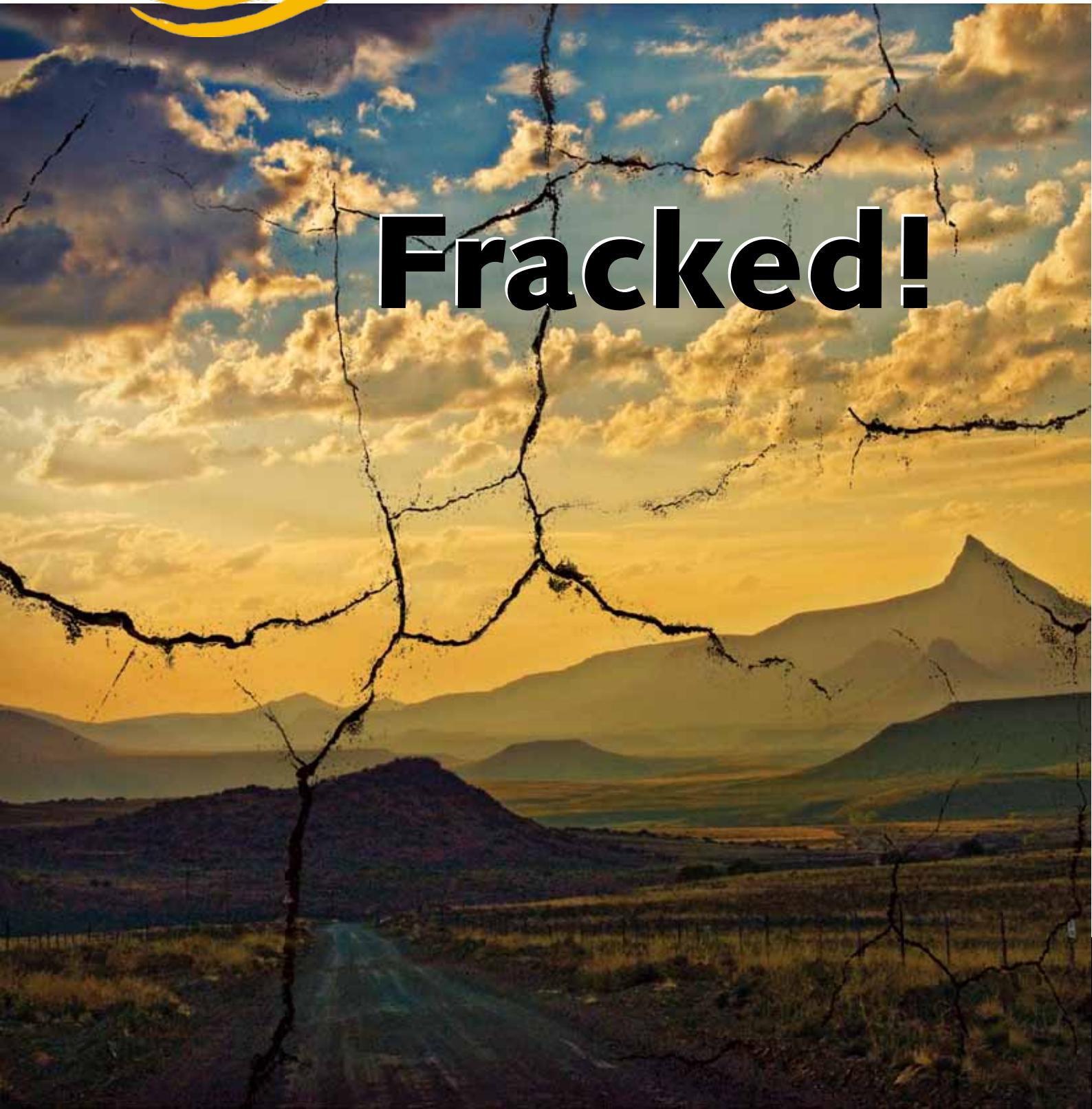


GROUNDWORK



Fracked!

groundWork is a non-profit environmental justice service and developmental organisation working primarily in South Africa, but increasingly in Southern Africa.

groundWork seeks to improve the quality of life of vulnerable people in Southern Africa through assisting civil society to have a greater impact on environmental governance. groundWork places particular emphasis on assisting vulnerable and previously disadvantaged people who are most affected by environmental injustices.

groundWork's current campaign areas are: Climate Justice and Energy, Air Quality, Waste and Environmental Health.

groundWork is constituted as a trust. The Chairperson of the Board of Trustees is Joy Kistnasamy, lecturer in environmental health at the Durban University of Technology. The other trustees are: Farid Esack, Patrick Kulati, Richard Lyster, Thuli Makama, Sandile Ndawonde and Jon White.

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groundWork is affiliated to the following international organisations:

Health Care Without Harm

International POPs Elimination Network

Basel Action Network

Oilwatch International

Global Anti-Incineration Alliance

groundWork is the South African member of Friends of the Earth International

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Shell's proposals for fracking in the Karoo are generating a lot of opposition from those who believe that Shell cannot be trusted not to frack it all up. Cover design by Barry Downard.





From the Smoke Stack

by groundWork Director, Bobby Peek

Dear Friends

In the still of an early morning, as I sit down to consider my thoughts for another smokestack, I am lulled into a false sense of peace and tranquillity, which this part of a day brings to one. But, on the contrary, we are not in a time of peace and tranquillity. Instead, it is a time of deep global crisis, a crisis as we have never before experienced.

Historians will tell you about various imperial crises that have occurred over the centuries – which, in their own ways, were also linked to ecological destruction and crisis, based upon over-accumulation and consumption. But it is the first time that we see crisis on the scale we are experiencing now. Many have already said this: it is a time for the 'perfect storm' in the form of our global crisis.

Yes, as we all know now, Japan and Libya are far from peaceful and quite. They are part of the global crisis.

The expected disaster caused by the fateful earthquake on Friday, the 11th of March, caught everyone by surprise. The sad reality is that you never can be prepared for what nature throws at you, and this is why it is critical to work within the bounds of nature. So the daily headlines about Japan are no longer about the more than 10 000 people who are believed to have been killed in the tsunami, but rather about the nuclear meltdown at its damaged nuclear plants built in a known earthquake zone. Words such as "disaster", "meltdown", "crisis" and "catastrophe" populate very many headlines that present stories on the situation. But one of the interesting headlines must be: 'Japan's nuclear morality tale' penned by Indian, Brahma Chellaney.

Is it a lack of 'morality' embedded within the South African government when, less than a week after the Japanese disaster, and when governments such as Germany and France are questioning their nuclear industry, the South African cabinet had the temerity to endorse an Integrated Resource Plan which includes 23% nuclear, between now and 2030, in our energy production mix? Furthermore, in a sign of defiance, the government has also ignored its own negotiated position at the Nedlac Energy Forum where it agreed, as part of Nedlac, 'to have a proper and focused national stakeholder debate on nuclear in 2011, prior to a decision being taken to include nuclear in the energy mix'.

No, this indicates not only a lack of morality but also the impunity of many modern 'democracies', where its electorate has become impotent to actually challenge it. This manifested itself in the 2003 Gulf War when, despite global public resistance, Bush, with the backing of certain states, still went ahead. Interestingly, this is happening in the crisis in Libya, where oil lies at the heart of conflict and all out resistance to change by Gaddafi and the eagerness of the US and its 'allies' to bomb the place to smithereens.

Getting back to South Africa's energy scenarios, we have to compliment government on taking the bold step of indicating that renewables will make up 42% of all electricity generation. But we have to consider Energy Minister Dipuo Peters' statement that 'the plan would remain flexible, with government constantly reviewing targets in terms of cost and feasibility.' I wonder what this could mean?

On the good news side, the date for the closure of the BulBul Drive hazardous and toxic waste dump



site, situated in the black communities of Umlazi and Chatsworth, has finally been set for the 15th of November 2011. This is indeed a victory over environmental injustice and environmental racism. Till this March there has been no absolute date set aside for this closure, but now the community has one from Wasteman Holdings. Sadly, there is still a legacy issue to be dealt with regarding the site, in relation to the alleged gassing of a local school due to operations at the waste site.

This legacy will likely never be dealt with because, as of this year, the eThekweni Municipality has down-sized its pollution compliance division, with the key architect and long time community activist leaving his post because, in the restructuring plan of the eThekweni Municipality, his post was not included. Siva Chetty, who was a person who managed to bring official rigour to science and balance it with politics and community pressure, obviously did not find favour with the powers-that-be. He will be missed by both government and the community activists who, in the past, were his fiercest critics.

Another piece of good news is that Friends of the Earth Brisbane has gone to court in the Queensland Land Court, opposing Xstrata Coal's proposal to develop a massive open-cast coal mine west of Wandoan in South West Queensland which will result in huge climate change. According to Indymedia the case has been taken on by the Environmental Defenders office. Solicitor Jo-Anne Bragg said: 'It's a David and Goliath battle against major mining interests. Our small team is proud to support Friends of the Earth Brisbane to make this objection and helping to point out the need to transition to an economy based on renewable energy, rather than approving another massive coal mine'.

