



# GROUNDWORK



## Killing King Coal

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*groundWork is a non-profit environmental justice service and developmental organization 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, Coal, Waste and Environmental Health.*

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*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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Cover: Members of the Highveld Environmental Justice Network protest outside the provincial Department of Minerals and Resources in eMalahleni, Mpumalanga. Credit: groundWork



# From the Smoke Stack



Photo by FoE

by groundWork Director, Bobby Peek

Dear friends

I want to start off this newsletter by apologising to Megan who is tasked with putting this critical publication together for us every three months. This should have been out a month ago, but it got bottlenecked with me. Our newsletter is our story, our actions, our struggles and it is a way in which we keep the world, communities, our sister NGOs, government, funders and even industry abreast of what we do. Being late with this is not proper, and there can be no excuse for it.

It has been a very interesting period since our last newsletter in March – not in the usual process of the amount of work that was done, but rather the fact that various processes that we have been monitoring and challenging came together; some positive, some negative. I have from my two decades of activism learned that whenever there is a victory there is also always a bitter pill to swallow. I have also learnt over this time that turning back corporate power and getting some form of accountability from the State takes a collective effort by all.

In the summer (yes, the Northern summer) of 2014, together with Heffa Schücking and Katrin Ganswindt, I spent a day in Oslo, doing what Heffa does best: moving in and out of political circles and laying down the threat. In this case the challenge was to get the Norwegian Pension Fund to get out of coal. The big word – divestment! It was one of those crazy fast days, in and out of meetings, running from one end of a small city to another. We first started with the Green Party in parliament. Ironically, on the very day that we were in parliament there was a vote on the type of investments the Norwegian Pension Fund (known as the Government Pension Fund Global) should consider. After parliament, it was off to the Ethics Committee that tries to bring some gloss to some of the dirtiest investments in the world by what

we often think of as a responsible government and people. Then off to the Norges Bank, which actually manages the world's largest pension fund whose income has been derived from exploiting gas and oil and placing the world in a predicament from which it will never recover – the ravages of climate change.

This visit built upon Katrin Ganswindt's three months in South Africa with groundWork in 2014, where she tried to understand the devastating developments in the Limpopo Province by Coal of Africa (CoAL). After meeting with the three entities during the hot summer day, we had laid in front of them evidence showing where Norwegian money is further racking up the climate change developments, not only in CoAL, but also in Sasol, where the Norwegian Pension Fund has huge investments. As usual, throughout this period we were met with the smoothness and steeliness of officialdom.

Fast forward to the 27<sup>th</sup> of May 2015, one summer later, when, after mounting pressure from global civil society led by Urgewald, the Norwegian government decided to get out of companies whose coal portfolio is more than 30% of their core business. This means that the likes of Anglo American, BHP Billiton and South Africa's very own Sasol come under the spotlight. Well done to the Urgewald team! The bitter pill to swallow is having to consider where this liberated money will now go. Oil development in Uganda and gas developments in Tanzania? We are still a long way off.

Talking of Sasol, we must not forget that the last twelve months was also a time when the likes of Sasol, Eskom and other companies placed immense pressure on government to create leniency and postpone the air pollution emission standards that are set to protect the citizens of South Africa's health and well-being. Sasol particularly played a very devious and unpatriotic role in this process.



In May 2014, in parallel to seeking leniency, Sasol instituted legal proceedings against the Minister of Environmental Affairs and the National Air Quality Officer to set aside a number of air quality standards (called “minimum emission standards”) applicable to Sasol’s industrial activities, and to all other big industrial polluters, including Eskom. These standards require significant reductions in the harmful pollutants that the operations of Sasol and other big industry emit. In April, Sasol withdrew its litigation. This is indeed a victory for people who are on the fence of Sasol, and South Africa as a whole. But what does it mean, considering that in March they were granted their right to pollute by being allowed the postponements from emission standards that they requested while hanging the “Sword of Damocles” over Minister Molewa’s head? Again, a bitter pill to swallow.

Getting to the local in south Durban. The battle against the port continues. But it is not about getting to push back on the port only – which is now being delayed to 2020 – but also the other major infrastructure developments and expansions that are surrounding it. The South Durban Community Environmental Alliance (SDCEA), against all odds, continues to challenge the government and corporates as these seek to dismantle south Durban to reassemble it to the exclusion of communities and for elite wealth. Ironically, during this period both the EIAs for Clairwood and the expansion of the present port were rejected by the KwaZulu-Natal provincial government.

Seldom has government rejected EIAs. Not only have these EIAs been rejected, but government officials have met with SDCEA to placate them, I would say by listening to their concerns. However, what we have come to recognise is that the rejection of these EIAs is nothing more than a procedural process to make sure that an ‘i’ is dotted and a ‘t’ crossed rather than a call that substantive issues be addressed. While the Clairwood EIA was being reconsidered, SDCEA raised numerous concerns about how the development was already bringing trucks on site and pulling to pieces the place in preparation for the development, despite the EIA not being finalised. What happened? SDCEA has been ignored.

All of government’s new found “power” to reject EIAs is meaningless if the only reason for the rejection is to make sure that the developer can correct procedural issues and to make it more difficult for community people to challenge substantive issues. Considering that the Gauteng government wants to make the EIA process no longer than ninety days, we are in for a development fest of note!

During this period, groundWork, with community people, visited Maputo to share in solidarity with the climate struggle there. It was at the height of a new wave of xenophobia gripping South Africa and in particular KwaZulu-Natal. Having witnessed the violence against, and brutal murder of, our fellow Mozambicans it was strange driving into Mozambique with a South African motor vehicle registration number. The two feelings inside of me were immense sadness at what we are doing as South Africans to our brothers and sisters from Africa and the fear of what the retaliation could be as I drove through an Africa which I so love.

I am not going to end this smokestack on a sour note. After reading this, I am sure some of you might be saying what a pessimist I have become. On the contrary. I get up each day recognising that you eat an elephant one bite at a time – which is not to say I advocate eating elephants! But I find strength when, as Musa Chamane has shown in the Waste Campaign, a long and often very slow battle does result in victories which are positive and (dare I say it) there is no bitter pill to swallow. This is so in the case where the waste pickers of Tshwane, together with groundWork and its allies, managed to get private waste company EnviroServ to pull back from their proposed municipal waste incineration development in Chloorkop, Pretoria, thus jeopardizing more than three thousand jobs. Well done to the South African Waste Pickers’ Association!

I end this smokestack by just saying happy birthday to all the groundWorkers and Board of Trustees, for June is the month when we celebrate another year of activism. Thank you for all your hard work, and critical guidance over the years. We are now sweet sixteen – although I hope more rebellious than sweet!

For now, Bobby ✂



# Old coal, new power station

Bobby Peek

*Colenso's power station is to be rebuilt to burn coal from South Africa's first coal fields.*

Northern-KwaZulu Natal (KZN) has been a wasteland for the last century. It is an environmental wasteland filled with toxic coal waste dumpsites, abandoned coal mines, abandoned and dilapidated skeletal coal-fired power stations, abandoned towns, abandoned people... and abandoned hope.

In the early part of the last century, towards the end of the phase of indentured labour from India, many people were sent to the coalmines of KwaZulu-Natal. There is still present a strong heritage from India and it is not unusual to speak with someone of Indian origin in South Africa and find that they have a relative or two from the Northern KZN area.

These were the first active coal fields in South Africa – there is even a town named Newcastle in the region. Then the corporate giants such as Anglo American moved on to the Vaal, where the second wave of coal was found, and then on to the Mpumalanga area – and now the Waterberg. When you follow this route you find abandonment and destruction as hope for a better tomorrow was promised with coal, and then dashed when corporate capital had taken all it wanted and moved on.

Now, from the ruins of Northern KZN, the disaster of coal is about to erupt again.

A 1050MW coal-fired power station, with its own new coal mine, has been proposed for Colenso by Colenso Power, a business created to build and run it. Colenso Power claims that the project is necessary to address the present electricity shortage. Commenting on the Draft Scoping Report (DSR), groundWork argues to the contrary: by the

time it is built, there will be a surplus of generating capacity.

This conclusion follows the projections of the Integrated Resource Plan (IRP) 2010 "Update". The first unit of the Medupi coal-fired power station in Lephalale, Limpopo will come on line in mid-2015 and, even allowing for further delays, the plant should be completed by 2018. The Kusile coal-fired power station near Emalahleni, Mpumalanga, is also delayed but the first unit should be producing power within the next two years.

