictions, and the effects of peak oil on the militarisation of Africa are illuminated.

While SENSE does cover Eskom recent load-shedding (wet coal...sure) and points out the role of industrial users in supply problems, it also covers the sticky issue of tariffs. The SECCP has recently completed a study of Eskom's domestic tariffs, with the conclusion that poor suffer unjustly. SENSE also notes that the backdoor privatisation of Eskom has begun, with private industry to generate 30% of all power. Here's another prediction; this will mark the beginning of a long and dirty road to a deregulated energy industry with spot markets, greedy electricity traders, rising prices, and the end of the dream of free, basic electricity for all. SENSE will continue to cover further developments.

The good news is that robots in Cape Town get solar power. That should help prevent traffic congestion when Eskom next flips the switch on us and not (due to penalty clauses in supply contracts) to the big industrial users.

Key meetings covered in this edition of SENSE include a recap of the Energy Summit,

Tristen Taylor
Energy Policy Officer
Earthlife Africa Jhb
31st of October 2007

2. SECCP News

SENSE 47 Text

Press Release: Eskom's Load Shedding and Industrial Power Usage
Earthlife Africa Jhb
11th of October 2007

Over the past few days, Eskom has been engaged in load shedding and encouraging domestic users to conserve electricity. In the process, a few key facts have been conveniently omitted.

The greatest users of electricity are not domestic users, who account for only 17% of electricity users. The greatest users of electricity are industrial factories; 29 companies consume 40% of all electricity. Furthermore, the demands on electricity supply up to 2050, according to the Department of Minerals and Energy figure, are primarily due to industrial demand.

Despite being the most-intensive users of electricity, industry pays half the tariff that domestic users do (an average of 29c per kwh compared to an average of 17c per kwh). This has an obvious effect on Eskom's ability to generate, transmit and distribute electricity.

Furthermore, Eskom and the Government have committed themselves to large-scale supply of electricity to individual and foreign companies at reduced tariffs; this at a time when Eskom struggles to supply citizens with electricity. Thirty percent of all South Africans are still not connected to the electricity grid.

An example of how Eskom and the Government are favouring foreign companies over the interests of South African households is the electricity supply deal to the Canadian aluminium-smelting firm Alcan.

For the past two years, Earthlife Africa Jhb has consistently called upon the Department of Trade and Industry (DTI), the Department of Public Enterprises, Eskom and Alcan to disclose the details of electricity sales to Alcan for its proposed smelter. Both the South African Government and Alcan have hidden behind a profoundly anti-democratic clause in the Developmental Electricity Pricing Programme (DEPP). Alcan is the first foreign company to benefit from the DEPP, and has signed a 25-year deal for 1350MW supply of electricity. This represents about 4% of the entire country's usage.

What is the DEPP? Essentially, the DEPP provides for uniquely discounted electricity tariffs for foreign industries that are heavy consumers of electricity (over 50MW) in South Africa. In return for investment in South Africa, the DEPP will ensure that electricity tariffs are internationally competitive (our nearest competitor is Australia, which sells electricity at US\$0.053 per kwh and is 30% more expensive) and that the industry in question can achieve an profitable internal rate of return; i.e. if electricity is a major overhead (such as in aluminum smelting), it the tariff will be low enough to ensure profit.

This is a significant incentive for heavy industry to invest in South Africa and is supposed to provide significant jobs. However, what it really does is commit Eskom to tariffs for heavy industry at a rate lower (or, at most, on par with the next cheapest supplier of electricity) than anywhere else. It is, in effective, a subsidy for foreign industries, similar to a tax break or import duty waiver.

The most worrying factor about the DEPP is the "built-in" secrecy clause. Eskom is a public enterprise, ultimately owned by the citizenry at large. However, the DEPP guidelines ensure that any contracts signed under the DEPP are to remain secret. This is profoundly anti-democratic. The

SENSE 47 Text

DEPP states (clause 12.1):

"All officials, employees or members of the Department, the adjudication committee, NERSA, Eskom and non Eskom distributors shall regard as confidential all technical information, records, particularly any strategic commercial information and all knowledge that pertains to any project that applied for benefits in terms of DEPP, whether such information is recorded on paper or in an electronic manner."

The very next clause (12.2) in the guidelines bounds individuals with knowledge about the contracts to silence for the rest of their lives.

If the DEPP is a method for promoting growth and development in South Africa, why then the secrecy? Why shouldn't this be in the public domain? This clause gives foreign corporations like Alcan the right to build electricity-intensive industrial plant in South Africa, get electricity on favourable terms in relation to their expected rate of return, and not to have to tell the country at large what rate they purchased electricity from the South African state. Further, this clause seems at odds with the spirit of the Promotion of Access to Information Act, through a pre-emptive strike against the releasing of information.