Often environmental and social justice activists are accused of sloganeering. Yet 'keeping the oil in the soil' found another home on the 11th of March, when Friends of the Earth Norway, together with other civil society organisations in Norway, celebrated a governmental decision not to open the areas outside Lofoten Islands for oil drilling. Thus, from Yasuni (South America) to Lofoten (Europe) – and can we soon include the Niger Delta and Rift

Valley (Africa) – keeping the oil in the soil is not merely a slogan but a reality of the times.

In South Africa we have our battles extensively mapped out in the challenge to keep oil in the soil, coal in the hole, and gas where it belongs. Local communities in the Karoo are not taking the potential destruction of their lands lying down and thus the movement to stop Shell in the Karoo is growing day by day! Well done. May this movement be long in life and deep in the reach it has to all people in the Karoo.

Over the last three months, groundWork has been meeting with the US ExIm Bank, the Deutsche Bank, Commerzbank and the German KfW Development Bank who have funded, or are still going to consider funding, Eskom. When the issue of energy poverty comes on the table, where groundWork and allies highlight that the loans are in no way going to address this, there has been a general hush in the room, except for KfW Development who presented their support to off-grid solar panels in the Eastern Cape. Why the hush? Is there some genuine understanding that these loans are not going to reverse energy poverty, and will even exacerbate it? This is something that they would rather ignore.

Finally, on Human Rights day, the 21st of March, around 1500 people from throughout KwaZulu-Natal marched onto the Durban City Hall, calling for the delivery of their human rights as well as for climate justice. Can we swell these numbers to 40 000 in the streets at the COP in December 2011? I believe this is doable.

Till next time! ☺



Fracking in the Karoo

By Bobby Peek

Activists doubt Shell's ability to extract shalegas in the Karoo safely and without damage to the environment

The civil-society struggle to keep Shell out of the Karoo, where the oil giant wants to use fracking – a technology used by the oil and gas industry to access “unconventional” natural gas deposits trapped in shale, coalbed, and tight-sand formations – to extract shalegas, is already touching some nerve ends. NGOs such as World Wildlife Fund, the Wildlife and Environmental Society of South Africa and the Federation for Sustainable Environment have all joined the “Treasure the Karoo Action Group”, warning that Shell should rather leave the Karoo.

Mr Jonathan Deal of the Action group has warned that Shell cannot be trusted in the Karoo if one considers their ‘precarious history’ on environmental violations that is evident globally. Deal has indicated that the Action Group has done research on Shell operations over the past months and have come across at least eighteen incidents where the oil giant has had to pay fines after they have been found guilty of environmental contamination in America and Brazil.

Shell's communication manager in South Africa, Mr Elton Fortuin, has responded by saying that Shell takes responsibility for ‘following the law as a serious issue’. Thus Shell is always willing to pay the fines if they have committed alleged violations. “Considering the extraction of shale gas in the Karoo, Shell is confident in its abilities to undertake this in a responsible manner.” According to Fortuin, the technology that Shell is using has been proven over the last sixty years.

Mr. Bonang Mohale, Chairman of Shell South Africa, has indicated to employees of the multi-national corporation that “natural gas has a critical and positive role to play in South Africa and the world's growing energy demands.” He indicated further that the carbon dioxide footprint of shalegas is 70% less than coal.

Mr. Richard Worthington, manager of the climate programme at WWF, has indicated that Shell is misleading people when they say that shalegas is a better alternative and that it has a smaller footprint than coal. He has indicated that extraction processes, as well as the transport of the gas, is “greatly energy-intensive”.

According to Worthington, WWF insists that Shell and Sasol, as well as Anglo American, which is also investigating extraction, together, do full environmental impact assessments in order that the cumulative impact of the developments are established.

Ms Philippa Huntly, senior environmental specialist at WESSA, has said that they are also against Shell's proposed fracking in the Karoo because it will impact on the ‘sensitive ecosystems’ and water resources especially will be threatened.

Shell's proposed environmental management plan can be found at www.golder.com. People are asked to comment by the 5th of April 2011.

A provisional list of environmental crimes committed by Shell, which do not include those in the Niger Delta, are:

- 2007 16 May – Release of chemical pollutants Shell Texas Deer Park – Royal Dutch Shell Plc released tons of chemicals into the air around Houston.
- 2007 14 March Environmental infringements Shell Chemical Company – \$6.5 million dollar settlement – “violated air and other emissions standards between 1999 and 2003”.
- 2006 October – Shell Oil and subsidiary, Equilon Enterprises, \$6.5 million settlement Riverside County California – \$3.6 million civil penalties and



Air Quality

ordered Shell to stop future violations of California health and safety laws.

- 2006 Shell annual report – pages 146 and 147 approximately 69 pending lawsuits as of the 31st of December 2006
- 2007 March 16 9th U.S. Circuit Court of Appeals ruled Shell to contribute to cleaning toxic waste site Arvin California – Environmental Protection Agency found evidence of soil and groundwater contamination.
- 2007 June – Rosedale – Shell prematurely halts cleaning operation despite repeated requests from state authorities. – extensive groundwater contamination – MTBE, gasoline, diesel and benzene seep into the water table).
- 2007 28 August – Bakersfield Californian reports State Senator, Dean Florez, "asked the state's attorney general to take legal action against Shell".
- 2007, 27 November Shell restarts clean up now estimated at 4 – 5 million gallons.
- 2003 August 5 – Shell agreed to pay \$49 million relating to its unauthorised venting and flaring of gas – coast of Louisiana and Gulf of Mexico. Same location in 2000, Shell to pay \$56 million. 2001 Shell paid \$110 million.
- 2003 – Pipeline rupture in Washington – United States v. Shell Pipeline Co. LP fka Equilon Pipeline Co. LLC and Olympic Pipe Line Co. Clean Water Act claims for environmental violations – Shell paid civil penalty \$5 million and criminal fines of \$15 million.
- 2004 – Refinery contamination Texas – Hilton Kelley, and 1,200 residents Port Arthur, launch class action lawsuit alleging breach environmental human rights. Guardian UK 24 June 2004, "Shell was emitting 200-300 times the allowed emissions – many of them carcinogenic".
- 2001 – February, environmental law infringements Brazil – Shell admitted responsibility according to a Greenpeace report, contamination by organochlorine pesticides including endrin, dieldrin and aldrin.

• Durban – Sapref Oil refinery, jointly owned by Shell and BP, accused of a "dismal pollution record, which has claimed the lives of many residents." Sapref admitted in writing that the plant did not have a "perfect environmental and social performance record". Accusation that Shell/BP apply double standards – South African operation far less circumspect on environmental controls than its refineries elsewhere in the world.

• 2001 March – US Clean Air Act violations – EPA and U.S. Department of Justice announce settlement committing nine refineries owned by amongst others, Equilon Enterprises, to invest \$400 million over eight years to reduce emissions of nitrogen oxides, sulphur dioxide and particulate matter.

• 1998 September- Emission violations Shell Wood River Refinery Illinois – U.S. Justice Department announces settlement by Shell for ... "hundreds of environmental violations including illegal levels sulfur dioxide and hydrogen sulfide air emissions, benzene (a hazardous air pollutant), violations solid waste labeling, reporting, and manifesting requirements, untimely reporting emissions of extremely hazardous substances – ammonia and chlorine, and violations of Illinois water regulations".

• 1995 – Shell settles Martinez Refinery dumping suit for \$3 Million for "dumping illegal amounts of selenium into San Francisco Bay and the Sacramento-San Joaquin River Delta".

• 1989 – Shell fined \$19.75 million for an oil spill at Martinez Refinery – December 1, New York Times – Shell to pay \$19.75 million "more than 400,000 gallons crude oil San Francisco Bay". ... several Federal regulations broken... a valuable wildlife habitat was ruined and tidal marshlands would take ten years to recover.

• 1988 explosion Shell refinery Norco, Louisiana. New York Times, May 5, six deaths, one person missing, 42 injured. Residents "fed up over recurring emergencies that forced them to evacuate their homes eight times in twelve years". AlterNet: February 2005 explosion "spewed 159 million pounds toxic chemicals into the air ... Shell paid out \$172 million damages to some 17,000 claimants".



Climate change jobs... 1 Million?

By Musa Chamane

The Mooi River Municipality is proving to be at the forefront of waste management. Will they achieve their objective of Zero Waste before 2015?

In the run up to the United Nations Climate Change Convention gathering in Durban in November 2011, the Alternative Information Development Centre is embarking on research that will present society with the possibility of one million climate jobs (where people are meaningfully employed in technologies and processes that mitigate and adapt to climate change, rather than feed into the ongoing crisis of climate change) in South Africa. groundWork is participating in this research with the experience we have had with working with waste pickers throughout South Africa.

Mpofana Municipality – more widely known as Mooi River – has been supporting the local waste reclaimer's project since its inception. From humble beginnings in 2008 to winning the United Nations Environmental Programme (UNEP) award in 2010, Sbu and Eddie have made the process of waste picking a meaningful and decent employment option for more than ten people. Job opportunities are very scarce in a farming town such as Mooi River, but commitment and a desire to succeed from a couple of entrepreneurs created more than ten permanent jobs in Mooi River. In a small town creating employment for people without the State having to spend a cent in this employment creation is no mean feat.