Further, this new plant cannot be reconciled with the national policy on climate change, especially considering the fact that existing coal-fired power stations already make South Africa one of the highest emitters of greenhouse gasses globally, and indeed the highest emitter in Africa. Despite this, the DSR does not contain a single reference to climate change.

Any additional energy needs should rather be supplied from renewable resources.

The case for any new coal plants is increasingly tenuous, particularly when considering the external costs of coal-fired power stations, such as environmental destruction and compromised human health.

In the scoping report, there is a section on "residual impacts", such as air and water pollution. This implies that there are some impacts that society will have to endure as a result of coal developments in the area. groundWork believes this should not be a foregone conclusion, and must be considered in light of alternatives and the no-go option which



## Lead

must be meaningfully considered. We contend that the impacts of energy production can be much reduced if renewable alternative energy production systems are developed.

It is of critical concern that the Colenso Power project is situated 500 metres from the Tugela River and proposes to use this as its source of water. This is one of the province's major water resources.

Neither water quantity nor quality are addressed in the DSR, and there is no indication given that negotiations with the Department of Water and Sanitation (DWS) have been conducted to determine whether water will be made available from the Tugela system, and that a Water Use Licence Application (WULA) is to be compiled for abstraction and other water uses.

Acid mine drainage from mines has already reached crisis proportions in certain areas in South Africa. More water is polluted at every point in the industrial life-cycle of coal. Therefore, it is not only an issue of access to water for people but also contamination of what little water there is. It is of particular concern that the project is immediately upstream of Msinga, where many people draw water directly from the Tugela.

Above all, the proponent and the consultant dealing with this case have been vague and frugal with the facts. Promises without substance are thrown about to make the decision makers happy. A statement such as "the employment profile of the Local Municipality is expected to change dramatically and for a long time" is vague and does not belong in a document that should be scientifically rigorous in order to inform responsible decision making.

It is not clear if the DSR and the proposed Environmental Impact Assessment (EIA) does or will

cover the proposed mining activities. All information related to the Mining Rights Application (MRA) and EIA for the mine should be made publicly available so that the cumulative nature of the project can be better understood and the consultation process is undertaken inclusive of both projects.

The DSR indicates that people will be removed to make way for the project but does not say how many or who they are.

Advertisements for the scoping process were only issued in English newspapers and hard copies of the report were available only in English. This is unacceptable and does not conform to the regulations governing EIA processes.

EcoPartners, the environmental practitioners doing the scoping process, restricted open access to the reports, requiring registration before documents could be released. This is contrary to open and meaningful access. No legislation requires people to register to receive public information.

Beyond this, when visiting the area, one witnesses the plight of a depressed society. Unemployment is high, opportunity for peoples' development is sparse, and the reopening of the coal wounds of the past are seen as a solution by those who have been dispossessed by coal once already.

To share learning and solidarity, groundWork often links community people who are facing new fossil fuel developments with those who have suffered from these developments in the past and have resisted. What do we do here? People know the devastation of coal already. Their forefathers knew it even more intimately. Indeed, my children's great-grandfather was indentured and abandoned as a result of coal. ✕



# Seeding climate justice

Bobby Peek

## Maputo Declaration of African Civil Society on Climate Justice

In April, community people from the fencelines of struggles in south Durban, the Vaal, the Highveld and Lephale, and various NGOs from South Africa including groundWork, Earthlife Africa, Trust for Community Outreach and Education, Womin and other NGOs, and participants from Kenya (the host country), Nigeria, Zambia, Malaysia, Zimbabwe, Botswana, Uruguay and Canada all descended on Maputo to share in solidarity with Justiça Ambiental! (JA! Friends of the Earth Mozambique) in their gathering, "Seeding Climate Justice".

After three days of listening to struggles and talking about the local to the global, "it was agreed that Africa is disproportionately impacted by the climate crisis although she has not significantly contributed

to the problem... that the climate crisis is systemic in nature and is a result of defective economic and political systems that require urgent overhaul... that Africa has been massively plundered over the centuries and continues to suffer severe impacts from resource exploitation and related conflicts". On this basis, the "Maputo Declaration of African Civil Society on Climate Justice" was agreed upon for further action.

Please read it below, share it as widely as possible and get hold of JA! in order to sign up to this declaration from wherever you are. Send your solidarity sign-on to Anabela Lemos at: [anabela.ja.mz@gmail.com](mailto:anabela.ja.mz@gmail.com). ✕

### Maputo Declaration of African Civil Society on Climate Justice

Climate justice advocates, community peoples and mass movements' representatives met in Maputo, Mozambique from 21-23 April 2015 to consider the roots, manifestations and impacts of climate change on Africa and to consider needed responses to the crises.

At the end of the deliberations it was agreed that Africa is disproportionately impacted by the climate crisis although she has not significantly contributed to the problem. The conference also noted that the climate crisis is systemic in nature and is a result of defective economic and political systems that require urgent overhaul. In particular, the meeting considered that Africa has been massively plundered over the centuries and continues to suffer severe impacts from resource exploitation and related conflicts.

The meeting noted that the *Africa Rising* narrative is based on the faulty premises of neoliberalism using tools like discredited measures of GDP and is presented as a bait to draw the continent deeper into extractivism and to promote consumerism.

The meeting further noted human and environmental rights abuses on the continent, as well as the ecological, economic, financial crises, all adversely affect her peoples and impair their capacity to adapt to, mitigate impacts and build collective resilience to climate change.

The meeting frowned at the widening gap between our governments and the grassroots and the increasing corporate capture of African governments and public

institutions. These constitute obstacles to the securing climate justice for our peoples.

The *long walk* to climate justice requires mass education of our populace, as well as our policy makers, on the underpinnings of the climate crisis, the vigorous assertion of our rights and the forging ahead with real alternatives including those of social and political structures and systems. It also demands collective and popular struggles to resist neo-colonialism, new forms of oppression and new manifestations of violence including criminalisation of activists and social movements, and xenophobia. We recognise that as climate change worsens, it will increase the resource crunch and migrations and will lead to more conflicts between people. We also recognise that the exploitation of migrant labour by corporations often leads to conflicts between neighbouring countries.

**With justice and equality as the irreducible minimum, the conference further noted and declared as follows:**

1. All nations must act together to ensure that global average temperature rise does not go beyond 1.5 degrees Celsius above preindustrial levels as anything beyond that will mean a burning of Africa;
2. In Paris COP21, we demand that African governments defend positions that benefit Africans not the World Bank or corporations;
3. We reject carbon markets, financialisation of land and natural resources, consumerism and commodification of nature, and all forms of carbon slavery;



## Climate and Energy Justice

4. We reject all false solutions to climate change including, Reducing Emissions from Deforestation and forest Degradation (REDD), industrial tree plantations, genetic engineering, agrofuels and geoengineering, noting, for example, that clean coal does not exist;

5. We reject the false notion of “green economy” that is nothing but a ploy to commodify and hasten the destruction of nature;

6. Renewable energy that is socially controlled must be promoted across the continent.

7. We call for the creation of financial systems that promote and facilitate clean energy options including by supporting subsidies, facilitated loans, research and development;

8. We demand an end to financial systems built on extensive subsidies, externalisation of costs, over-optimistic projections, and corruption;

9. We resolve to work towards reclaiming energy as a public good that is not for profit and reject corporations-driven energy systems;

10. We say no to mining as we lived better without extreme extractive activities.

11. Our land is our present and our future livelihood and we reject land grabbing in all its forms including particularly for so-called “investment” projects that are setting the path beyond land grabbing to a full continent grab;

12. There must be full, transparent and prior informed consent of communities before the use of their lands for any sort of projects;

13. In all cases the welfare of local communities and our environment must come be prioritised over the profits of investment companies.