The DEPP deal with Alcan means that the citizens of this country won't know the answers to the following questions:

- * What is the price of electricity agreed upon by Alcan and Eskom?
- * What are the conditions of supply of electricity?
- * Will the price paid to Eskom cover the indirect costs of smelter? For example, the environmental group TWIG has calculated that the indirect costs of harm to the environment based on Eskom CO2 emissions to supply the smelter with electricity would be R6.4 billion.

The question that should be asked when Eskom turns off the lights is; why, if Eskom can't supply electricity to the citizens of this country, is it offering foreign companies large amounts of power at reduced tariffs? Must individuals and small businesses suffer so that large industries can be assured profit?

ESKOM'S Tariffs - A Briefing for Activism
by Lerato Maregele, SECCP, Earthlife Africa JHB
October 2007

ESKOM is a South African corporation dealing with the generation, transmission and distribution of electricity in South Africa (SA), also active in other African countries. Ownership of ESKOM is vested in the SA government and the electrical utility is acknowledged as the lowest-cost producer in the world. Eskom operates a number of notable power stations including Kendal Power Station, the largest coal-fired power station in the world and Koeberg Nuclear Power Station. While ESKOM generates up to 95% of the electricity used in SA it is not the only distributor. ESKOM sells electricity to industries, mines, distributors (such as municipal councils), and other stakeholders.

Distributors re-sell the electricity to their customers – sometimes at exorbitant prices, which frequently their customers cannot afford. This re-distribution scheme can have considerable

SENSE 47 Text

negative impact on the socio-economic life of the customers, especially domestic users. There are different tariffs for the electricity used by households in South Africa, with rural areas often subject to higher costs. Township residents will often pay more for electricity than their more affluent suburban counterparts, despite being based in the same city. Residents of Tembisa in Ekurhuleni are paying about 31% more than residents in the nearby wealthy suburb of Sandton.

Industry, particularly energy-intensive industry, benefits the most in this regard. Average electricity prices for the manufacturing and mining sector in South Africa have been in the order of 16c per kWh, while deals are negotiated with large consumers (e.g. ALCAN COEGA) for lower tariff rates. In fact, South African industry enjoys the lowest charges for electricity in the world, around 40% lower than the next cheapest, Canada.

This paper explores the practice of Eskom's various charges for electricity to its different customers. Further, it will demonstrate the difference in tariffs between Eskom-supplied customers and those customers whose electricity is provided by municipalities. Section 2 will cover the average tariff rates charged by Eskom in South Africa to different customers. Section 3 will look at a case study for the Ekurhuleni Metropole, one of the municipalities in the country that is selling electricity to its different customers at relatively high prices. Poor people are the ones who suffer most from these pricing practices....

Download the Entire Document:

<http://www.earthlife.org.za/Files/Eishkom%20tariffs%2020Aug.pdf>

SECCP Goes to Parliament

Sustainable Energy and Climate Change Project (SECCP) will be briefing key parliamentarians in Cape Town on the 15th of November. The event will be held at Centre For The Book and the programme start at 16:00 – 17:30 and the networking session will follow from 17:30 – 20:00.

The issues upon which Members of Parliament will be briefed upon are:

- Sustainable energy services, particularly to low-income households and rural poor
- The role of renewable energy technologies for the implementation of energization
- Access to electricity and Free Basic Electricity
- Developmental Electricity Pricing Programme & Energy Efficiency Accord
- The review process of the 1998 White Paper on Energy Issues
- Renewable Energy and Gender.

For more information, please contact: Sibusiso Mimi, sibusiso@earthlife.org.za, 011 339 3662

Energy Caucus Meeting

The Energy Caucus will be meeting in Cape Town from the 14th to the 15th of November 2007. Key issues under discussion will be renewable energy, electricity tariffs and transport.

The South African civil society Energy Caucus is a grouping that includes organised labour, faith and indigenous peoples' groups as well as NGOs and CBOs that are committed to working for a just

SENSE 47 Text

transition to sustainable energy. The Energy Caucus, which was first convened in June 2002, is held together by a set of 33 principles.

For more information on how to attend, please contact: Maya Aberman, Earthlife Africa Cape Town, coordinator@earthlife-ct.org.za, 021 447 4912

Energy Summit

3. SA Sustainable Energy News

The Poor Fly Under the Solar Water Heating Radar
By Gail Jennings

CAPE TOWN, Oct 12 (IPS) - Earlier this year, IPS reported that the South African coastal city of Cape Town was debating a "first of a kind" bylaw that would make solar water heating compulsory for relatively costly new buildings, and certain renovations. This got us thinking: what of solar water heating for less expensive structures -- especially homes being built under the country's extensive low cost housing programme...Are any initiatives on the drawing board in this regard? Since coming to power in 1994, the African National Congress government has spearheaded the building of low cost, subsidised houses to overcome the homelessness created by apartheid. However, many of these structures are what is termed "core houses", meaning they lack flooring, geysers and other amenities.