It is clear from my broader experience that the waste trade has proven to be a new economic activity for some in this country. Trash is no longer trash, but a resource. The poor, unemployed, mostly youth have resorted to waste recycling due to the lack of job opportunities in this country and most of them

are doing well. In India and Brazil waste trade is regarded as a job but critics feel that these are not decent jobs. Our own Department of Environmental Affairs official, Joanne Yawitch – who is now with the National Business Institute – fervently opposed giving South Africa's waste pickers their right to employment during the negotiations on the National Environmental Management: Waste Act. She wanted them off the landfill sites. I wonder, will she now support them as the Director of the NBI, considering they are part of the business fraternity? The reality is that Waste Pickers do not have an easy job – let us not romanticise it – but we must fight to make these job opportunities decent and dignified.

In Mooi River each waste reclaimer earns R1 000 per month in this project. It is not a good amount of money to earn for hard labour such as this – but it is a start. The project has got great plans and if all goes well this amount can be doubled before the end of the year.

Commitment made by the Municipality in supporting this project has taken this project to another level. They have been the first waste pickers in South Africa who have gained recognition and formal *locus standi* from a municipality in the form of a letter of recognition that they have the right to work on the waste landfill site, in residential areas, and local businesses to recycle waste.

Excitingly, the municipality intends adopting waste separation at source for the entire town, but they want groundWork to partner in bringing this about.



Waste

A waste picker prepares recyclables for transport at the Mooi River dumpsite.

Photo: groundWork



"Since Mooi River is a farming town, organic waste needs to be composted for the market will be there though the local commercial farmers," says Muzi Madlala, the Municipal Manager. I have worked with a countless number of municipalities but I have never seen such a commitment to creating jobs and improving the area through projects such as these.

Shelter erection at the landfill site will resume shortly, since the landfill is electrified, with two machines as tools donated to waste pickers by Central Waste Paper being installed. The state of the shelter is very informal but after receiving funds from the Global Greengrants Fund and receiving the UNEP SEED award – which has a small financial

prize attached to it – the shelter will be improved tremendously.

The Municipal Manager has approved the shelter erection plan and a new permit for waste pickers which guarantees them the right to recycle for the next five years. In discussions it is clear that the municipality intends source separation in the very near future, which is what the reclamer's dream of. The manager encouraged waste pickers that they need to work hard and save the money so that they can buy a bakkie to assist them in their recycling business. Different coloured bags for Mooi River were discussed during our conversation with the manager. He was also very positive about it and encouraged groundWork to assist in getting more funding to boost the project since the municipality operates on a slim budget.

If all goes well for the reclaimers in Mooi River, Zero Waste will be achieved in the near future while creating job opportunities and alleviating poverty. Creating jobs for the unemployed is one of the most satisfying jobs one will ever do. There are more and more jobs that will be created by this recycling project. The landfilling of waste comes with many social ills, including climate change. Climate change is on top of every progressive state's agenda. Waste recycling mitigates climate change impacts. Municipalities in South Africa will soon be looking at Mpofana Municipality in Mooi River as a beacon of light. ☺



Preparing for COP17 and beyond

By Siziwe Khanyile

It's all systems go towards a civil society challenge to the COP17

With COP17 in Durban this year, groundWork's Climate Justice and Energy Campaign hits its stride, as groundWorkers and community groups work to get ready to mobilise towards this event and beyond.

We recognise that the COP in Durban is not where we will have the biggest influence on decision makers and we see the development of a strong civil society voice outside, developing its own agenda based on daily experiences of energy poverty and the ravishes of climate change, as being key during the run-up, in the course of and post the COP in influencing our negotiators.

Our work relates to challenging the role of fossil fuels such as coal, which is currently South Africa's major source of energy as promoted by government, both in poor households in the form of coal braziers and to power Eskom. Why the majority of South Africans and, indeed, Africans are energy-poor while there is an abundance of energy resources in Africa, from renewables to fossils, is something that puzzles me.

groundWork's Climate Justice and Energy Campaign is built upon the long term goal of the attainment of energy sovereignty by Africans. The concept of people's energy sovereignty is one that responds to the crises of the times. It is linked to food sovereignty, defined by the Nyeleni Declaration as:

... the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts those who produce, distribute and consume food at the heart of food systems and policies rather than the demands of markets and corporations.

groundWork will continue working on energy issues around South Africa, dialoguing with

community organisations on the fenceline of various developments to understand the challenges of climate and energy. In Mpumalanga and Limpopo provinces we work with local people, campaigning on coal mining, the coal-to-liquid industry and coal-fired power stations. In KwaZulu-Natal, Durban, the dialogues will be on oil refineries and oil pipelines, and, in the Karoo, Western Cape shale gas extraction by Shell and the proposed fourth crude oil refinery in Eastern Cape, Port Elizabeth. These campaigns will seek to inform, to mobilise communities and to challenge government policy.

With government turning a blind eye to coal-burning in poor households, groundWork will hold collective dialogues with township residents and shack dwellers in the Vaal, the Highveld and south Durban. These dialogues will allow communities to review the politics of energy, climate, health and environment, to explore the practical meaning of energy sovereignty as a way of resisting elite power and of giving effect to people's control of their own energy future, to respond to climate change and also to discuss alternative models for local energy provision.

The community dialogues also aim to support peoples' participation in policy processes on climate change and energy such as with the Climate green paper and the standards that will seek to address the emissions of greenhouse gases.

It is the market and corporations – with the support of 'democratic' government – that continue to make a mockery out of the UNFCCC and our collective challenge of climate change. groundWork will seek to expose this. In November, groundWork will host a 'Dirty Energy Gathering' the week before the COP to bring together community people and policy NGOs globally in order to expose and challenge false solutions such as 'clean energy' from fossil fuels, financial and other institutions that support



these processes, and to call for real solutions at the UNFCCC process. This gathering will culminate in the 'Climate Gangster Awards' that will expose those main drivers of climate change.

These activities will all be underpinned by key pieces of research that will be released during this year and that will inform the mobilisation of civil society towards, at and beyond the COP 17. This mobilisation will come together during the Global Day of Action during COP 17 in Durban.

groundWork is part of the South African civil society planning committee towards COP 17 whose mandate is to coordinate pre-COP activities such as community awareness and mobilisation, to facilitate communication of civil society initiatives in respect of COP17, to establish an NGO space during COP 17 outside of the UNFCCC space, and to plan

a civil society march on the global day of action. As part of the committee, we are maintaining linkages with the progressive government of Bolivia – and we hope more governments will stand up and be counted against the present hypocrisy of the UNFCCC – and we are planning to have a broad civil society event at which a delegation from Bolivia will be present. This will be a moment to mobilise South African and, indeed, African civil society.

The road to COP 17 promises to be a busy and challenging one as groundWork works on the ground to strengthen people's voices, which we hope will have an impact on the activities inside the negotiating halls of the ICC in Durban in December 2011, and will support us in our endeavours to sharpen our strategy for energy sovereignty over the next years. ☺

Siziwe,
protesting with
with Bongani
Mthembu of
SDCEA at the
COP16 in
Cancun, Mexico.

Photo:
groundWork



The curse of the Highveld

By Rico Euripidou

In the Highveld it's energy for industry and air pollution for the poor, where exceeding the standards is, indeed, the standard.

"Between May and August 2010 – 570 times standards were exceeded".

East of Johannesburg lies the Highveld, which has been home to South Africa's coal mining heartland since the 1800s. It also hosts some of the most polluting corporations globally, such as Sasol, Eskom, Highveld Steel and Vanadium (part of the Anglo group), Columbus, Rand Carbide, Vanchem, and SAMANCOR chrome works to name a few. Coal is synonymous with power stations in South Africa and, in the Highveld, Eskom, the South African energy utility, has eleven operational coal fired power stations generating 30 000 MW within the Highveld Priority Area (HPA). However, Eskom produces most of South Africa's electricity by burning low grade coal in this area – sometimes even coal discards or coal ash!

Despite this area being the heart of our energy production, most community people still live within the context of energy poverty. They simply cannot afford to pay for the electricity produced, which is sold to them at seven times the price that industry gets it at. What communities commonly get instead is toxic waste, air pollution and water pollution while industry reaps profits with cheap abundant energy at below cost. Coupled with the multitude of polluting industries are high unemployment rates. Often our department officials say, "if people had a choice between pollution and jobs, they would choose jobs". I am sure they would – but there are no jobs. To rub salt into peoples' wounds government encourages people to continue burning coal indoors, using a "clean coal technology" called the Basa, which has

caused even more acute and direct impacts on poor people's lives. So... they get a double whammy – endorsed uncontrolled industrial pollution and indoor air pollution because government has now decided this is their meaningful strategy to provide people with affordable, clean energy.