**In line with the above and through other considerations, the conference demands as follows:**

1. Governments must ensure that the energy needs and priorities of local households, local producers and women – including with regard to social services, transport, health, education and childcare – should be privileged over those of corporations and the rich;

2. We demand that no new oil exploration permits or coal mines should be granted in order to preserve our environment and to keep in line with demands by science that fossil fuels be left in the ground if we are to avoid catastrophic climate change;

3. We call for and support public and social control of the transition to renewable energy, including by community-based cooperatives, civil society collectives and the provision of local level infrastructure;

4. Governments must dismantle the barriers of privilege and power including those created and reinforced by financial institutions such as the International Monetary Fund (IMF) and the World Bank;

5. We demand urgent technology transfer for clean energy production, the abolishment of intellectual

property and increased research and development funds to tackle climate change;

6. We demand full recognition of local community knowledge of forests, food production, medicinal and cultural uses of land and forests; funding of research in this area and use as part of the public education system;

7. We demand an urgent transition from dirty energy forms to clean energy systems while ensuring that workers are properly equipped and provided with new healthy jobs created by this shift;

8. Governments must support agro-ecological food production in the hands of small scale producers, prioritise food production over cash crops in order to promote food security in the context of food sovereignty;

9. Governments to ensure the protection and recognition of farmers’ rights to save, sell

and exchange their seeds while rejecting genetic engineering and synthetic biology, including of those seeds manipulated and presented as being *climate smart*;

10. Ensure access, security, control, and right to use land for women. We recognise land as a common good;

11. Tree plantations must not be misrepresented as forests and trees must not be seen simply as carbon stocks, sinks or banks;

12. Community forest management systems should be adopted across the continent as communities have a genuine stake in preserving the health of forests;

13. The right to clean water should be enshrined in the constitutions of all African countries;

14. Governments must halt the privatisation of water and restore public control in already privatised ones;

15. Governments should halt the building of big dams, other mega structures and unnecessary infrastructure;

16. Governments should be responsible for holding corporations accountable for all environments degraded by ongoing or historical extractive and other polluting activities. Corporations who have created this contamination must pay to clean it up, but their payment does not constitute ownership of these environments;

17. Governments to ensure the cost of social and health ills by using energy derived from fossil fuels are not externalised to the people and the environment;

18. Governments must take up the responsibility of providing hospitals, schools and other social services and not leave these for corporations to provide as corporate social responsibility or other green washing acts.

Conference participants resolved to work with other movements in Africa and globally for the overturning of the capitalist patriarchal system promoted and protected by the global financial institutions, corporations and the global elite to secure the survival of humans and the rights of Mother Earth to maintain her natural cycles.

**Signed by:** All the organisations, representatives of social movements and communities and students present at the meeting.





# The formal birth of HEJN

Robby Mokgalaka

*HEJN have decided to look towards a bigger picture – to form a central structure.*

In their quest to see environmental justice, and after a long and tireless effort to link together the Highveld communities affected by coal in order to build solidarity, the Highveld Environmental Justice Network (HEJN) was finally positioned to become a functional structure.

Members gathered in Ermelo in May 2014 to brainstorm guiding principles, values, missions and visions to govern the structure. All organization members mandated by their respective community-based organizations were present to take part in the process. The drafting of the constitution of HEJN was a long, challenging, but successful endeavour. The document was then sent to the Centre for Environmental Rights to breathe life into it in terms of the legally required frame. In between the legal process, consultations were held to ensure that the content reflects the intentions and minds of the representatives.

In November 2014, members of HEJN assembled again in Carolina to adopt the constitution, at which point consensus was reached and the document was formally adopted. The document was beaten into shape to reflect members' intentions, accommodating their struggle on the community level. This open, democratic consultation process in the drafting of the document yielded optimism amongst members in respect of the organization. People started throwing ideas around in the meeting about how HEJN members should work together in consolidating their different struggles and could assist each other. The gesture suggested that people were beginning to see success in the organization.

The success of the process did not go without challenges. The politics of power and dominance which has been prevalent for many years had its

role to play. Some members felt that they did not receive the recognition they deserve. I think this was because people have been living in their own spaces, according to their own rules, and receive all the attention they want. Under the circumstances, one had to understand and acknowledge that this was a transformation process for certain individuals, which requires patience. However, with a constant reminder to members about the main objective of the organization, focus was gradually regained.

On the 18<sup>th</sup> of April 2015, all fourteen community-based organizations forming HEJN met in eMalahleni to have their first annual general meeting to elect members into positions. This was an historic event as it transformed HEJN into a formal and potentially more functional structure. Responsibilities amongst members would clearly be defined and roles would be played with better coordination and understanding than before.

The organizing team did not ignore the fact that the nature of the meeting would create a delicate space that could either break or make HEJN. The team strategically appointed independent persons to assist in facilitation to ensure a neutral space for all members. The election process was democratically run and everyone had a say, and the newly elected members appeared happy and ready to lead the organization as a team, as they each gave short speeches about their appointment expressing their commitment.

Out of enthusiasm and optimism members have already been asking for a strategic meeting so that they can start getting into action. Their spirit was apparently lifted by the unquestionable feeling of unity created in the space and amongst themselves. The entire process clearly shows the development of HEJN as an organization. ✕



# Phansi coal! Phansi

Robby Mokgalaka

*HEJN's mass action showed that unity yields power.*

On the 25<sup>th</sup> of March 2015, Ayanda Bam, Director of the Independent Power Producer KiPower, was visibly shaking when he received a memorandum from the marching crowd of about 300 at his offices in eMalahleni, Highveld. His gate was blocked by a frustrated and large gathering of HEJN members, clearly against coal due to the environmental injustices already affecting their health. The crowd, in dark blue T-shirts emblazoned with "Coal Kills, Kill Coal", took to the streets to echo their message loudly.

The activists came from different areas of the Highveld, including Arbor, Delmas, Middelburg, Carolina, Ermelo and Wonderfontein, to demand that the government take action against the pollution caused by coal mines and coal-fired power stations in their respective areas, but also to stand in solidarity with the Delmas community who would be directly affected if the proposed KiPower coal-fired power station was built. KiPower is a subsidiary company of Kuyasa Mining.

In 2007, the national Department of Environmental Affairs declared the Highveld area a "hot spot" or air priority area. This meant that the ambient air quality is polluted to such an extent that it is not safe to breathe as it causes many kinds of respiratory diseases, amongst other illnesses. Notwithstanding the declaration made, the government continues to issue licences to companies to construct coal-fired power stations within the same declared area. The communities were expecting the government to implement strategic plans to reduce the pollution, as many people are increasingly suffering from asthma, sinus and other respiratory diseases. In response to the government's neglectful attitude

towards its people, the communities resorted to such radical ways to address their problems.

The activists expressed their concerns by handing over their memorandum containing their demands, firstly to the officials at the provincial Department of Mineral Resources (DMR) and then to KiPower. Both were to be replied to within fourteen working days.

Before this, however, after receiving the news about the planned demonstration, DMR officials quickly arranged an urgent meeting with the HEJN members to negotiate an alternative solution to the demonstration. The meeting between DMR and HEJN was held on the day prior to the demonstration. In the meeting, the officials expressed their willingness and preparedness to listen to the community members and address the issues concerned.

HEJN representatives saw the desperate approach by the officials as a gimmick to suppress the planned action. The meeting ended in a stalemate, with HEJN saying the demonstration would go ahead and that the DMR should arrange another day for the meeting, after the march, to address the issues they had put out on the table.

The demonstration had an impact within HEJN in that it strengthened and motivated solidarity amongst members, as there were positive activities occurring within the organization subsequent to the demonstration.

Members are still gathering thoughts on how to make effective follow ups on the memorandums handed over, as the neither the DMR nor KiPower have responded. ✕



# The key to better waste management

Musa Chamane

*An IWMP is a significant framework for each municipality, outlining how waste will be dealt with.*

The Waste Act, which was promulgated in 2008, compels every municipality and industry to have an Integrated Waste Management Plan (IWMP) or an Industry Waste Management plan (INDWMP), respectively. These plans are supposed to be developed with public consultation. With INDWMPs, the minister of the Department of Environmental Affairs is given powers to request the plan from any industry of the minister's choice. If these plans are not there, that means the industry is not in compliance with the law and will be penalised accordingly.

Most local municipalities are still battling to produce this document when they are requested to do so. The IWMP is very important for the practical implementation of the Waste Act 2008. There are various challenges that municipalities are faced with regarding the issue of IWMPs; these range from not having budgets to not understanding the fundamental importance of having such a plan. Most metropolitan municipalities, however, have this plan.

The plan is detailed and shows which projects are in the pipeline and with how much budget. The IWMPs are like the Integrated Development Plans (IDP) for municipalities because a municipality without an IDP will not deliver anything. IWMPs need to reflect current projects as well as have steps mapped out for the future. Once these plans are completed, they are tabled at the municipal executive committee and the IWMP is either adopted or not. IWMPs need to be revised every five years.