Solar water heaters (SWHs) can be somewhat expensive to install; but this cost is normally recovered within a few years through energy savings that continue long after the units are paid for. The heaters can provide an environmentally friendly source of hot water for low income housing residents, and cut their household water heating bills in the long run -- good news all round, surely, especially if financial aid were provided to help people get a foot on the SWH ladder.

Not necessarily, it seems.

Low energy usage

"Generally, people living in low income households don't spend enough money on energy for water heating," Andrew Janisch of Sustainable Energy Africa, a Cape Town-based consultancy, told IPS. "As a result, the saving from using solar energy for this purpose would not repay the upfront cost of the solar water heater, even with attractive financing options."

A solar water heater is made up of a hot water storage tank or geyser, and a roof-mounted panel (called a "collector") that absorbs the sun's energy and uses it to heat the tank water.

The cost of SWHs ranges from about 500 dollars to 2,200 dollars, depending on factors such as the volume of the tank and the square meterage of the collector -- and whether a high pressure water

SENSE 47 Text

flow from the tank is required for bathroom and kitchen equipment.

"It's a tough issue," said a project manager at a Johannesburg-based company that is co-ordinating an initiative offering incentives for the installation of solar water heating systems in several houses for the middle and upper income brackets.

"We used to look at government subsidised houses, but it was just too expensive in the greater scheme of things," the manager told IPS. "Add the cost of a geyser to the 49,000 rand (about 7,000 dollars) per house subsidy, and it would not fit the bill."

"We're still taking our lead from our previous minister of minerals and energy: she directed us not to force technologies onto low income housing," the manager added. "These things must go on the houses in Sandton to create the aspiration among low income households, was her message." (Sandton is a wealthy suburb of Johannesburg, South Africa's financial centre.)

These observations are echoed by Peter Lukey of the chief directorate for air quality management and climate change in South Africa's Department of Environmental Affairs and Tourism.

"We must avoid the 'ghetto-ification' of renewable energy. Solar should never be seen as second class power," he told IPS.

"In South Africa, we need to take into account our vulnerability to climate change, and focus on where we can make the biggest impact. It is not the poor who are polluting with their energy use -- it's middle and upper income households."

As a result, SWH initiatives remain focused on the relatively wealthy, and the downright rich. In the case of low earners, "Either the government must pay, and it's too expensive, or the individual must pay -- and it's too expensive," said Lukey.

Red more: <http://www.ipsnews.net/print.asp?idnews=39639>

Robot the blackouts can't stop
The Times
By Anton Ferreira
14th of Oct. 2007

Solar traffic light shines through load-shedding.

As blackouts plague South Africa once more, there's one set of traffic lights in Cape Town that keeps working regardless — it's powered by the sun. Switched on two weeks ago as a test project, the lights run off batteries charged by a solar panel that converts the sun's energy to electricity.

If the lights prove reliable and cost-efficient, the city plans to install more of them. The solar-powered traffic lights have been equipped with light emitting diodes, which use far less power than light bulbs and last much longer.

Barry Bredenkamp, operations manager for the National Energy Efficiency Agency, said the solar robots were the first of their kind in the country.

SENSE 47 Text

“Cape Town could be at the forefront of a significant technological revolution if it works,” he said. “Every other municipality will want to jump on board because they all have serious problems with traffic signalling and power failures.”

What happens when the sun is obscured by cloud for days on end, as it often is during Cape Town winters? The lights will continue working because they have a back-up connection to the Eskom grid.

Link: <http://www.thetimes.co.za/News/Article.aspx?id=586863>

4. SA Unsustainable Energy

Spot those power gobblers
Mercury
17th of Oct. 2007

My sympathies to all fellow load-shedders who Eskom treats like mushrooms - kept in the dark and fed copious loads of deceptively patriotic manure.

Now I'm all for saving as much electricity as possible by switching off the geyser, installing compact-fluorescent light bulbs and other save-energy-in-the-home ideas.

We have a crisis on our hands, and it's too easy to blame Eskom alone. Every South African needs to use electricity wisely - not just to avoid blackouts, but because we have a wider international role to protect the world from global climate change and harmful levels of air pollution.