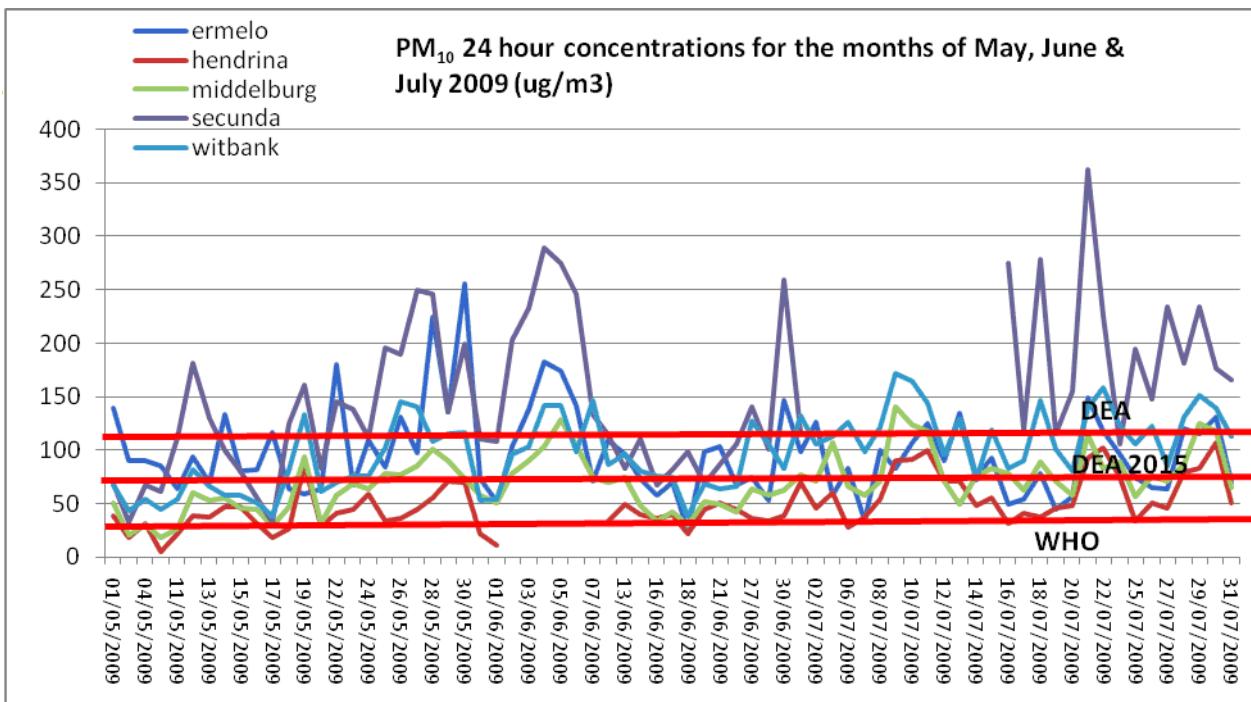
Three and a half years after the area was declared a priority air shed, we prepare for another winter in which there is no hope of any meaningful action to ensure that we have an environment that is not harmful to one's health and well-being within the HPA.

It is in this context that groundWork and local communities have challenged government on the air pollution in the area and government has responded by declaring this area a 'priority area' for special intervention to challenge the air pollution issue. The Highveld Priority Area (HPA), which extends from Middleburg and Witbank in the north, to Ermelo and Ekhuruleni in the east and southwest, was declared by the Minister of Environment and Tourism in November 2007 under the National Environmental Management: Air Quality Act. This article presents some of the critical information that has emerged from the monitoring of air pollution over the last two years in the Highveld Priority Area.

This area was declared as a priority area simply because the ambient air, as it exists, is consistently of such bad quality that it is expected to cause residents to experience health outcomes that will affect their health and well being. For this reason the Air Quality Act requires specific air quality management actions to rectify this situation. One



Figure 1:
 PM_{10} 24 hour concentrations for the months of May, June & July 2009



of these actions is that the ambient air quality be measured and monitored.

The curse of winter

Five ambient air monitoring stations are operated and maintained in the HPA by SI Analytics for DEA in the Mpumalanga Province. At each of the stations PM_{10} , $PM_{2.5}$, SO_2 , NO , NO_2 , NOx , O_3 , CO , benzene, toluene, ethylbenzene, xylene and mercury are measured. In addition, meteorological data are also measured. The diagrams are a summary of the ambient air quality measured over the past two years since monitoring began. Summary data are presented and discussed over the winter period for 2009 and 2010¹. Breaks within the line charts reflect data gaps.

Particulate matter concentrations (PM_{10} and $PM_{2.5}$) – Dust as far as the eye can see!

Particulate matter, commonly referred to as PM are the microscopic particles of dust, metals or toxic chemicals small enough to be inhaled into the respiratory system of humans. They range from particles with a diameter of ≤ 10 microns (1 micron (μm) = 10^{-6} metre) and are potentially dangerous because they are small enough to be drawn into and affect the lung. However, particles with a diameter of $\leq 2.5 \mu m$ are more dangerous because they can be drawn deeper into the lung; they are designated $PM_{2.5}$.

Below, summary concentrations are presented for both PM_{10} and $PM_{2.5}$. The current interim South African annual and twenty-four hour standard for PM_{10} is $50 \mu g/m^3$ and $120 \mu g/m^3$ respectively. This is, however, in stark contrast to globally accepted and implemented standards of $20 \mu g/m^3$ and $40 \mu g/m^3$ respectively for PM_{10} , even though, from January 2015, the PM_{10} standard will be revised to $75 \mu g/m^3$ and $40 \mu g/m^3$.

Presently, South Africa has not adopted an ambient standard for $PM_{2.5}$ although, in response

1 The HPA air quality data reports are available on the website: <http://www.saaqis.org.za/Downloads.aspx?type=AQ>. These are monthly reports compiled by the consultants (SI Analytics) who maintain the monitoring stations. Monthly statistics are available at: <http://www.deat.sianalytics.co.za/index.php?id=statistics>



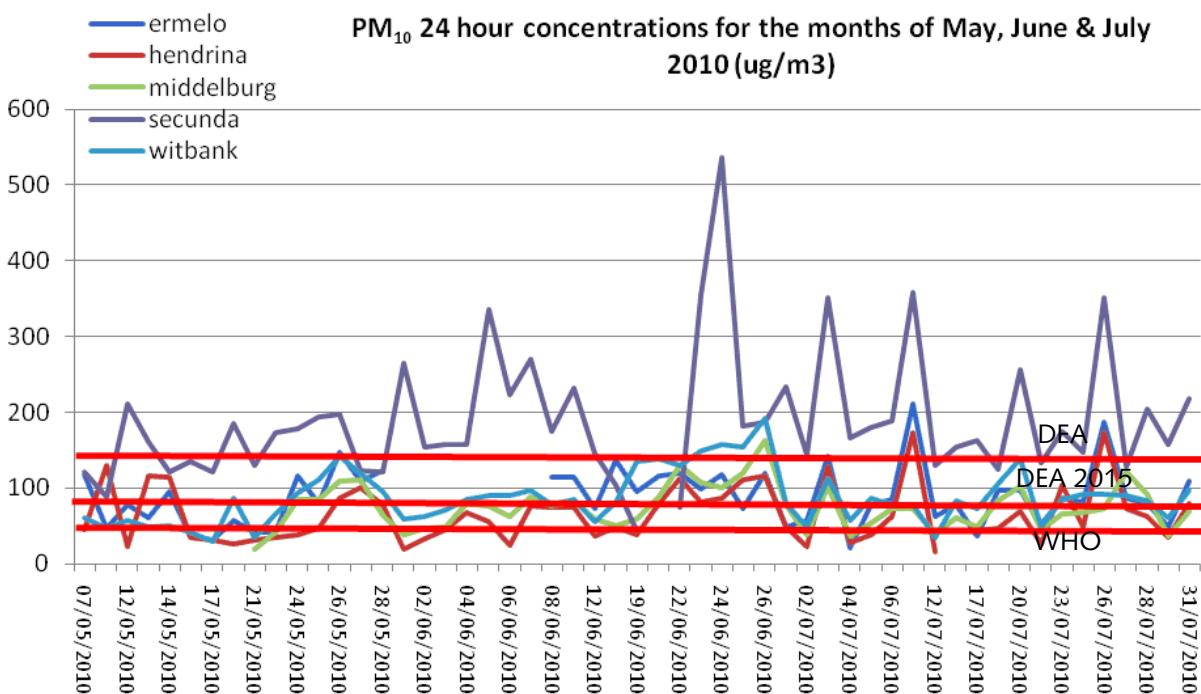


Figure 2:
 PM_{10} 24 hour
concentrations
for the months
of May, June &
July 2010

to groundWork and civil society concerns, the Department of Environmental Affairs² have initiated a process to do so and it is anticipated that we will adopt the guideline limit set by the World Health Organisation which is $10\mu g/m^3$ (annual average) and $25\mu g/m^3$ (twenty-four hour average).