The proposed projects need to be clearly defined, including from where the funding will come and who the beneficiaries will be; however, in most

cases IWMPs have what are called unfunded mandates. This is where projects are outlined but there is no budget allocation for them. For instance, an IWMP cannot talk about separation-at-source projects in 2016 without having prepared a plan and budget right from source collection all the way to the recycling centre.

According to the Waste Act 2008, recycling should be a priority practice in municipalities. The Polokwane Declaration 2000 has a clearly set target of 75% diversion of waste from all landfills in South Africa by 2022. The Act was developed in light of the Polokwane Declaration and therefore each municipality should be working towards that goal. Failure by municipalities to have met this diversion rate will mean that they are letting the country down by not meeting what is prescribed in the Act.

The challenge I foresee occurring at municipal level is that waste management is not a top priority; even officials who are at waste management units will attest to that. There are other issues that the municipality feels are of more concern, such as housing, water and electricity, leaving waste to become a non-issue at government level on the one hand and, on the other, resulting in protests in response to the lack of waste management as a service delivery issue and as an employment issue.

In light of this, groundWork is currently reviewing all the IWMPs that we managed to get from various municipalities. If a municipality's plan says, for instance, that there will be five recycling projects, then that we have to push for this and hold them accountable to make this happen. Small municipalities that have limited revenue will be assisted by groundWork in identifying potential funders for recycling projects. We work more



## Waste

with informal recyclers like waste pickers and as we attempt to support them in securing their livelihoods, IWMPs are important because they will clearly define how waste pickers can be included.

South African Waste Pickers' Association (SAWPA) members continue to make input to IWMPs and INDWMPs when requested to do so. The consultation with informal waste collectors is crucial since there have been projects that have failed in the past due to exclusion of the informal waste pickers. The IWMP has to be developed with the people so that they support and own these IWMPs. IWMPs should not have unfunded mandates because this is not helping the country at all. IWMPs need to be developed and be within the public access so that they become a success.

Municipalities such as uMgungundlovu (district) in KwaZulu-Natal Province have involved waste pickers in the development of their IWMP. The inclusion of waste pickers into the plan just under five years ago, led to funding access from the Cooperative Governance and Traditional Affairs Department (CoGTA). The project of construction of a materials recycling facility (MRF) has been delayed by municipal in-fighting and as a result a meeting was held between the above two municipalities, CoGTA, groundWork and Hlanganani ma-Africa Cooperative of Waste Pickers at the Pietermaritzburg landfill site.

It was agreed here that the Msunduzi Municipality (local) should take over because there were challenges in implementing this project through the district. The challenge is between these two municipalities and is seemingly unresolved as, despite commitment made by the funder (which is CoGTA) that they will re-allocate the money to them, Msunduzi Municipality still seems reluctant to implement this project. CoGTA, Hlanganani Ma-Africa and groundWork are expecting the local municipality to complete this project by June 2016, as is outlined in the municipality's draft IWMP. The cooperative wants Msunduzi Municipality to deliver the promise of working in a formal manner through an MRF and has vowed to do anything that will force the municipality to deliver.

This is a chance for the municipality to rebrand its negative reputation after being under administration for the last five years, and there is

a chance that the city could create a number of decent, full-time jobs by uplifting the cooperative of waste pickers. Imagine working as a waste picker in a very tough environment and you get promised that you will be able to work in a much better organized environment and suddenly that dream is not to be anymore.

The challenge of non-delivery will always be there if government spheres compete with each other. South Africa is a job-scarce country and this is an opportunity for the municipality to make a contribution, but they are stifling the guarantee of waste pickers' livelihoods and a formalisation of their sector.

There was hope that the presence of an MRF might increase recycling rates for the city. Recycling in the city is very limited. The local municipality has started projects that exist in the city but these do not recycle all recyclable material, whereas with an MRF almost all waste will be recycled.

There are a multitude of positive contributions that come from recycling, such as curbing waste's contribution to climate change. Waste landfilling is a challenge for everyone globally, and we recognise that landfills are actually an old method of dealing with waste. Recycling saves space at the landfill and also has economic benefit for the municipality. Recycling is something that we have to prioritise all the time due to all of these benefits. ✕



# Chemicals in Africa

Rico Euripidou

## *Vested interests in treaties such as the Minamata Convention on Mercury will protect our children*

Globally, researchers are describing a pandemic of childhood developmental disabilities. In the US, where advanced surveillance techniques are well established and sensitive enough to detect patterns over time, the numbers are ringing alarm bells! The U.S. Centre for Disease Control and Prevention (CDC), reported that between 2006 and 2008 approximately two million more US children were diagnosed with developmental disabilities (including autism, neurobehavioral development disorder and attention deficit hyperactivity disorder) compared with a decade earlier.<sup>1</sup>

While better diagnostics may explain some of this increase, a significant trend emerging from global health research associates exposure to a growing body of better researched, commonly released “neuro” environmental pollutants with this rising trend in childhood developmental disabilities. Chief among these remain exposure to lead (and its compounds still commonly found in many household products), a well-known environmental toxicant that interferes with the normal development of a child’s brain and can result in lower IQ, learning disabilities, and behaviour problems like aggression and hyperactivity. However, widespread exposure to pesticides, industrial and vehicle fine particle pollutants, and mercury are increasingly being linked to this trend.

Mercury exposure sources globally include most large predatory fish, some types of air pollution and mercury-containing products commonly found in circulation, including batteries, thermometers and other measuring devices. In artisanal and small scale gold mining (ASGM) communities worldwide, airborne exposure to mercury occurs from burning

off the mercury following the amalgamation process. Researchers routinely report pregnant women and women of childbearing age burning amalgam, sometimes because the men refuse to. Approximately 10 – to 15-million people in seventy countries work in the ASGM trade<sup>2</sup>. Additionally, chemicals known to be endocrine disrupting chemicals (EDCs) commonly used in everyday household products such as flame retardants, cosmetics and everyday plastics can all have adverse impacts on the developing brains of children.

### **So how does this happen?**

During critical stages of development, children’s brains are most sensitive to the impacts from these chemicals. Some of these neuro toxic environmental chemicals, such as mercury, cross the placental barriers quite easily and affect the structure or function of the developing brain prenatally and also during infancy. Even very low levels of exposure early in life can have profound and lasting negative effects.

Similarly, researchers have linked an entire class of industrial chemicals called phthalates to asthma, attention-deficit hyperactivity disorder, breast cancer, obesity and type II diabetes, low IQ, neurodevelopmental issues, behavioural issues, autism spectrum disorders, altered reproductive development and male fertility issues.

And like many other industrial chemicals that have raised red flags, many of these chemicals have made it on to the production line and into common, everyday household products without the fundamental basic steps to assess their toxicity

<sup>1</sup> Elizabeth Grossman, What Are We Doing to Our Children’s Brains? published in Truthout on Feb. 20, 2015

<sup>2</sup> Charles W. Schmidt. (2012) Quicksilver and Gold: Mercury Pollution from Artisanal and Small-Scale Gold Mining. Environmental Health Perspectives • volume 120 | number 11 | November 2012



to humans having been taken. With phthalates, the research has come before any sort of regulation – companies are not even required to list phthalates on consumer product labels in the global North. However, enough distinct phthalates have been studied to indicate that companies should proceed with caution when using any chemical in the phthalate class, particularly in products for pregnant women or young children who, the research has indicated, are the most vulnerable to the effects of phthalates.

One of the first phthalates to raise a red flag, DEHP, was replaced in hundreds of consumer products with DiNP, only for researchers to discover a few years later that exposure to DiNP is correlated to male genital birth defects and impaired reproductive function in adult males<sup>3</sup>.

Globally, the measures currently used to assess chemical risk and set safety standards fall short of protecting children around the world. Especially in the global South, children continue to be exposed to dangerous neuro-toxicants released from products, emissions in the home and from industrial sources. Many examples exist, from informal electronics recycling in Nigeria and Ghana, to massive lead and mercury exposure in many African countries from artisanal small scale mining activity, alongside widespread agricultural pesticide use.