Our electricity is among the cheapest in the world. The nation produces 1.4% of global greenhouse gas emissions, yet makes up less than 0.8% of the world population. But it is very misleading to talk collectively about "us" or "we", because some South Africans use vastly more electricity than others. In fact, much of our power is not used by South Africans at all - but by multinational industries, which remit profits to shareholders overseas.

This is not a unique situation. Most countries fall over themselves to woo foreign investors. The point, however, is that when a country faces a major electricity crisis one would expect the government to discourage more energy-intensive foreign investment until the crisis is resolved. Yet it's still business as usual here.

Which is why Eskom's selective load-shedding and energy-saving campaign smacks of hitting soft targets rather than profligate users.

It's all very well asking Joe Citizen to curb electricity use in the national interest, but I've yet to see serious attempts by Eskom to target big-industry holy cows, which gobble the largest chunks of South African electricity.

Eskom spokesman Andrew Etzinger assured me some large industries also "took a big hit" during

SENSE 47 Text

the latest bout of load-shedding last week. Though he had no detailed statistics to hand, Etzinger said one example was the BHP Billiton aluminium group, which apparently cut production by 50% to 90% for part of last week.

Finding reliable data on SA electricity consumption is tricky, but National Electricity Regulator statistics suggest that the residential sector (you and I) use 17% to 19% of the total. By contrast, heavy industry uses 60%, with the remainder going to the commercial farming and transport.

The environmental group Earthlife Africa alerted me to the presence of a very influential group of industrial holy cows known as the Energy Intensive Users Group (EIUG).

This powerful lobby group has 25 members who collectively use 40% of SA's electricity. It was set up in 1999 to ensure "internationally competitive" (read cheap) prices for members. Unfortunately, its website seems to be on the blink, its Rivonia telephone number rang unanswered yesterday and I was unable to reach the EIUG chairman or deputy chairman at Anglo HQ before deadline.

But I think it would be very illuminating to identify them and find out what contribution they made to load-shedding over the past year - before we are forced to swallow nuclear power at their behest.

Link: <http://www.themercury.co.za/index.php?fArticleId=4083854>

Transnet gets nod to build R11bn pipeline

Khulu Phasiwe

14th of Sept. 2007

TRANSNET pipelines, formerly Petronet, has been granted the coveted licence to construct the R11bn multi-product pipeline that will transport petroleum products from Durban to the industrial heartland of Gauteng. Transnet pipelines beat the black economic empowerment firm Ipayipi Consortium for the lucrative licence.

Transnet CEO Maria Ramos said yesterday the company was "heartened" by the decision of the National Energy Regulator of SA (Nersa). She said the decision recognised Transnet pipeline's role as a key strategic player in the effort to achieve security of fuel supply in SA.

"Our track record as an operator is clear evidence that we are a good option and we are heartened by the faith bestowed on us to deliver this vital economic infrastructure on time and within budget," said Ramos.

Ipayipi was dejected, CEO Deyar Natha saying: "We are disappointed that we didn't get the licence. We received a very bland letter from Nersa and we don't know why our application was turned down."

Nersa said it would provide reasons for its decision "in due course". The regulator would make an announcement on Transnet pipeline's tariffs in due course. Nersa said the new 24-inch pipeline was expected to be operational by the third quarter of 2010, by which time the existing pipeline was expected to be short of capacity.

The new pipeline is intended to mitigate the shortfall of petroleum products in the interior of the

country.

Industry players said current demand exceeded product pipeline capacity by two billion litres a year. Consumption in the inland market was expected to reach 17-billion litres by 2010, up from the current average of about 14-billion litres.

The demand was expected to increase to 40-billion litres a year by 2030.

Read more: Link: <http://www.businessday.co.za/articles/topstories.aspx?ID=BD4A564480>

S.Africa sugar industry pushes for biofuels policy

By Muchena Zigomo

22nd of Oct. 2007

JOHANNESBURG (Reuters) - South African sugar producers will be loathe to invest in biofuels until the government finalises a long-delayed biofuel policy, the chairman of an industry body said on Monday.

Rodger Stewart, chairman of the South African Sugar Association (SASA), said until there was a definitive policy on biofuels the local industry would invest little in ethanol production.

South African officials have released draft biofuels policy documents with proposals on issues like ethanol and biodiesel blends but an apparent wrangle over the more contentious matter of state subsidies has stalled a final policy.

The Southern African Biofuels Association says it needs between 2 billion rand and five billion rand a year from the government to get the capital intensive industry off the ground.

"I think the problem is that we're in a policy vacuum at the moment. What we need first for ethanol (production) to work is a clear policy and at the moment the policy environment is not clear," Stewart told Reuters.

South Africa is expected to unveil its own biofuels policy this year and officials hope it will open up new markets for producers in the struggling farming sector.