The graphs (figures 1 and 2) best summarise the PM_{10} twenty-four hour concentrations measured for the winter months of May, June and July 2009 and 2010 and illustrate the extent of ambient air pollution which prevails during winter within the HPA. The dark horizontal lines provide a comparison between measured PM_{10} twenty-four hour concentrations, the current ambient standard and the WHO recommended standard. As is evident, all of the monitoring stations recorded ambient levels of PM_{10} that consistently exceed our national and international standards. Secunda and Witbank record the highest levels of air pollution over both years, with massive peaks occurring in Secunda.

Table 1: Ratio of $PM_{2,5}$ to PM_{10} for May 2010.

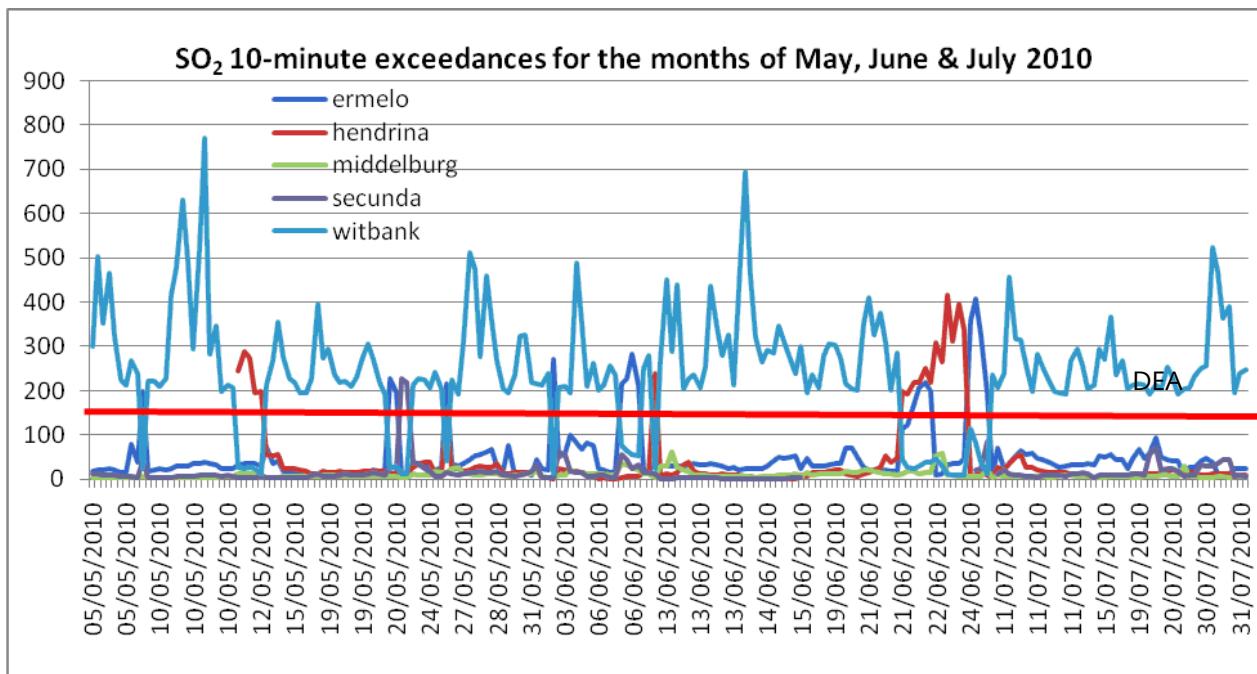
Station	Monthly Average Concentrations		
	PM_{10} ($\mu g/m^3$)	$PM_{2,5}$ ($\mu g/m^3$)	$PM_{2,5}/PM_{10}$ Ratio
Ermelo	60,60	38,49	0,64
Hendrina	46,75	20,49	0,44
Middelburg	23,09	12,49	0,54
Secunda	104,18	48,73	0,47
Witbank	52,08	36,99	0,71

Table 1 is copied directly from the SI Analytics monthly report for the month of May 2010 and shows the Ratio of $PM_{2,5}$ to PM_{10} for May 2010. The ratio presented in the table can be broadly applied to determine the $PM_{2,5}$ concentration from the PM_{10} concentrations presented in Figures 1 and 2. To illustrate an example – the PM_{10} concentration shown for Secunda in Figure 2 is mostly comprised of $PM_{2,5}$ (ratio 0,71) demonstrating that the emission source is industrial rather than domestic. This is especially relevant because industry have always claimed that particulate matter pollution

² With the new government, since May 2009, the Department of Environment and Tourism has been split.



Figure 3: SO₂ 10-minute exceedances for the months of May, June & July 2010



is because of domestic fuel use. This, however, provides the evidence to demonstrate that this is simply not the fact!

When compared to the proposed WHO twenty-four hour standard (average) of 25 $\mu\text{g}/\text{m}^3$, we can see just how polluted Secunda really is. The significance in this regard is that particles with a diameter of $\leq 2.5 \mu\text{m}$ are more dangerous because they can be drawn deeper into the lung and therefore have a greater public health impact. Furthermore, there is ample peer reviewed public health evidence in the global health literature to demonstrate this.

Similarly the proposed PM_{2.5} twenty-four hour average of 25 $\mu\text{g}/\text{m}^3$ is exceeded for almost all of the time during this winter monitoring period. Similarly the eight hour average (61 ppb) for Ozone (O₃) is exceeded on 147 occasions in the HPA during the month of May 2009 and, since O₃ is classified as a secondary priority pollutant, is an indicator of photochemical reactions originating from industrial pollution.

Sulphur Dioxide (SO₂) – Asthma's enemy!

Figure 3 shows SO₂ ten-minute exceedances for the months of May, June and July 2010. From the line chart it is clear that the ten-minute SO₂ ambient air

quality standard (191 ppb) recorded by the Witbank monitoring station is exceeded for almost the entire monitoring period. The average for Witbank over the three month period is 256 ppb which is almost twice the ten-minute standard of 191 ppb. No SO₂ ten-minute average data is available for a 2009 comparison.

Figure 4 shows the SO₂ twenty-four-hourly exceedances for the month of July 2009. Compared to the South African national standard of 48 ppb averaged over twenty-four hours it is evident that Witbank (and Middelburg) experience the highest concentrations SO₂. Compared to the WHO recommended twenty-four hour standard of 7.6 ppb it becomes quite shocking to see how bad the air quality in Witbank really is. Witbank is home to many old coal mines which are constantly burning underground.

Observations: Going nowhere!

Worryingly, the conclusion consistently drawn for the reasons of the observed exceedances of national standards within these HPA reports is...

"this can be ascribed to an increase in the burning of coal and wood in rural areas for warmth and the lack of rain in the winter months to scrub the



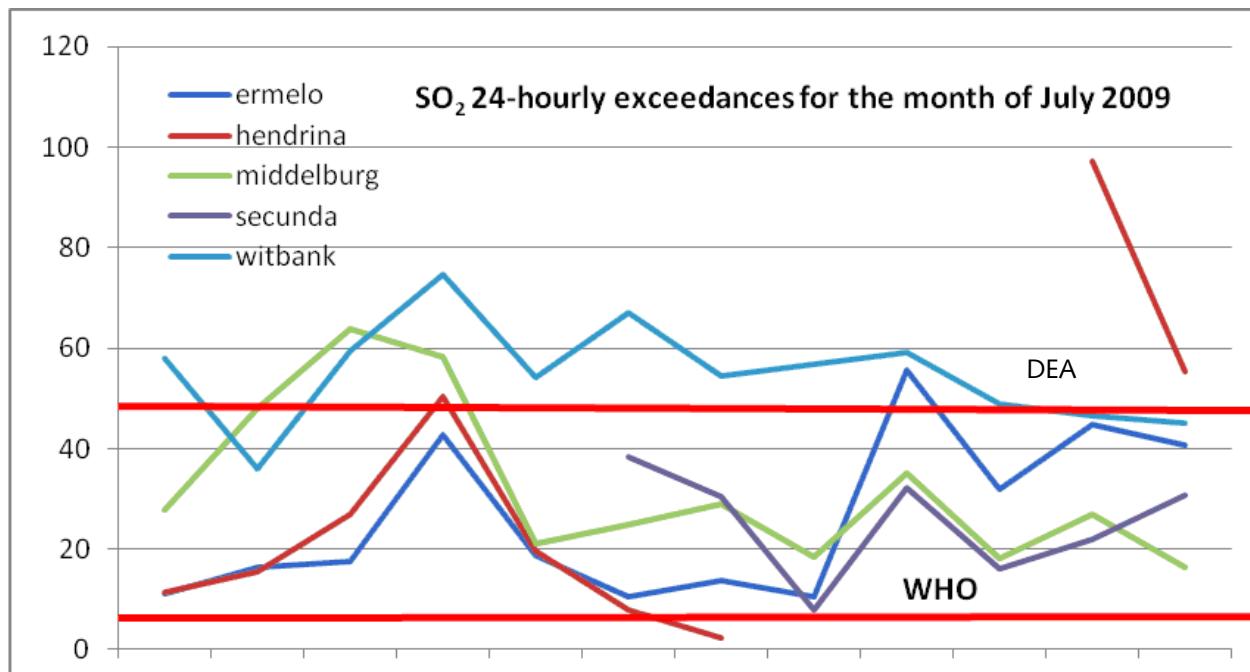


Figure 4: SO_2 24-hourly exceedances for the month of July 2009

air of particulate matter" ...i.e. laying the burden of the blame on poor communities who rely on fossil fuel for cooking and spatial heating. Within the May 2010 report the conclusion drawn for elevated $\text{PM}_{2.5}$ recordings is..."during the month of May the $\text{PM}_{2.5}$ concentrations measured exceeded the WHO guideline of $25 \mu\text{g}/\text{m}^3$ numerous times at all stations. Looking at the diurnal graph it is evident that the main contributor is domestic fuel burning". This is in fact a grossly incorrect conclusion because the published literature widely acknowledges that the sources of $\text{PM}_{2.5}$ are linked to industrial emissions of fine particles and do not originate in domestic settings. $\text{PM}_{2.5}$ arises primarily from combustion sources, while the coarse fraction of PM_{10} ($\text{PM}_{2.5-10}$) arises from mechanical processes and entrainment. Thus these are fundamentally different pollutants.