The United Nations Special Rapporteur on human rights and hazardous substances and wastes<sup>4</sup> recently stated that “far more effort and resources should be devoted worldwide to protect people from the negative health impacts of toxic pollution”. This call is made in the context of an estimated 13-million deaths per year being attributed to environmental factors, which amounts to approximately one quarter of the global burden of disease (i.e. all the people who die globally.) Pollution is now thought to be the leading cause of death in low – and middle-income countries, and poor women

and children who live and work in the world's most polluted environments are most affected. Despite this trend, less than 3% of the World Health Organization's (WHO) proposed program budget for 2016 to 2017 is dedicated to the “Health and Environment” sub-category. “The amount of work WHO dedicates to monitoring and preventing harm from toxic pollution is disproportionately low, given the impacts of pollution on human rights,” the Special Rapporteur warned.

We should be counting the costs as scientists progressively discover how chemical compounds, common in everyday products as well as in indoor and outdoor air pollution, can adversely affect early brain development during these key critical stages of development. Chemicals treaties acknowledge that the foetus is not well protected against environmental chemicals and that neurodevelopment effects are occurring. Nonetheless, countries across the world selectively implement and internalise the provisions that are aimed to protect populations from such impacts. It is thus incumbent on civil society to address and implement real risk reduction and risk management strategies.

Globally, NGOs agree that sound management of chemicals has not been given the priority it deserves. Priority on fundamental issues such as proper labelling and information on chemicals in products is critical for workers and civil society in all countries. Similarly, it needs to be recognised that the phase out of highly hazardous chemicals and pesticides in developing countries is a right of developing countries to protect their populations from large sources of exposure – measures often resisted by large transnational corporations. With the progressive implementation of chemicals treaties, often the simplest means to protect our children is to adopt a cautious approach. Alongside this, countries should integrate and mainstream chemicals management along with their sustainable development goals (SDGs). In particular, those SDGs covering health, water, and sustainable consumption and production are of direct relevance to chemicals and with a direct emphasis on risk reduction can make positive impacts on children's health. ✕

<sup>3</sup> <http://www.theguardian.com/lifeandstyle/2015/feb/10/phthalates-plastics-chemicals-research-analysis>

<sup>4</sup> Mr. Baskut Tuncak (Turkey) was appointed Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes by the UN Human Rights Council in 2014. Learn more, visit: <http://www.ohchr.org/EN/Issues/Environment/ToxicWastes/Pages/SRToxicWastesIndex.aspx>



# A sustainable health future in Africa

Luqman Yesufu

*The health sector is taking leadership for a sustainable future in Africa, as hospitals reduce the financial and health costs of energy*

Over the past few years it has become clearer that human activities are increasing the amount of carbon in the atmosphere. We continue to burn fossil fuels – coal, oil and gas – to satisfy our thirst for energy. This in turn has contributed significantly to the amount of greenhouse gases in the atmosphere, particularly carbon dioxide. According to a recent scary statistic reported by the United Nations Framework Convention on Climate Change (UNFCCC), over 200 years carbon dioxide, the major greenhouse gas responsible for climate change, has increased by 30%. The UNFCCC have held a series of annual meetings aimed at stabilizing the greenhouse gas concentrations in the atmosphere at levels that would prevent dangerous anthropogenic interference with the climate system. Carbon dioxide is causing our planet to warm up, and if left unchecked will lead to catastrophic effects on our environment and health.

The UNFCCC Conference of parties (CoP) process is working towards securing a legally-binding global climate agreement on curbing carbon emissions, to be made at CoP21 in December 2015 in Paris, with a binding effect from 2020. In April 2015, the GGHH's initiative launched the 2020 Health Care Climate Challenge (HCCC), encouraging the health sector to reduce their carbon footprint and protect public health from climate change. Over twenty leading health care institutions from across the globe have already pledged to take meaningful action on climate change, by reducing their carbon emissions and therefore kicking off a worldwide campaign to mobilize hospitals and health systems to address humanity's most pressing problem.

In Africa, the Western Cape Government Health Department, which is already a member of GGHH,

has pledged to the 2020 HCCC, specifically committing to “reducing its carbon footprint from energy consumption at government hospitals in the Western Cape Province... by 10% in 2020 and 30% in 2030 based on the 2005 levels, which amounts to saving about 15000 tonnes of carbon dioxide annually.” This demonstrates the department's leadership in promoting a sustainable future, as they are beginning to recognise that they need to look beyond the immediacy of the doctor-patient relationship to incorporate a more global vision of environmental health.

Our hope is that within the next year or so, this will inspire other health systems and hospitals in the region to make similar commitments. As health professionals, the mandate is to prevent and cure disease, so it is necessary to lead by example and encourage others to change their own practices and policies that affect a healthy and sustainable environment.

## **Sustainability coordinators going global**

Africa Health Congress, which is one of the continent's largest healthcare exhibitions and the leading platform for the industry to learn and connect, recently concluded its fourth congress, which took place at the Gallagher Convention



*groundWorker  
Luqman Yesufu  
with Annelene  
Du Plessis and  
Eben Mouton.  
Credit:  
groundWork*



Centre in Johannesburg between the 5<sup>th</sup> and 6<sup>th</sup> of May 2015. The exhibition attracted more than 7 000 healthcare professionals and hosted 500 of the world's leading healthcare suppliers, manufacturers and service providers. Thousands of new healthcare products, equipment and services were showcased by the main players in the industry. Africa Health provided an opportunity for participants to see the latest technologies on display and test them out, all under one roof.

Africa health Congress had ten parallel conferences, of which the Public Health Conference was one. The objectives of the Public Health Conference were to: explore the link between the quality of healthcare services and universal health coverage; discover South Africa's plan towards eliminating malaria; review regional and international approaches to the Ebola outbreak; evaluate the need for good leadership, implementation and management strategies; and discuss the global burden of Non-Communicable Diseases. Two GGHH Sustainability Coordinators – representing Khayelitsha Hospital and Faculty of Medicine and Health Sciences, Stellenbosch University – presented their case studies. This was hugely significant as it propelled the practice of the GGHH initiative in South Africa onto a global platform.

The green hospital contingent included the Support Service Manager from Khayelitsha Hospital, Mrs. Annelene Du Plessis, and Dr. Eben Mouton, lecturer in the Faculty of Medicine and Health

### **Energy savings at the Faculty of Medicine and Health Sciences.**

They identified four major areas where they could make significant savings on energy. These were the Heat, Ventilation and Air Conditioning (HVAC) unit, lighting, lifts and hot water generation. The HVAC plant was highly inefficient and consumed a lot of energy and this was replaced with a new one. More energy-efficient chillers and speed pumps were installed and the system now provides 30% more capacity for between 15 to 30% less electrical input. Heat is now recovered from the air-cooled chiller to supplement water heating. In addition, solar accumulators were also installed in one of the residences to supply primary heating for water.

Sciences, Stellenbosch University. We presented under the theme of "Leadership and Universal Health Coverage" and our session was moderated by Julia Moorman, President of the Public Health Association of South Africa (PHASA) and Dr. Waasila Jassat, Clinical Advisor of the Aurum Institute in Johannesburg. The topics presented were:

"Global Green and Healthy Hospital: Global and African overview and context" – Luqman Yesufu.

"Energy efficiency and cost saving at Khayelitsha Hospital" – Annelene Du Plessis.

"Reduction in energy usage at the Faculty of Medicine and Health Sciences, Stellenbosch University" – Eben Mouton.

**At Khayelitsha Hospital**, the emphasis was on renewable energy installation at the hospital and the carbon emissions avoided. In summary, between 2011 and 2015, the amount of energy from solar and wind generation is equal to 152 313kWh, which amounts to an average of 29.6kWh of energy per day. This equates to saving 152 tonnes of carbon emissions, the same amount produced by a car that has travelled a distance of 1 160 982 kilometres.

Greater energy efficiency and transitioning to renewable energy such as solar and wind can significantly reduce the amount of greenhouse gases in the atmosphere and thereby help mitigate the climate change effects on public health.

Overall, this was a wonderful opportunity for the Sustainability Coordinators, as it gave them an opportunity to share their best practices and experience. At the end of conference, Annelene commented: "I am really proud to have presented my GGHH case study to a very large audience of health care professionals as I felt that they all appreciated our presentations and it gave them hope that changes can be made and all is not lost. I can't wait to share my experience with my hospital management staff as I am sure they would have all loved to experience this conference". ✕





# The colour of darkness

Megan Lewis

He lives next to his house. The rain tap-taps on the roof. He lives next to his house. The summer cold blows in through the cracks. He lives next to his house. A cough echoes around the tin square. A blast resounds around the shack and in his head.

