An umbrella for non-compliance: “Air Quality Offsets” in South Africa

How air quality offsets were set in place

Air quality offsets in South Africa are part of a push back against gains made in air quality regulation through the hard work of environmental justice activists since the arrival of a non-racial democracy in 1994. Working for over a decade against a reluctant and weak regulator (the Department of Environmental Affairs, or DEA) and strong corporates (petro-chemical giant Sasol and steelmaker ArcelorMittal) as well as Eskom, a corporatized parastatal that has the monopoly in the electricity sector, activists succeeded in forcing a revision of air quality regulation in 2004, to be more in line with the environmental right in the South African constitution.

This included new air quality legislation, and the settings of ambient and emission standards for a number of priority pollutants. These changes came into full effect in 2010, on the understanding that in 2015, Sasol, Eskom and other polluters were required to comply with these new standards, which required expenditure on abatement technology.

Twelve years after legislation had changed, South Africa's two biggest air polluters – Eskom and Sasol – were not ready. They embarked on a dual strategy. One was to apply for exemptions from the new standards for most of its power stations, the other was to force the development of an official offset policy as an escape route from compliance.

In June 2015, draft air quality offset guidelines were published (1). It was criticised at length by civil society activists. It did not come out of a “normal” policy process, but carried all the scars of a response by a weak regulator to two main polluters who were winning the argument by changing the facts on the ground. At the same time, a more extensive overall defence was published by the Department (2). It covered five areas of application: air quality, wetlands, biodiversity, water resources and carbon offsets.

Both documents, the offset guidelines and the DEA defence, claimed that offsets would balance protection of people's health and environments with the need for economic development. In effect, they returned to polluters the apartheid power to decide how they would deal with not only their own pollution, but also that of “the other polluters” using up their “pollution space”– mainly the households who were too poor to afford electricity and were burning low quality coal. Environmental activists fully support measures that would relieve if not eliminate the pollution of people indoors as a result of their energy poverty. In a workshop following the release of the 2015 policy, communities and activists generally agreed that the air quality offsets would not work. Those proposed by Eskom and Sasol were viewed as a way of shifting blame onto communities. There is no comparison in the scale of emissions from industrial and domestic sources and it was argued that interventions to reduce domestic emissions are a responsibility of government and should not depend on offsets. It is particularly galling that the government has failed to address domestic emissions in any meaningful way but, over the last decade, has tried to do it as cheap as possible with the Basa Njengo Magogo programme. This involves teaching people to put the kindling on top of the coal, instead of at the bottom, when lighting a fire. Government and corporations claim that this reduces particulate

emissions but this method does not reduce sulphur or volatile organic compounds from burning coal and metal toxins are still present in the air, including mercury, lead, chromium, magnesium and arsenic. This programme is wholly inadequate as a response to pollution caused by poverty energy. (3)

How does it work

Current South African air quality offsets are based on the understanding that indoor air pollution has much greater effects than regional ambient pollution from coal fired power stations and industry. Air quality activists have never accepted this argument as science because:

- ground level household emissions are dwarfed by industrial emissions;

- recirculation and deposition of regional industrial pollution is not taken into account;

- 50 per cent of PM10 (particulate) pollution comes from coal mine dust entrainment (most of it through haulage/transport);

- persistent ground level pollution (with high percentages of Volatile Organic Compounds) from spontaneous combustion from coal have not been quantified or included in calculations;

- few detailed studies on household indoor pollution have been done, and their results are inconclusive.

Nevertheless, in March 2015, the Department of Environmental Affairs (DEA) allowed Sasol to “postpone” compliance with minimum emission standards in exchange for an offset programme. In the case of Sasol, the offset programme consists of a mixed bag: measures to deal with veld fires, testing emissions of heavy vehicles entering Sasol premises, reducing dust from unsurfaced roads (which activists suspected was meant to create a new market for a Sasol chemical product that would be cheaper – and nastier - than tar roads); intervention in municipal recycling and household waste collection, as well as cheap retrofits to houses including potentially flammable polystyrene insulation.

The South African activist organization GroundWork responded to Sasol’s offset implementation plan that (4) “this is the cheap option to compliance. It works in the same way as a mediaeval indulgence: Sasol may carry on sinning, at considerable profit, providing it pays the much lesser cost of a penance.”