The government wants biofuels to provide up to 75 percent of its renewable energy needs by 2013, joining the global push for cleaner energy alternatives to harmful fossil fuels.

Ethanol and biodiesel are eco-friendly by-products of crops like sugar and maize and are already being widely used in cars in countries like Brazil, the world's largest sugar producer.

"There are things like mandated ethanol content in fuel mixes, among other issues, that we would need in the policy in order for this to be a success in South Africa," Stewart said.

Science and Technology Minister Mosibudi Mangena said in July the government was unlikely to meet demands for subsidies to help a nascent biofuels sector but industry players say without such support they would battle to make profits.

SENSE 47 Text

Mangena said subsidies would not go down well with many parts of the farming community which have seen their livelihood shrink since post-apartheid South Africa cut agricultural subsidies.

However, without some assurance of assistance from the government to ensure profitability, local sugar industry players would remain reluctant to invest in ethanol production, Stewart said.

"I would say there would definitely need to be an economic incentive for farmers to move into ethanol," he said.

Link: <http://africa.reuters.com/business/news/usnBAN251364.html>

Sasol Orders New Reactor as Part of Synfuels Expansion to Meet SA Growing Demand for Fuel
PR Newswire
18th of Oct. 2007: 06:38 AM EST

JOHANNESBURG, South Africa, Oct. 18 /PRNewswire-FirstCall/ -- Sasol today confirmed that it had awarded a contract to Japanese manufacturer, Hitachi Zosen Mechanical Corporation (HMC), a wholly-owned subsidiary of Hitachi Zosen Corporation, to construct a Sasol Advanced Synthol (SAS) reactor.

The new SAS reactor is needed for Sasol to increase its 150 000 barrel a day (b/d) synthetic fuels operation at Secunda in South Africa by 20% to 180,000 b/d by 2015. Sasol uses its advanced Synthol reactors to produce synthesis gas which is converted into a large range of valuable liquid fuels and chemical products.

"Sasol supplies about 35% of South Africa's liquid fuel needs. The Secunda expansion project will help us meet major growth opportunities in both our domestic and international markets. We will use both natural gas and coal as feedstock to produce our advanced range of synthetic transportation fuels," says Sasol executive director Dr Benny Mokaba.

Read more: <http://money.cnn.com/news/newsfeeds/articles/prnewswire/NYTH05218102007-1.htm>

South Africa seeks partners to develop nuclear fuel: The government is in the "early stages" of talks with international companies...

By Patrick Donahue
Bloomberg
19th of Sept. 2007

South Africa is seeking foreign partners to enrich uranium as part of a strategy to expand the country's nuclear-energy program in the next few decades. The government is in the "early stages" of talks with international companies and countries that could enable it to use centrifuges in producing low-enriched nuclear fuel, Tseliso Maqubela, the chief nuclear director of the Energy Ministry, told reporters.

"We would prefer to do enrichment with partners," Maqubela said at a briefing in Vienna, part of a meeting of the International Atomic Energy Agency. "The timeline that we have is going to depend on how much progress we make in attracting partners," he said.

SENSE 47 Text

The government is targeting partners that have mastered centrifuge technology, which produces atomic fuel by spinning uranium gas at high speeds, he said. In 1993, South Africa became the first nuclear-armed country to verifiably dismantle its weapons after the fall of the apartheid regime.

Energy Minister Buyelwa Sonjica said the country aims to generate 20 000 megawatts of nuclear-produced electricity by 2025. The government plans to reach an agreement

with vendors in the next six months to build an advanced pressurized water reactor that will initially generate as much as 3 500 megawatts of electricity by 2016.

Sonjica in February announced plans to tighten control over uranium reserves to ensure adequate supplies for the country's nuclear program for 40 to 60 years.

The country plans to use more nuclear energy as it runs out of coal, its main source of electricity.

The announcement came as South Africa reaffirmed its opposition to nuclear weapons.

"Nuclear weapons ownership does not serve any deterrent purpose whatsoever, but fosters insecurity and instability," Henk Roodt, a counselor at the South African High Commission in London, said yesterday at a conference on weapons of mass destruction. "South Africa remains one of the only countries to unilaterally disband its nuclear weapons arsenal, thereby demonstrating to the international community that disarmament is not a political illusion," Roodt told the London meeting.

Link: <http://www.moneyweb.co.za/mw/view/mw/en/page1329?oid=161783&sn=Detail>

Private Electricity Producers Receive State Backing

By Hilary Joffe

Business Day

26th of Sept. 2007

THE government hopes to see the private sector come in to build new coal-fired power stations to help meet SA's electricity needs in the next couple of decades, as it gives effect to its plan to get independent power producers to build 30% of the new capacity the country will need by 2030.