A metre away, the breeze catches the slightly unhinged corner of a cupboard door, pastel-blue in colour. The counter is dirty, the hinges are rusted, the cupboard is bare. The colour matches the window frame opposite, some panes withheld their glass bodies, and others shattered.

The blasting continue throughout the day and night; profit does not heed the tick of the clock. There are people, many people, who cannot think about the dark claustrophobia, the unbreathable air, the safety of the equipment, their health. A job is a job and there are mouths to feed back home. They work at night, they work during the day, they work until they are too sick not to.

He hears his neighbours whisper as they walk past his plot. They say he's crazy. They say he never comes out of his black hiding place. The harsh sun bouncing off the blue rimmed glass panes, the once beautiful wattle and daub house he had built with his own hands is a reality he does not want to see, he chooses not to acknowledge.

Milk will cleanse your body and keep you healthy. That's what they told him down there – in the crevices of the earth's shell – that there is nothing

to worry about. He wasn't worried. He had lived in the area for five years until he was finally called in to work, digging out the chunks of black earth. This is what created electricity in the power stations he could see in the distance. He used it in his coal brazier to keep the house warm, cook food and boil water for tea or a bath in the winter months.

A blast rattled through the huge hill of rock and sand behind his house, shaking off the loose pieces of earth. Soon after building the mud structure, the cracks started to show in the walls and a glass pane even splintered once. Having slept through the thunder of the mines, he began to awaken often with dirt on his face. He would brush it off, worrying more about his *mielies* and *imifino* that were perishing without water. The taps would spurt out tablespoons of water at a time, the boreholes dry ever since the mines came. The roads were blackened from the trucks spilling coal as they trundled to the power stations; soon almost every patch of land took on the dark tinge.

When he left the blackness of the tunnel that day, he found the roof of his house had crumbled in. He had seen the large crack up the side of the wall in the light of dusk the evening before, but had thought it would hold until his next day off. The sun streamed in, laying bare his clothes, wash bucket and bed. He had never seen so much light in his house – it made him squint, his head pounding from the glare. ✕



## The wait is over!

Megan Lewis

### *groundWork's new documentary is ready to be released*

It has been just over a year since groundWork, together with SourcedTV and independent film director Simon Waller, conducted the interviews and shot the footage that became the documentary concerning coal and health in Mpumalanga, Highveld. In case you never saw the seven minute video news release, titled *Clear the air: How Eskom's coal kills*, you can watch it on groundWork's website. As the output suggests it was a shorter version that was aimed at broadcast and online media, with a specific angle targeting the country's biggest user of coal, energy utility Eskom.

It formed part of a media package, which meant that newspapers and radio stations were also able to use the material in covering the story. Part of this was the desktop report by Liziwe McDaid titled *The health impact of coal: The responsibility that coal-fired power stations bear for ambient air quality associated health impacts*, which acted as the factual basis upon which the documentary was premised, and which was then substantiated by the lived reality of people living next to coal-fired power stations.

Towards the end of July 2015, groundWork and the Highveld Environmental Justice Network (HEJN) will be holding screenings of the thirty-minute campaign video, titled *The Bliss of Ignorance*, to communities from three towns in the Highveld, namely eMalahleni/Witbank, Ermelo and Middleburg. This is the height of winter in South Africa, being particularly cold in the Highveld region and the time when air pollution is most visible.

The documentary will be shown in either English or isiZulu in order for communities to understand and engage meaningfully with the content. Prior to the screenings, HEJN will mobilise people in those towns using pamphlets in English and isiZulu, which outline the main points from the report and the details about screenings in the various towns. Billboards with coal and health messaging will be erected in these towns to broaden public interest.

Critically, the screenings will be accompanied by a facilitated discussion.

Zelena Akcija/Friends of the Earth Croatia have shown the documentary at their local Zagreb-based film festival. It has already picked up prestigious awards at two different film festivals in Indonesia. These are: the **International Award of Outstanding Excellence** for *Documentary Short* at the International Film Festival (Environment, Health and Culture), and **Platinum Award** for *International Documentary* at the World Film Awards. For more information on these two awards, visit the following sites respectively <http://internationalfilmfestivals.org/EHC/winners.htm> and [http://www.worldfilmawards.org/2015/platinum\\_world\\_awards.htm](http://www.worldfilmawards.org/2015/platinum_world_awards.htm)

Not only will the documentary be shown in the communities that are most affected, but also to the rest of country and world through press work done around this time. Visit the groundWork website from the 27<sup>th</sup> of July onwards to see our coal and health public campaign and to gain access to the full documentary, downloadable in English and/or isiZulu. If you would like to hold screenings and need guidance, please email [megan@groundwork.org.za](mailto:megan@groundwork.org.za).

For more on the film, please go to the Back Page of this newsletter to read the synopsis and get details on how you can engage online in the lead up to the release. ✕



# Peabody & Co.

Greenfly

Coal kills one in eight people worldwide and 2200 people prematurely in South Africa every year. That's the view from medical researchers. Coal lifts people out of poverty. That's the view of Peabody Energy, the world's biggest coal corporation. Choose who to believe. Hell, Peabody may even pay you to believe them if you have the right media profile.

Two years ago, the World Coal Assembly (WCA) met alongside the 2013 climate negotiations in Warsaw. They wanted to help us understand that you only have to burn more coal more efficiently to save ever more carbon dioxide emissions. If you burn less coal you save less carbon dioxide because the more you emit the more there is to save.

Anglo Coal's CEO, Godfrey Gomwe, chairs the WCA's Energy and Climate Committee and told delegates he grew up with paraffin. Therefore, we need to "balance" climate change with the "challenges" of energy poverty. And of course, it goes without saying that coal = electricity = lights on for 1.3 billion people without it. Therefore, those who say no to coal say no to the poor.

Balance is a word with a history in climate politics. The conclusions of 99.9% of the world's climate scientists must have equal weight with the views paid for by ExxonMobil, Koch Industries and Peabody. That's balance. Media mogul Rupert Murdoch (21<sup>st</sup> Century Fox, News Corp and Zero Ethics) is with them on that. The opinions that count in a plutocracy are opinions that have been paid for.

And challenge is a word with a lovely view. It stretches out through time to the hazy blue yonder where you just can't say who was responsible, where you just can't say about poverty. But here's another equation. Coal = electricity = economic growth = lifting the poor out of poverty. So you don't actually have to do anything about poverty or even energy poverty. Just get rich. Those who say no to plutocracy say no to the poor.

So Peabody and coal are there for the poor. Just like ExxonMobil and oil are there for the poor. There is indeed a remarkable consensus in fossil fuel land that they are all there for the poor. And this consensus came about quite suddenly without anyone having to talk to any poor people – and definitely not to any organizations of poor people. What would they know anyway?

Cheap coal will power the poor. Clean coal will make it safe. Eskom shows the way. As a long term advocate of clean coal, it refuses to abide by minimum emission standards because it would cost too much. Moreover, sulphur scrubbers consume lots of water and limestone would need to be mined and trucked in by the convoy load. Therefore, clean coal isn't so clean as dirty coal.

Carbon capture and storage (CCS) is ultimate clean. Cut the carbon from the smoke stack and pipe it to the cavernous deep underground and that's climate change sorted. In America, the FutureGen pilot project has now been cancelled twice. First by Bush and again by Obama. It was a public-private partnership in which industry (yes, Peabody, Anglo and all) ducked paying, the technology failed and there was nothing to show for a billion dollars or so of public funding.

South Africa is set to lead the way to the next failed project. But it's the promise that counts. In the hazy blue yonder, CCS may work. Therefore, we must build more coal plants now.