So here we are at the start of another winter period with its associated inversions which result in the trapping of pollution and the very real and negative impact on peoples' health. But after three years of talk there is still no change. Yes, the DEA will say that they have published (or are working on) the draft Highveld Priority Area Air Quality Management Plan (which was meant to be published for public

comments in January 2011). However, it is clear from the evidence that immediate action for immediate change is required now, and not in five years time. Sadly, many of the industries polluting in the area will be able to attain 'grandfathering' status if they apply for permission to continue to pollute.

Finally, to use the phrase of rubbing salt into "gaping wounds", the government has agreed that Eskom can build a 4800MW coal-fired power station "Kusile" near Delmas (with a proposed life-span of fifty years). This energy is for base load, i.e. industry, and not for the community. This deliberate and calculated action will further lock the HPA into a high ambient air pollution trajectory and thus undermine genuine efforts at addressing historical environmental injustices and prejudice the potential for renewable energy industry development. ☺



SA landfills leave much to be desired

By Musa Chamane

During a recent trip around waste sites in South Africa, Musa discovered that there is still a long way to go in terms of waste management in the country

We are a developing country in terms of the Human Development Index, including other measures of development such as emissions per capita, and we are a leader in Africa in terms of development. Our attitudes as South Africans, especially our government, in dealing with subjects such as waste management are still a challenge. I have visited two provinces recently with a hope that I would find a difference in terms of waste management as compared to when I visited two years ago; Northern Cape, the hottest province in South Africa, and KwaZulu-Natal northern region. Both have badly managed waste landfills.

It was the early hours of the morning and about thirty waste pickers had convened at the Upington dumping site. Some of them were a bit dozy, while others had begun the work of the day. I spotted a few crows floating in a clear blue sky. The sun was already up and it was hot. The area resembled a semi-desert with shrubs that were beginning to adopt a brown colour due to heat and lack of rain. The land is vast, flat and dry.

I arrived with Simon, who works as a waste picker at Sasolburg landfill. I had asked him to accompany me because Afrikaans is the dominant language in the area and he can speak more than five South African languages. Some waste pickers just ignored us while others simply glanced at us. Still others were already enjoying the shade in a shelter made out of wasted material. "Waar is Jomo,"¹ asked Simon? We know Jomo from our first visit to the area in 2009. Luckily Jomo was still around and he remembered us and he called everyone. We had a meeting with around forty waste pickers. After speaking to them about the broader waste picker movement in South Africa they indicated that they would join the movement.

¹ "Where is Jomo?"

We then proceeded to the Kuruman waste landfill site which is privately run, even though the licence holder is the Kuruman municipality. We encountered a problem upon entering the site since we had not made proper arrangements with the waste landfill management. After lengthy negotiations between Simon and the security guards we eventually got approval to go inside and about twenty young male waste pickers were on site and we addressed them about the movement and they gladly accepted the idea and showed a keen interest in joining, as well as attending the meetings.

The landfill itself was in a poor state, as most landfills are in this country. Despite being privately managed there was neither compacting nor covering of waste, just like in Upington. Both sites are covered once a week and sometimes once or twice a month, depending on the municipality and the managers of the site. The waste pickers all sell to one person, as they were instructed to do when the private company started to operate from this site. This is a monopsony that is common in various parts of the country.

From the hottest province I moved on to the coastal province of KwaZulu-Natal, to the Newcastle waste landfill site which is located outside the town of Newcastle. The municipality has appointed consultants to develop a material recovery facility (MRF). Twenty male waste pickers operating on site already knew about it and had mixed feelings about it. Some feel that they will be pushed aside, while a few of them feel that it would be a good opportunity for them as well. This issue was introduced last year and a number of waste pickers, especially women, left the landfill for good because the management of the municipality made it clear that those that are going to remain on site will be sucked automatically into the MRF. This announcement was followed by



fencing of the site. Some waste pickers forced their way back by jumping or destroying the fence to the site. Others have since left because the majority of the women cannot jump the fence due to age and strength.

This landfill is not that bad in terms of operations but what was disturbing was that they receive waste types that are banned at general landfill sites. The site manager agreed that they do receive hospital waste and animal carcasses, but they normally dig a trench to dispose of such waste. I queried this with him and he told me that it has been the norm since even before his time. It is more than twenty years since the site started to operate. In terms of daily covering and compacting it looked perfect.

Another waste landfill or dumping site that is being privatised is Estcourt dumping site. There were a lot of domestic animals on site and there were four waste pickers, employed by someone who collects only bottles. The dumping site is in a very poor state and there were a lot of flies and flooding of waste as it had rained during the week that I visited.

I believe that the municipality does not have the capacity to properly run that dumping site. I learnt also that the waste landfill site will soon be managed by private consultants who have been contracted by Imbabazane municipality to operate the site according to the Department of Water Affairs' Minimum Requirements². The dumping site is hopeless as far as I am concerned; even the consultants that have been appointed have never dealt with waste so their management is a matter of trial and error, which is bad for the environment.

My perception that rural and farming towns generally have poor landfills was supported by my observation of the Ladysmith waste dumping where, when one visits the landfill site, one feels like puking. Every type of an animal is on site trying to find something to eat. There are two formal houses that are located on the same land as the dumping site. I wondered how this could have happened. There is an ill-operating weighbridge which clearly states that the municipality dumps on this site. Waste pickers' lives are very tough

² The Minimum Requirements is a set of guiding documents on the construction and management of waste landfill sites in South Africa. It is presently being revised.

here since rural towns do not have more than one market and exploitation is the order of the day.

There are a few points one can draw out of the recent landfill visits. Our municipalities are really struggling in terms of waste management. The waste managers at the landfills are not well capacitated on how to operate landfills properly according to the minimum requirements. Even when one enquires about the minimum requirements and classification and its meaning there are very few landfill managers who know the meaning. Most of them agree that there is a positive role that the waste picker's are playing, even though a few complain that waste pickers are disrupting the operations on the site.

Waste management is still not a priority for our government, despite the Waste Act of 2008. It is not clear whether the Act has filtered down to local municipalities or not. By the look of things, it seems as if our government is not serious about issues of waste management. ☺



The management offices at the Ladysmith dumpsite also leave something to be desired.

Photo: groundWork



Leadership needed in mercury debate

By Rico Euripidou

Progress towards a legally binding global mercury treaty is slow, and government leadership is sorely needed

Over the last week in January I attended the Second Intergovernmental Negotiating Committee (INC2) in Chiba, Japan, to continue the process of negotiating a legally binding global mercury treaty expected to be signed in Minimata, Japan, in 2013. groundWork has, over the last five years, played a prominent role in assisting the African Regions governments to understand the elements of the global mercury issue and especially how mercury issues in Africa impact African communities.

Mercury is a potent neurotoxin which contaminates fish supplies around the world and poses particular risks to women and young children. The anticipated mercury treaty will address mercury pollution globally. Delegates from more than 120 countries attended as well as fifty NGOs from twenty-seven countries. NGOs primarily urged delegates to be more ambitious when setting the mercury treaty's scope and goals.

Significantly for South Africa, delegates discussed requirements to control mercury emissions from major sources such as coal fired power plants and metal smelters and to address existing contaminated sites such as the Thor Chemicals mercury stockpile which is yet to be cleaned up.

The Minamata tragedy¹ provided a centrepiece and inspiration for discussion; Minamata victim

Shinobu Sakamoto testified in the plenary session and presented a statement from thirteen Minamata victims and supporter groups directly to the Vice Minister of the Japanese Ministry of Environment. They urged delegates to develop a strong treaty that would prevent future Minamata catastrophes, and to justly address the continuing effects of the Minamata disaster, still unresolved after over fifty years.

The Japanese government also received criticism from NGOs for its continued export of tons of toxic mercury, especially to developing countries. Measures to reduce the global supply of commodity mercury, to reduce mercury use in industry and to restrict trade were debated.