This could add large private coal-fired base-load stations to the two smaller gas turbine plants that a private sector consortium led by US power producer AES is to build, at a cost of R5bn, after the state awarded the consortium the contract last month.

Eskom will buy the electricity from the new plants in terms of a decision by the government to make Eskom the single buyer of power generated by new independent power producers.

Public enterprises department director-general Portia Molefe said yesterday it was logical coal-fired power plants would be included in the new capacity independent power producers would build, given that the government wanted new producers to build 30% of the new capacity, but the private sector would not be participating at all in the nuclear build programme.

SENSE 47 Text

The government's draft nuclear energy strategy makes Eskom the only provider of nuclear power in SA, and nuclear generated power is expected to account for about half of the 40000MW of new generation capacity SA will build in the next 20-25 years.

Molefe said it was up to Eskom to figure out how to reintroduce private sector players on the coal side. No plans for new privately owned coal-fired power stations had been proposed at this stage.

Eskom CE Jacob Maroga said it was keen to see independent power producers develop in SA. It would mean the big build programme would see more people coming in to risk capital in the market. Some of the independent producers could also unlock new supply lines and bring in skills.

Molefe emphasised the potential importance of independent producers in giving SA access to equipment which was in short supply globally.

Eskom will spend more than R200bn to expand its generation, transmission and distribution capacity. It has said it would announce details next year of its plans for at least one nuclear power plant. It has already started building one new big base-load coal-fired power station, the R80bn Medupi, which will generate about 4500MW, and was completing plans for another. It is also recommissioning three power stations -- mothballed in the 1980s -- and has installed two open cycle gas turbines to supply power during peak times.

Molefe said the mothballed power stations would account for 8% of the country's new build programme, while 27% would come from coal, 46% from nuclear, 12% from pump storage schemes and 7% from gas.

Link: <http://allafrica.com/stories/printable/200709260487.html>

5. SA Energy Policy & Analysis

Implications of ignoring Peak Oil for South Africa

From the "Energy Futures"

The Association for the Study of Peak Oil and Gas South Africa

August 2007

Economy: Inflation spikes driven by rising oil prices; interest rates rise to quell inflation, but depress consumer spending further; the US economy, and the world economy slide into recession; unemployment rises rapidly.

Transport: Massive price rises for air flights, road transportation; South Africa's inadequate public transport infrastructure provides no viable alternative; demand for motorcycles and bicycles increase, and also for people to work from home; road maintenance costs soar and road infrastructure deteriorates.

Food: Rising prices and fuel shortages place commercial farmers under pressure; food prices rise significantly and severe food shortages increase; government intervenes in the pricing and supply of food.

SENSE 47 Text

Climate and environment: Governments abandon negotiations to lower carbon emissions and CO2 concentrations increase to dangerous levels setting the course for a 2 degree increase in temperatures and catastrophic, irreversible climatic conditions later in the century.

Download the Executive Summary of Energy Futures for South Africa at:

http://aspo.org.za/index.php?option=com_docman&task=doc_download&gid=2&Itemid=43

Download the entire report at:

http://aspo.org.za/index.php?option=com_docman&task=doc_download&gid=3&Itemid=43

Petroleum Murder: Peak Oil, Militarisation, and America's Proxy War in Somalia

By Tristen Taylor

August 2007

"We've embarked on the last days of the age of oil."

-- Mike Bowlin, CEO of the US oil company ARCO (1999)

Something unheard of in human history is occurring – the global scarcity of a number of key material resources. The word in financial quarters is that it is impossible to buy zinc futures as the price is escalating too fast for the market to keep up. Essentially, the global demand for resources is beginning to outstrip production abilities, and financial markets have entered a long and very profitable commodity boom. Mining, oil, drilling and associated retail companies are making money as fast as stockbrokers can cash in.

In this general climate of increasing resource scarcity, one resource towers above all others - petroleum. Oil, fondly referred to as black gold, is the basis of the global economy. Everything around us owes its production and distribution to oil. Food is grown using machines burning diesel, transported in trucks and packaged in plastics that use petroleum as a feedstock. Our current method of civilisation is utterly dependent on oil and if the oil supply were to dry up tomorrow, the vast majority of us would starve to death in a matter of weeks. At best, survivors would be scratching out a Dark Age existence amidst the ruins of rusting BMWs and everlasting plastic Coca-Cola bottles, making snares for rats out of computer mouse cords.