Meanwhile, the Davis Tax Commission has been hearing business views on Treasury's proposal for a carbon tax. Industry has lately agreed that something must be done about climate change. It's just that all actual proposals, like the carbon tax, are not affordable. The Chemicals and Allied Industries Association takes it further. It is not just the carbon tax. South Africa cannot afford a climate change policy. X



## Interview with SA GGHH pioneer

Megan Lewis

*Mitchell's Plain Hospital was the second healthcare facility in South Africa to join the Global Green and Healthy Hospitals initiative. This is not surprising, considering that the construction of the hospital was thought about with sustainability in mind, complementing its surrounding of five hectares of land designated for conservation. Opening its doors in Cape Town in 2013, this government hospital serves the community of the Cape Flats, a predominantly poor, working class community with high crime, mortality, HIV and birth rates. It was designed for primary healthcare, focusing on Trauma, Obstetrics and Outpatient functions.*

*The Department of Transport and Public Works constructed the hospital using environmentally friendly and sustainable materials and the building is orientated to maximise site views and natural sunlight.*

*Thorpe Koorts, Project Manager at the Department of Health and Sustainability Coordinator for GGH at Mitchell's Plain Hospital, explains the importance of creating a healthcare sector that is based on principles of sustainability and environmentally friendly management.*

### **Why is the example of Mitchell's Plain Hospital a good model to follow?**

Aesthetics and environment contribute to the healing process. Natural surroundings and sunlight have been proven to enhance the healing process, placing both patient and staff in a positive state. To maximise the effect, the building is orientated to receive the most sunlight in high occupation areas such as wards. The effect is further brought into the building through the use of windowed courtyards. This means that a patient's experience is improved and their stay potentially shortened.

### **As a key coordinator in the hospital, how do you continue to carry out the ethos of a greener/sustainable hospital within your work?**

Because I've experienced the outcome of the implementation of these principles I can cross pollinate successful or improved strategies to other

projects. I also promote and manage conservation throughout the organization and personally strive to reduce carbon usage. I have a comprehensive understanding of the carbon cycle on earth and realise the scale of the problem we are causing – it is immense. This is what motivates me to carry out my work in this way.

### **Your hospital was the second to join the Global Green and Healthy Hospitals initiative and you were one of the main drivers of this process. What do you see are the benefits – at a local and global level – to joining GGHH?**

I usually describe GGHH Connect as a "Facebook for Hospitals". I enjoy seeing what facilities in very remote places are doing. This makes me feel connected at a global level. We have chosen to work on three of the ten goals on the GGHH Agenda. These are **energy**, as this has been identified as our biggest long term concern and is what I am passionate about; **leadership**, as the CEO, already in a position of leadership, felt it important that others focused on this as a critical skill; and **waste**, as this is a challenge at our facilities and there is much room for improvement in this area. We do, however, occasionally fulfil projects in other goal areas, as you will see in the case study.

### **HCWH and GGHH are running the 2020 Climate Change Challenge for hospitals that want to commit to reducing their emissions. How do climate change and hospitals link together?**

It is clear when you view it as a cycle. Our healthcare facilities use massive amounts of energy that comes from fossil fuels, which are the main contributors to climate change, which in turn causes disease and illness, ultimately creating more consumption within and pressure on healthcare facilities. Mitchell's Plain Hospital is already reducing its use of carbon in a number of ways. These are through the expansion of our existing solar project; campaigning for behavioural change within the operations of the hospital; conservation policies; and lowering overall consumption of electricity from the national grid. ✕



## Case study: Environmentally friendly rodent control project at Mitchell's Plain Hospital (2012 – 2014)

### Global Green and Healthy Hospital Agenda Goal Chemicals

#### Hospital Goals

Firstly, controlling pest bird and rodent population via the establishment of predator birds. Secondly, eliminating the need for poisoned rodent bait.

#### The Issue

A strong motive during the development of the hospital was to establish environmentally friendly principles, both in infrastructure and operationally, which would be sustainable throughout the facility's life expectancy. Due to the environmental setting, a solution was required to control pest bird and rodent populations without using poisonous chemicals in the vicinity of the nature reserve.

#### Sustainability Strategy Implemented

The aim was to attract and promote the nesting of birds of prey around the facility. This was done through the design and establishment of a raptor nesting box scheme at the hospital site, in order to promote the natural control of pest bird and rodent populations.

#### Implementation process

The main objectives of the project were to encourage diurnal and nocturnal raptors to reside and breed within the grounds of the hospital, effectively increasing natural predation pressure on populations of avian (mainly pigeon and starling) and mammalian (mainly rodent) pests, and providing an environmentally friendly and sustainable alternative to poisoning as a means of pest control.

#### Progress towards achieving these objectives

A survey of the general area of the hospital determined the ecological context within which the "subsidised" raptor community was to be established, and to estimate the raptor community that could be supported on the site.

The identification of suitable locations for nest boxes to support the requisite number of pairs of owls and falcons.

The sourcing and installation of the requisite nest-boxes – two falcon boxes located on the roof of the hospital itself, one eagle-owl box attached to the inside of one of the peripheral walls, and four Barn Owl/Rock Kestrel boxes erected on poles located around the hospital grounds. This process could only be completed once heavy construction activities had ceased.

#### Benefits

Firstly, savings on poisonous chemicals, secondly, no release of poison into the environment and, thirdly, no disruption in the food chain but rather supporting the natural eco-balance.

#### Tracking progress

The hospital had an expert on birds of prey to monitor, update and advise on the process. He frequently visited the site to report on population numbers, nesting patterns and to advise on maintenance and sustainability issues.

#### Challenges and lessons learned

A major challenge was to prevent the use of poison as a pest control in the greater area. Once rodents are poisoned, they become disorientated and are very easy prey, which brought an ethical conflict, as the birds that are attracted therefor also become poisoned. This required ongoing awareness-raising and collaboration with adjacent facilities to not employ poison baiting. We encouraged mechanical trapping.

Being a government hospital, it has a large organizational compliment with standard protocols on procurement and tendering. With rotation of staff within the organization, there are frequently new procurement officers who simply do as they did at their previous facility and instruct normal pest control services.

It must be noted that there needs to be a tolerance of some rodent populations. Naturally, birds of prey need prey. Thus it is an inherent requirement of the project to have some mice and rats around the facility. This is a challenge, as health facilities by default have zero tolerance on rodents.

Some of the nesting boxes became infested with other occupants, such as bees. This is problematic, as the birds will not return to a box once bees have left their scent.

#### Outcome and status quo

The project is deemed successful as:

- There have been various sightings of predator birds in the vicinity, and a low pigeon pest population. It has been noticed that the pigeon population also varies with related seasonal presence of owl presence.
- Two years after the initiation of this project, the hospital continues to refrain from poison baiting.

Some complaints of mice have been received, which was expected and acceptable.



## The myth of clean coal

Gary Cohen, co-founder and president of Health Care Without Harm and Practice Greenhealth

In May, Republican U.S. Sen. Shelley Moore Capito of West Virginia introduced legislation to roll back President Obama's Clean Power Plan. Proposed by the Environmental Protection Agency in 2014, the plan would require states to reduce air pollution and carbon dioxide emissions and would likely speed the retirement of older, inefficient coal-fired power plants.

Capito, Senate Majority Leader Mitch McConnell of Kentucky and other lawmakers from coal country view the Clean Power Plan as an existential threat to their states' economies. They contend that phasing out coal would remove a cheap source of energy, leading to higher costs for utility ratepayers.

Here's the problem with that argument: Coal is only cheap if you choose to ignore its staggering costs to human health and the environment.

Just last month, a report from the International Monetary Fund (hardly a radical outfit) found that the environmental, health and other costs of burning fossil fuels reach \$5.3 trillion a year – \$10 million every minute. Coal – the dirtiest fuel in terms of air pollution and climate-warming carbon emissions – accounts for just over half that total. By shouldering these costs, we are, in effect, granting a massive public subsidy to coal and other fossil-fuel companies.

Health costs from air pollution account for nearly half of that \$5.3 trillion subsidy. Those costs include the burden of care for cancer and respiratory and heart disease as well as lost wages due to disability and death. Those costs are paid by each and every one of us, in days of missed work and nights spent in the emergency room, in higher tax rates and in soaring insurance premiums. Some pay the ultimate price: a recent study by researchers at the Massachusetts Institute of Technology found that air pollution from U.S. coal-power plants causes more than 50 000 premature deaths each year. Most of those deaths are in the east-central U.S. and in the Midwest, where power plants burn high-sulphur coal.

Worse, the health costs of coal fall most heavily on those who can least afford them. The dirtiest coal

plants are disproportionately located in low-income communities of colour, which is one reason that African Americans' rates of asthma are 35% higher than among Caucasians.

And then there are the steep and growing costs of adapting to a changing climate. The societal costs of climate change – droughts, flooding, wildfires and superstorms – have reached \$1.27 trillion a year, according to the International Monetary Fund report. Coal produces more than its share of climate-changing carbon emissions: While coal-fired plants supply just 40% of the nation's electricity, they account for more than three quarters of carbon-dioxide emissions from power generation. Again, when you consider the mounting costs of climate change, the greatest burden is borne by the most vulnerable people.