The Zero Mercury Working Group² (an international coalition of more than ninety-three public interest environmental and health non-governmental organisations from forty-five countries from around the world) and other non-governmental organisations spoke out on many occasions during the session, with recommendations for strengthening provisions, including expanding the list of mercury-based products and processes to be regulated under the treaty, providing explicit time lines for phase outs and strengthening provisions that address artisanal and small-scale gold mining, the largest single use of mercury in the world, among many others. ☺

¹ The Minamata tragedy demonstrated to the world the human impact of acute mercury contamination. This incident occurred because a chemical company named Chisso, located on Minamata Bay, pumped its wastewater, contaminated with mercury chloride, into the ocean from the 1930s until the 1960s. Methylmercury bio accumulated in fish and local people (particularly fisher folks) got poisoned – this was called Minamata disease, characterised by a loss of sensation and numbness in their hands and feet following acute poisoning and significant congenital malformations such as paralysis and impaired mental development during

fetal development – some children born were referred to as “wooden dolls”. However the real tragedy of the Minamata incident is that many victims never received fair compensation from Chisso nor assistance and recognition from the Japanese government more than fifty years after the event.

² www.zeromercury.org



The WB and the energy conundrum

By Sunita Dubey

Not having learned from the Eskom loan debacle, the World Bank is now recommending lignite over renewables in Kosovo

Kosovo's energy needs – "lignite vs renewables"

The World Bank Group is once again set to repeat another Eskom debacle, and this time it is in Kosovo, which is one of Europe's poorest nations, with looming challenges of 45% unemployment, lack of infrastructure and ever-rising energy needs. The economy relies mainly on remittance from Kosovars living outside of Kosovo and subsistence agriculture. It is the South within the North.

The World Bank has been assisting the country's "energy sector development" since 2006 and has come up with the recommendation for "privatisation" and building another 600 MW "lignite-based power plant". The arguments for such a high carbon and environmentally devastating project are very similar to the ones used for Medupi by Eskom, in South Africa. The "brown coal" has scored at the top of chart as the most feasible and cheapest option for meeting energy needs in Kosovo. In the absence of viable renewables, the lignite-based power plant is the only way to revive the economy and deal with looming unemployment. This is the same song that the World Bank was singing a year back when they approved \$3.75 billion to build the third largest coal power plant in the world, in South Africa.

While the discussions on the energy strategy within the World Bank are still going on, and they are projecting themselves as climate-friendly institution, the Kosovo project is casting doubts on their intention and role as a "climate-friendly developmental bank".

Today, Kosovo is at the crossroad of monumental decisions about meeting its energy needs. The options are either to use domestically available lignite or go forward and meet its energy demands through renewable energy. In the context of Kosovo's interest in joining the EU, it is important

that it embraces environmentally friendly developments to fully comply with applicable EU Directives and develop strong regulatory systems for the energy sector development. In March 2011, the European Commission adopted a road map for transforming the European Union into a competitive low-carbon economy by 2050. The Commission has invited other European institutions, member states, candidate countries, as well as potential candidates and stakeholders, to take this road map into account in the further development of EU, national and regional policies for achieving a low carbon economy by 2050.¹

Current energy needs in Kosovo are met by Kosovo A, which is a forty-year-old lignite (brown coal) based power plant and pollutes approximately seventy times more than EU standards and yet the plan is to keep producing energy from lignite. Kosovo B, another lignite based coal power plant, which is about twenty-five years old will, according to the 2009-2018 Energy Strategy, be refurbished and privatised. Due to outdated technology and aging ash handling and disposal systems, air pollution from the dust generated by Kosovo A and B electricity generation plants and the ash dumps represent a critical environmental and health problem for this region.

The International Development Agency (IDA) provided a grant totalling \$10.5 million in technical assistance to help bring in new investments in the energy sector and attract private investors to develop Kosovo's lignite mines and increase capacity for lignite-fired power generation. Kosovo has an estimated 11.5 billion tons of reserve lignite. The technical assistance was broad, including an assessment of carbon mitigation options (including

¹ <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/272&format=HTML&aged=0&language=EN&guiLanguage=en>



options to leave space for a carbon capture and storage plant) as well as policies for promoting renewable energy in the country.

The World Bank's fossil fuel binge is showing no sign of slowing down, despite the fact that we are nearing the one-year anniversary of Eskom's loan. The controversy around the Eskom loan raised many critical questions about energy access, environmental and health impacts, benefits to the local communities, etc. Once more, these critical questions are overlooked in favour of "big fossil fuel projects" and adding another dirty coal-based power plant to meet the energy needs of Kosovo.

groundWork, with its ongoing experience with the Eskom campaign, has been interacting with the Kosovar civil society, who are looking for low carbon development to meet their future energy needs. They have raised numerous concerns regarding the lack of transparency in decision making, poor governance in the energy sector and no meaningful involvement of civil society in the assessment done by the World Bank. The willingness of the World Bank to move forward with the project, despite the volatile political situation, absence of a clear national development plan and weak government capacity and institutions to manage problems emanating from the project of this scale is worrisome.

Civil society feels that the World Bank should not be hasty in advancing the lending negotiation process with Kosovo. Even the World Bank acknowledges in the Interim Strategy Note that

"there is the risk of controversy surrounding lignite-based power generation, although it is critical to Kosovo's development and Bank Group support will help ensure adherence to the best available technology from an environmental standpoint. Moreover, Kosovo's overall energy strategy, supported by the WBG and other partners, will help put the country on a lower carbon path." This was the same promise World Bank made while giving money to Eskom; that this loan will steer South Africa towards a low carbon path. There has been minimal progress in South Africa to scale up renewables, except for promises within the just-approved Integrated Resource Plan. Despite this plan the power company Eskom is all set to build another 4800 MW power plant, Kusile, supposedly the world's largest coal power plant. This is despite the fact that South Africa is the host country to the upcoming UNFCCC conference on climate change (COP17).

groundWork is sharing its experience with Kosovo's CSOs and was part of the strategy meeting held in Pristina (capital of Kosovo) in the month of February. Since then, groundWork has provided solidarity with local groups and connected them with various other communities fighting similar battles around coal. We are all awaiting the outcomes of the World Bank Energy strategy to see whether any lessons have been learnt by this institution after Eskom and how they are going to fulfil the agenda of "poverty alleviation", "energy access" and "mitigating climate impacts" in their future energy projects. 

A lignite-burning power station in Obilic, Kosovo spews out smoke.

Photo: Jon Worth



Nedlac Walkout

Climate Justice Now! South Africa issued this statement before walking out of the Nedlac meeting on the 25th of March 2011

Government disregards Nedlac's outcome on a call for national stakeholder debate on nuclear energy

On the 16th of March 2011 the South Africa cabinet endorsed the Integrated Resource Plan 2010 with a nuclear mix of 23% over the next twenty years. By approving the IRP 2010 as such, government has ignored concerns raised by society and, indeed, the National and Economic Development and Labour Council (Nedlac) itself.

We believe that Cabinet's decision:

1. To go for nuclear is unsafe and violates the National Environment Management Act and the Precautionary Principle enshrined in that legislation and the Draft Green Paper on Climate Change.
2. Pre-empts climate policy and embeds a major expansion of fossil powered generation.
3. Undermines the Nedlac process and decisions reached by consensus, within the Energy Task Team where it was finalised that: "Constituencies agreed to have a proper and focused national stakeholder debate on nuclear in 2011, prior to a decision being taken to include nuclear in the energy mix."

In light of the recent Japanese experience, it is difficult to fathom why government has insisted on releasing the IRP 2010 now and, moreover, embedding nuclear within its mix, considering the breath and depth of statements being made globally, including those by Japan's Nuclear Safety Commission Chairman Haruki Madarame, who has apologised for promoting nuclear.

Critically, through the Nedlac process, Government agreed not to take a decision on nuclear. As this is part of the official record of Nedlac, it forms a statutory regulation that the government is obligated to act in adherence to. Essentially, Government has bypassed its own rules to make the decision.

If Government is of the opinion it can ignore accidents, NEMA, and NEDLAC, we believe that our participation within Nedlac is meaningless and our reliance on policy to protect society is wishful thinking.

We call on government to acknowledge that it has erred in going forward with the IRP 2010 and to withdraw their approval; call on Parliament to take action to get answers from Cabinet as to why it has acted contrary to the outcomes of Nedlac; call on parliament to ensure that government takes the necessary actions that set in place a process of a stakeholder debate on nuclear energy to inform the IRP 2010, and that Parliament places these concerns on its official record as this session of Nedlac was mandated by parliament.

These issues will be tabled at the Nedlac on Friday, the 25th of March and, failing a suitable response from Government representatives at Nedlac to our concerns, the community representatives mandated by the Climate Justice Now! South Africa will walk out of the Nedlac negotiations on the Green Paper on Climate Change. ☺



Government's Climate Change Response Green Paper seems not to believe itself. It warns there will be hell on earth after 2050 if we do nothing about climate change and then proposes a set of measures which do nothing much about climate change.

Hell on earth? It says average temperatures will be 3-4°C hotter at the coast and 6-7°C hotter inland. That's what we get if the world as a whole warms by 4°C which is where the Copenhagen Accord voluntary 'pledges' will take us. Put that in perspective: average ice age temperatures are just 5°C cooler than now – well, 5.8°C given global warming to date.