The petroleum industry is vital to the life of every human being in the modern economy, yet it is a tightly controlled industry with only a handful of key players (see table next page), divided amongst state and private control. Of the ten biggest corporations in the world (as ranked by Fortune 500), five are oil and gas companies with a combined annual revenue of US\$1,271,058,300,000.00, or 1.271 trillion dollars.¹ By way of comparison, South Africa's Gross Domestic Product is US\$215,511,134,393.14, or 215.5 billion dollars.²

Not a great deal has changed in the petroleum market since 1900 when Standard Oil controlled 50% of global sales.

Read the rest at: <http://www.earthlife.org.za/Files/Petroleum%20Murder.pdf>

6. African Energy News

Tanzania offers six oil blocks for exploration
22nd of Oct. 2007

NAIROBI, Oct 22 (Reuters) - Tanzania has invited energy explorers to bid for six blocks in the east African nation that is fast becoming a new frontier in the hunt for oil and gas.

According to a statement by the Tanzania Petroleum Development Corporation seen by Reuters on Monday, the six blocks are all inland and stretch from the southeast of the country to the northwest. Bidders have until December 3 to submit their documents.

Tanzania has at least 14 companies exploring at sites both on and offshore, and it has so far found three areas with natural gas deposits. Its last licensing round was in 2004.

Prospectors are studying east Africa afresh as insecurity in other parts of the continent and increasing energy nationalism elsewhere push them to seek new sources.

Gas discoveries in Tanzania, and oil discoveries on the border between Uganda and Congo has peaked interest in the region, which had been largely overlooked.

Among the companies exploring in Tanzania are Dutch group Shell International (RDSa.L: Quote, Profile, Research), France's Maurel and Prom (MAUP.PA: Quote, Profile, Research), Petrobras of Brazil (PETR4.SA: Quote, Profile, Research) (PBR.N: Quote, Profile, Research) and Ras al-Khaimah Gas Commission of United Arab Emirates.

More information on the Tanzanian offer can be found at <http://www.tpdc-tz.com/index.htm>.

Link: <http://uk.reuters.com/article/oilRpt/idUKL2236768020071022>

Country to Get a Biofuel Plant
By Salome Alweny
The Monitor (Kampala)
21st of Oct. 2007

A local investor is planning to set up a plant which will use foodstuff like maize, cassava and sugarcane to manufacture oil and gel for lighting and cooking respectively. The investor, who currently imports the biofuels (synthetic oil and gel) from their South African-based parent company Liquifier Pty Limited, hopes to set up the plant in east and western Uganda, by the end of June next year.

According to the General Manager of Liquifier Uganda limited, Mr Michael Musoke, the plan is to reduce carbon emissions in the atmosphere through reduced deforestation and consequent charcoal burning.

"Plans are underway to set up a local manufacturing (biofuel manufacturing) plant in Uganda. It will be the only Gel manufacturing plant in Uganda, the East and Central African region," Musoke told

SENSE 47 Text

Sunday Monitor.

"There is a lot of garden surplus in Uganda, which we shall use," Musoke adds, to justify where the feedstock (crops to be used to produce the fuels) will come. He says since their operations will depend mainly on farm produce "we shall also support the farming sector by offering them more seeds to plant, provide farm inputs and provide the necessary advisory services".

Liquifier Uganda limited became operational in Uganda two years ago but its products were only launched last month.

Today, their products with a brand name Liquifier have found their way in most super markets in Kampala.

Among their products are synthetic oil, which burns in specially designed lamps (liquilamp) made of durable, hard plastic, which does not get destroyed when used for lighting.

The Liquilamp, which takes half a litter of synthetic oil, goes for Shs26,000 giving 60 hours of burning or lighting. According to Musoke, the synthetic oil has been mixed with a chemical called citronella, which is a mosquito repellent.

"When you use the liquilamp, you can also be sure you are well protected from mosquitoes and malaria," he says of the Liquifier product. Other products are gel, which comes with specially designed stoves, made of mild steel.

A litre of gel, which burns in the stove, goes for Shs3,600. A five-litre gel pack goes for 18,000 and according to Musoke, it burns for a period of three to four weeks for light cooking.

A double plate stove goes for Shs55,000 while a single plate stove goes for Shs 42,000.

The gel is packed in consumer friendly quantities ranging from one litre to 200 litre drums, which caters for big institutions like schools, hotels, restaurants, and hospitals.

For hotels that have long been using spirit for warming foodstuffs during the buffet method of serving, Musoke says the gel is a better option as it burns longer.

Musoke describes the products as smokeless, odourless, highly portable, leaves minimal residue after use and produces twice as much energy, compared to gas and paraffin.

"It's also none poisonous and can be used as anti-septic on the skin," he says.

"Research on our products found Liquifier is a better alternative compared to other products (such as gas and paraffin)," he adds.

Biofuels are gaining firm ground in Uganda with many companies and individuals opting to convert arable land to enable production of the feedstock used to manufacture fuel from the crops.