Coal, then, is anything but cheap, despite what you might hear from industry executives and their friends in Congress.

Of course, we expect industries to defend their interests. A generation ago, the tobacco industry and congressional delegations from tobacco-growing states denied the health impacts of smoking and fought to protect public farm subsidies for tobacco growers. But eventually the societal cost of smoking became too great to bear and the subsidies were revoked.

It's time to do the same for coal. Just as we refused to subsidize tobacco, we can stop propping up the coal industry. The Clean Power Plan is a good start; a carbon tax that captured the full health and environmental costs of fossil fuels would be even better.

Market forces have sealed coal's fate in the long term. Coal-fired power plants are already being made obsolete by renewables such as wind and solar. In 2014, there were more jobs created in the renewable sector than in fossil fuels. By removing public subsidies for coal, we can speed the transition to a clean – energy future rather than doubling down on the dirty and costly fuel of the past. ✕

<http://www.governing.com/gov-institute/voices/col-myth-coal-cheap-health-societal-costs.html>



## **In Brief**

### **CoAL on the skids**

Coal of Africa, which said in its December interim results that it needed R142-million in order to keep afloat, is now playing down its funding problem. It has, however, failed to raise the needed capital, and is also under fire over its community and environmental conduct. CoAL needs the money to get Vele colliery back into production, continue development of its Makhado project, and repay Rio Tinto for land it bought and should have paid for in September last year.

CoAL's share price has dropped from R35 in 2008 to 48c, still better than its low of 24c, which was the price on the 7<sup>th</sup> of April 2015.

### **Medical college divesting from fossil fuels**

The Royal Australasian College of Physicians, representing more than 21 000 medical practitioners and students in Australia and New Zealand, has decided to divest about A\$2.3 million of fossil fuel interests from its A\$90 million endowment.

The Australian campaigns director for 350.org, Charlie Wood, said: "In moving its own money out of fossil fuel companies, the college has sent a powerful message that investing in health means divesting from the industries that threaten it. The college's leadership on this issue sets a laudable standard that other health organizations and professionals will now be compelled follow."

The college itself explained its actions thus: "Since the RACP is a health organization with an objective of improving the health of our population, divestment is an important action that leads to reduced carbon outputs and achievement of our health objective – to ensure better health outcomes for our patients into the future."

### **Caruso just doesn't give up**

For the third time since 2007, Australian mining entrepreneur Caruso is angling for mining rights in the dunes of the Wild Coast. Despite abandoning previous attempts in the face of strong opposition, his South African subsidiary, Transworld Energy Mineral Resources (Pty) Ltd launched a fresh application on the 6<sup>th</sup> of March 2015.

At a raucous meeting, the local population made their strong objection to the application and the process of consultation very clear. Both the chief and the consultant, Mr Badenhorst, had broken some basic rules of engagement.

In the end, the meeting broke up in disarray, knobkieries were brandished, guava's were thrown and the chief, Mr Badenhorst and his team left in undignified haste.

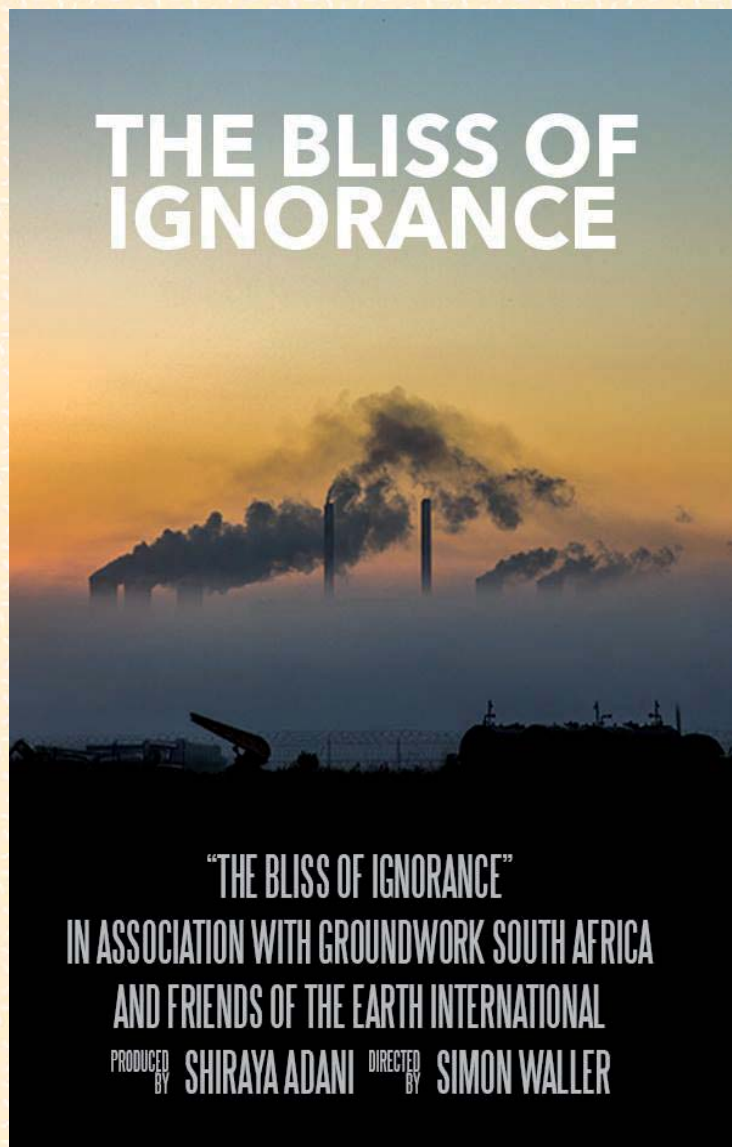
It is clear that the normal tolerance and goodwill of this community has been tried too far.

The Amadiba Crisis Committee, which was created eight years ago to fight the first application, defeated that application after a six-year-long struggle. They are girding their loins to beat this application too.

### **Polluted birds**

The Cooper's Hawk, found in Greater Vancouver, could be the most polluted bird in the world. Researchers found that the levels of PBDEs (polybrominated diphenylated ethers, a commonly used flame retardant) in these birds was 196 parts per million. PBDEs become more concentrated as you go up the food chain. Cooper's Hawks eat starlings, and take on each starlings pollution burden. Although PBDEs are banned in Canada, they are still accumulating in landfill sites, as people dispose of their PBDE-rich items. It is hoped that, as many forms of PBDE are now banned, the levels of contaminant will now begin to reduce.





Through first-hand testimony *The Bliss of Ignorance* investigates South Africa's complex relationship with one of the country's most abundant resources: coal.

With experts predicting the creation of a “sick” generation in the Mpumalanga region (which is home to twelve of the world's largest power stations), this documentary looks at the impact of South Africa's energy policy – particularly the support for Eskom's coal-fired power stations – on public health. In February 2015, the country's energy utility Eskom was granted five years grace from complying with atmospheric emission standards, making this film even more timely and relevant.

Set against the wider climate change debate, *The Bliss of Ignorance* highlights how the mining and burning of coal affects the environment; polluting air and valuable water resources in a water-scarce country. In 2012, 17 000 people in Carolina, Mpumalanga were left without water because their local supply was polluted by acid mine drainage.

While making *The Bliss of Ignorance* the filmmaker – who has filmed and directed in a number of international locations – visited Durban, Pretoria, Johannesburg and Cape Town interviewing scientists, lawyers, professors, campaigners, doctors, university lecturers and representatives from Eskom. He also lived in a township in Middleburg, Mpumalanga to learn first-hand from residents about the main health impacts and how pollution is affecting their lives and the lives of their children.

*The Bliss of Ignorance* is a production for Friends of the Earth International and groundWork, Friends of the Earth South Africa. Its release date is the 27<sup>th</sup> of July 2015.

In July 2014, the video news release was issued to the public. This was a shortened version of *The Bliss of Ignorance*, focusing specifically on Eskom as the main user of coal. To watch *Clear the air: How Eskom's coal kills*, visit <https://vimeo.com/99675319>

To watch the trailer of *The Bliss of Ignorance*, visit <http://theblissofignorance.net/>

For exclusive clips of the documentary, like the Facebook page at <https://www.facebook.com/TheBlissOfIgnorance>

To keep in the know, follow on Twitter @Coal\_kills