'Hey, it won't be that bad,' says Business Unity South Africa. The authority for this conclusion is 'the general view'. Curious that BUSA repeatedly challenges the Green Paper to substantiate its arguments. Leaving that aside, doing nothing much is really a bit much for BUSA: "Business believes it is imperative not to attempt to pursue ambitious emission reductions without a global agreement ..."

This sounds very much like European business telling the EU to back off on more ambitious reductions unless the US makes comparable commitments. At least eight big Euro corporations then went and funded US Senate candidates who either said climate change isn't happening or that they would block climate legislation. They include some of South Africa's favourite transnational corporations: BP, ArcelorMittal, Bayer and Lafarge. (Thanks to CAN for digging that up).

There was a global agreement in Cancun. We might call it the US-BASIC agreement. BASIC, remember, is Brazil, South Africa, India and China. Cancun adopted, with great applause, the Copenhagen Accord rejected with howls of derision the year before. And, just to show that the US is there for the long haul, it is pretty much what it wanted back in 1991 when they were negotiating the original convention. Its principle features are what's not there: no binding cap on carbon emissions; a fund with no money in it; and a tech transfer body with no way to transfer technology. So it meets the basic condition for international agreement: it won't work.

But back to Business South Africa. It repeats three times that the get out clause on government's Copenhagen Accord offer must be restated with feeling. The Green Paper is clearly remiss in stating only once that South Africa will do nothing unless the North anted up the money and technologies like the UNFCCC says it should. Business of course wants to see the money – with a large wedge of it in its own wallet. Otherwise, trimming the growth in carbon emissions is just not realistic.

This is based on the sound business principle that the polluter gets paid. With a good thick wedge of 'incentives', business may volunteer to reduce pollution. Alternatively, it may increase pollution to get more incentives to reduce it. The Kyoto Protocol's cap-and-trade scheme worked the same way. Cancun does even better by keeping trade while throwing off the cap. This is the 'voluntary' approach.

Back in the 90s, people who had the stench of their corporate neighbours up their noses said 'stuff that' and demanded tough regulation with binding air quality standards. They finally got the Air Quality Act in 2005 and the proposed climate policy promises stringent enforcement to protect people's health.

What you win on the swings, you lose on the roundabout. Enforcement was handed down to local authorities without the means of enforcement. Four years after the Vaal Triangle was declared a pollution hotspot, the air still stinks and the local authorities still have zero capacity. eThekweni was the exception. With SDCEA breathing down its neck, the local authority set up a system that actually worked – a bit. This is obviously not realistic and the council is now doing the sensible thing – dismantling it.

We do love the smell of sulphur in the morning.

Back in the US, White House officials say that the international target of keeping global warming below 2°C is not realistic. That's not because we will fry at that temperature. Rather, having ditched any idea of a global target for carbon reductions, the game is now to ditch the temperature target. One must admire the logical consistency.

All aboard folks. Next stop, Hell. ☠



In Brief

Small is good!

Grand Inga, a massive hydroelectric project on the Congo River, could generate as much as 39 000 Mw of power. Feasibility studies are in progress, but there have already been setbacks and criticism, one of the major ones being that industry, as always, will benefit while the energy-poor people of the region will not.

In the meantime, work has begun on one of the 315 smaller dams planned for the DR Congo. This dam will provide electricity to the nearby built-up areas. The dam is being built at a waterfall on the Lufuku River. Its reservoir will be only four metres deep and its turbines will not eliminate the natural falls on the river.

Local residents, who currently have no access to electricity, are eagerly awaiting completion of the dam, especially since the project has been in the pipe-line since the early 1980s.

Even though small-scale dams like this don't address the needs of energy-intensive industry, it may well create alternatives to a development path that relies so heavily on resource extraction.

Some good news

Early in March the Constitutional Court gave a unanimous ruling in favour of Thembekile Mankayi, who was represented by the redoubtable Richard Spoor, in a case against AngloGold Ashanti. The judgement, a huge step towards the rights and dignity of mine workers, came too late for Mr Mankayi, who died of the lung disease contracted in the mines a week prior to the judgement being handed down.

Pipeline disaster in Dalian, China

Although this happened last year, we did not read about it in the news. To see some truly horrible pictures of the disaster go to http://www.boston.com/bigpicture/2010/07/oil_spill_in_dalian_china.html

Big business spies on activists

The Guardian newspaper in the UK revealed that three large energy companies have been spying on environmental activists. Leaked documents show how a security firm hired by the companies informed on environmentalists' plans after snooping through their e-mails. This was made known after police chiefs, defensive because of revelations of undercover officers in the protest movements, claimed that there are more corporate spies in protest groups than there are undercover policemen.

AngloGold Ashanti wins another unwanted award

AngloGold Ashanti were awarded the "Public Eye Award" for the dubious distinction of "contaminating land and people with its gold mining in Ghana", beating BP, Coca Cola, Philip Morris and Toyota for the honour. Activists allege that the company has destroyed over fifty rivers, all essential to the life of the local residents.

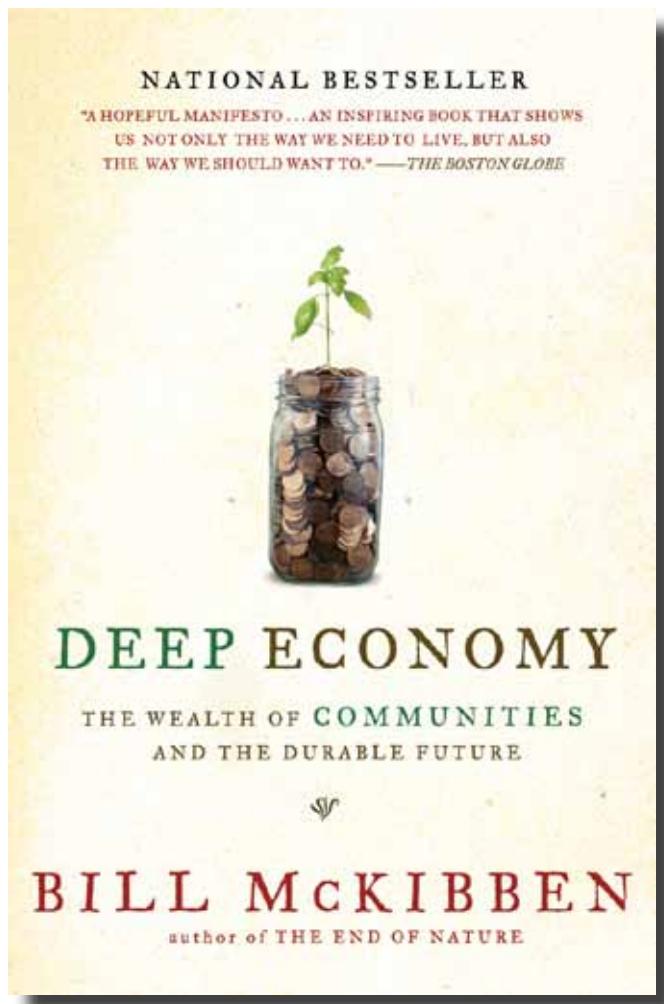
Sasol's now messing in Canada

Sasol has completed a R7.55 billion acquisition of a 50% interest in the Montney Shale Basin in Canada from Talisman Energy. This is a shale rock deposit where natural gas can be found in large quantities.

Remember Chernobyl

Chernobyl has recently been opened to tourism, but it is important to remember that the catastrophe is still a reality and that nuclear power still kills. A call has been made to make the twenty-five days between the 2nd and the 26th of April days of action to highlight the victims of the nuclear industry, both through accident and through working at the plants, and those whose land and lives are destroyed by uranium mining. All organisations are encouraged to run special events during this period and to register at www.chernobyl-day.org.





Deep Economy

The Wealth of Communities and the Durable Future

The bestselling author of *The End of Nature* issues an impassioned call to arms for an economy that creates community and ennobles our lives.

In this powerful and provocative manifesto, Bill McKibben offers the biggest challenge in a generation to the prevailing view of our economy. For the first time in human history, he observes, "more" is no longer synonymous with "better"—indeed, for many of us, they have become almost opposites. McKibben puts forward a new way to think about the things we buy, the food we eat, the energy we use, and the money that pays for it all. Our purchases, he says, need not be at odds with the things we truly value.

McKibben's animating idea is that we need to move beyond "growth" as the paramount economic ideal and pursue prosperity in a more local direction, with cities, suburbs, and regions producing more of their own food, generating more of their own energy, and even creating more of their own culture and entertainment. He shows this concept blossoming around the world with striking results, from the burgeoning economies of India and China to the more mature societies of Europe and New England. For those who worry about environmental threats, he offers a route out of the worst of those problems; for those who wonder if there isn't something more to life than buying, he provides the insight to think about one's life as an individual and as a member of a larger community.

McKibben offers a realistic, if challenging, scenario for a hopeful future. As he so eloquently shows, the more we nurture the essential humanity of our economy, the more we will recapture our own.

<http://www.billmckibben.com/deep-economy.html>