Last year, Sugar Corporation of Uganda Ltd (Scoul) requested the government to provide 7,100 hectares of land from within Mabira Central Forest Reserve to enable it expand its sugar production from the current 50,000 tonnes to 100,000 tones per annum, in line with their plans to increase

sugar production and produce power alcohol.

Read more: <http://allafrica.com/stories/200710220522.html>

Namibia rations power after South Africa reduces supply
Panapress
9th of Oct. 2007

Windhoek, Namibia - South African electricity supplier, Eskom has cut electricity exports to Namibia by 30 MW, triggering power rationing which is likely to hit hard on huge energy consumers such as mining companies in Namibia. National power utility, NamPower, which imports 238 MW from Eskom, said it is now in consultations with large power users such as mines and local authorities to reduce their energy consumption.

"NamPower received a request from Eskom this morning to reduce electricity demand by 30 MW due to technical problems experienced on Eskom side," said John Kaimu, NamPower corporate communication manager.

NamPower said that the request also applies to Botswana, Swaziland, Lesotho, Zimbabwe, Zambia and southern parts of Mozambique.

Eskom warned early in the week of possible power failures and called on consumers to use energy sparingly.

The state power utility said that in addition to the continued tight supply and anticipated severe weather conditions could cause damage to its pylons and other critical electrical infrastructure.

NamPower said that local generating capacity remains constrained. The Ruacana Power station, a small hydropower generating plant situated in the northern parts of the country is only operating at full capacity during peak periods due to low water levels.

Meantime, water levels are as low as 27 cubic meters per second, only enough to run the station at full capacity during peak hours.

The coal fired Van Eck power station, which NamPower management says is too expensive to run, is only generating about 80 MW. The third power station, Paratus is generating 8MW, NamPower said.

The power utility urged consumers to turn off nonessential lighting and office equipment during the day and overnight.

"We are not aware of how long it is going to last, and until we get further information from Eskom, in the interim we have to implement these measures," Kaimu said.

Link:

<http://www.afriquenligne.fr/news/daily-news/namibia-rations-power-after-south-africa-reduces-supply-2007101010343/>

7. Events

October 2007

ENERGY EFFICIENCY AT WORK

Date: 25th to 26th October

Venue: Emperors Palace, Gauteng, South Africa

Contact: Christina den Heijer

Tel: +27 (0)18 294 7174

Cell: +27 (0) 82 334 0923

E-mail: cemanager@intekom.co.za

November 2007

20TH WORLD ENERGY CONGRESS - THE ENERGY FUTURE IN AN INTERDEPENDENT WORLD

Venue: Rome, Italy

Date: 11 – 15 November

Contact: Arrivederci a Roma, Rome 2007 Organising Secretariat

Tel: +39 06 333 99 397

Fax: +39 06 333 99 401

E-mail: organisingsecretariat@rome2007.it

Website: www.rome2007.it

TPWIND FIRST GENERAL ASSEMBLY

Venue: Brussels, Belgium

Date: 13 – 14 November

E-mail: secretariat@windplatform.eu

Website: www.windplatform.eu

4TH WEST AFRICAN POWER INDUSTRY CONVENTION (WAPIC)

Venue: Sheraton Hotel, Abuja, Nigeria

Date: 19 – 21 November

Contact: Nicole L. Smith, Conference Manager NAPIC 2007, Spintelligent (Pty) Ltd

Tel: +27 21 700 3500

Fax: +27 21 700 3501

E-mail: nicole@spintelligent.com

Websites: www.spintelligent.com and www.esi-africa.com/events

THE 4TH EUROPEAN CONGRESS ON ECONOMICS AND MANAGEMENT OF ENERGY IN INDUSTRY

Venue: Hotel Ipanema Porto, Porto, Portugal

Date: 27 – 30 November

Contact: Prof. Albino Reis, ECEMEI, Rua Gago Coutinho 185 – 187, 4435-034 Rio Tinto, Portugal

Tel: 351 22 973 4624 / 22 973 0747

Fax: 351 22 973 0746

Website: www.cenertec.pt/ecemei/

SENSE 47 Text

December 2007

UNITED NATIONS CLIMATE CHANGE CONFERENCE

Venue: Bali, Indonesia

Date: 3 – 14 December

Website: http://unfccc.int/meetings/cop_13/items/4049.php

EUROPEAN OFFSHORE WIND CONFERENCE (EOW2007)

Venue: Berlin, Germany

Date: 4 – 6 December

Contact: Jonathan Collings, EWEA

Tel: +32 2400 1056

E-mails: info@ewea.org and jonathan.collings@ewea.org

END-----