It argued: “The minimum emission standards enable communities to hold corporations liable for polluting them. The offset absolves the corporation of liability. At the same time, it outsources government’s responsibility for healthy human settlements served with clean energy. Thus, the interests of the community are at stake on both sides of this deal. Yet this deal is struck between Sasol and government. In so far as communities have been consulted, they have denounced offsets in principle and this deal in particular. It appears, however, that the matter was already decided and community views were already excluded. “

In discussing these proposals, including at meetings called by Sasol, people from community organisations reiterated several points:

1. These projects cannot substitute for compliance with minimum emission standards. Sasol must provide a roadmap to compliance showing what steps Sasol will take and by when.

2. Implementation of air quality management plans (AQMPs) as a priority area, which must demonstrate government and corporations' commitment to reducing industrial emissions within set timeframes.

3. Source apportionment studies have been mandated within the AQMP process and should be funded by Sasol and other corporations on the polluter pays principle.

4. A baseline for the distribution of pollution is necessary but not adequate. There must also be a baseline for people's health so that the existing health impacts of pollution are understood. Such a study should create the basis for monitoring people's health through the systematic collection of statistics from hospitals, clinics and doctors. Baseline studies and health monitoring should be under the auspices of the AQMP as any process managed by Sasol or other corporate polluters will lack credibility.

5. Irrespective of what Sasol does with its offset projects, we expect the government to take responsibility concerning domestic energy and emissions. To date, the government has done nothing more than the Basa Magogo programme which was always a cheap way of avoiding a real response and has proved utterly ineffective.

6. Similarly, the government needs to provide healthcare staff and adequate facilities to confront the crisis of health created by the pollution of the Vaal and Highveld. This should include 24-hour clinics that are able to respond to emergency pollution events at night and specialist staff to deal with respiratory illnesses. The system must be developed to enable better access to public healthcare. In this respect, local people do not trust that corporate health professionals will give a proper diagnosis where the corporation's activities are the likely cause of illness.

Who do offsets benefit?

Offsets, in general, benefit industry in many ways. These are a threat to building a reasonable regulatory regime. They undermine democracy.

The main concerns of South African activists on offsets include:

- Offsets always lay the blame of pollution or destruction of biodiversity onto local communities. Industries' activities are mostly not identified as the root causes of the problem.

- The use of offsets inverts the mitigation hierarchy. The mitigation hierarchy, which is part of South African policy, prescribes that all other options, such as avoidance or minimisation of damage should be avoided before offsets are considered. However, industry will always prefer offsets to mitigation measures as they are cheaper. Hence, there will be pressure to cut costs of the offset.

- Offsets are used to justify the unjustifiable: projects that should be rejected are permitted on the basis of offset proposals; illegal practices (e.g. exceedance of minimum emission standards) are permitted on the basis of offsets.

- Regulatory capacity is inadequate to the task and provides no oversight. The assumption that offsetting compensates for weak regulatory and planning capacity is false. To the contrary, it exacerbates it.

- Offsets will push the government to abandon responsibilities rather than build capacity to meet them

– while weakening regulation, thus playing into the arms of the business lobby.

- Destruction from the original project is certain, benefits of the offset are not – indeed, most offsets may themselves be destructive.

- Offsets usher in the commodification and financialisation of nature.

- If there is real money involved (as proponents hope) big capital will move in. Offset providers will not be restricted to small and ethical practitioners. It will be profit driven.

- The use of offsets depends on a series of false calculations and equivalences that simplify complex and unique ecological systems – between what is destroyed and what is preserved and between ecological and money “values”. (e.g. How many chameleons are worth a hawk and what’s the price?)

- Offsetting will mask the fact that habitat and species loss is irreplaceable.

- Offsets represent a double land grab: People may be removed for the original project (e.g. to make way for a mine) and then again for the offset itself. This may be because people lose jobs with the change of land-use (already observed on the change from farms to farms used for raising game (mostly antelopes) for resale and hunting and the eviction of farmworkers) or because people who used land and natural resources in the offset area are excluded from doing so (as is likely in former Bantustan areas).

- Within specific catchments or airsheds, the offsets may be overwhelmed by the accumulation of destructive activities – e.g. acid mine drainage ruins wetlands preserved as offsets to the mining projects; air quality offsets fall far short of the scale and geographic spread of industrial pollution (e.g. the Eskom and Sasol proposed offsets).

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Groundwork, South Africa, http://www.groundwork.org.za/

(1) Government Gazette, June 2015

(2) Department of Environment, Discussion Document on Environmental Offsets, June 2015

(3) Rico Euripidou, 2014. Slow Poison: Air pollution, public health and failing governance. A story of air pollution and political failure to protect South Africans from pollution. Hallowes, D (editor), groundWork, June 2014, http://www.groundwork.org.za/specialreports/Slow%20Poison%20(2014)%20groundWork.pdf

(4) GroundWork response to Sasol offset implementation plan, 29 January 2016.