

Southern Africa Cape Coal

While the legacy of coal mining has already left a heavy mark on some countries, others are just experiencing the first wave of international exploration teams searching for rich coal fields. In South Africa, the long-term negative impacts of decades of coal extraction are highly visible, particularly in the form of diminished and polluted water resources. In neighboring Mozambique, the dawn of a new era of coal mining has just begun, but the negative impacts are already being felt. Meanwhile in Botswana and Zimbabwe, foreign companies from China, India or the United Kingdom have just started prospecting or negotiating concession leases.

South Africa No Water – No Life

South Africa holds the world’s fourth largest coal reserves and produced 259 million tons in 2012. About 3/4 of its production is used domestically. This is no surprise, as the country generates 94% of its electricity by burning coal. 74 million tons of coal were exported in 2012, mainly to Europe and Asia.¹³² The country’s coal mining sector is dominated by Anglo-American, Exxaro, Sasol, BHP Billiton and Xstrata. The ‘big five’ account for 80% of South Africa’s coal production.

South Africa is a water-stressed country, where rainfall is scarce and unevenly distributed, so that drinking water often has to be pumped over hundreds of kilometers.¹³³ While the country’s National Water Act of 1998¹³⁴ recognizes that “water is a resource that belongs to all people,” the reality is that it belongs more to some than to others. The coal industry is one of the biggest users and polluters of water in the country. For both underground and surface mining, groundwater is pumped out, water tables are lowered and ecosystems and agricultural production are damaged. Leached water from waste rock dumps and discharge from the mines themselves, have immense impacts on water resources.

Acid mine drainage contaminates water resources for decades.

Nowhere is this more evident than in Mpumalanga, the province east of Johannesburg, where a large part of the county’s water reserves is generated. The wetlands of Mpumalanga are a network of hundreds of lakes and rivers. Four of South Africa’s biggest rivers – the Tugela, Vaal, Olifants and Pongola – have their source here. Mpumalanga is, however, also South Africa’s cradle of coal mining. While the mining companies continue to expand their business into new regions and provinces, the terrible heritage of abandoned coal mines remains. Hundreds of them leak acid mine water laced with heavy metals into the waterways. Acid mine drainage contaminates water resources for decades and threatens the water supply.¹³⁵ People and wildlife in the Mpumalaga Lake District already suffer from a shortage of potable water. Groundwater is often so contaminated that it cannot even be used for irrigation.

The Olifants River, which supplies the famous Kruger National Park, is another victim of the industry. Decades of coal mining have polluted the river and degraded its water quality. To make matters worse, the Olifants also has to provide water for several coal-fired power plants nearby. Year by year, the river loses more water, and the surrounding region is slowly turning into a wasteland. Ironically, the river’s water is too contaminated to be used in the thermal power plants without prior treatment. The water problem is widespread all over the mining regions. The contaminated water reservoirs of Middelberg and Witbank put even Johannesburg’s fresh water supply at risk.¹³⁶

132 “Coal statistics,” World Coal Association, 2013

133 “Bitter Coal – Summary,” urgewald, 2013

134 “National Water Act, Act No. 36,” Republic of South Africa, 1998

135 “Coal mining on the Highveld and its implications for future water quality in the Vaal river system,” McCarthy & J.P. Pretorius, 2009

136 “Water Hungry Coal,” Greenpeace Africa, 2012



Brickbuilder from Moatize village. Mining giant Vale took away his home and livelihood for a coal mine.

In Soutpansberg, CoAL has started a water war against the local population.

In theory, South Africa's Department of Water Affairs is responsible for management and fair allocation of water supplies to different sectors of society. In practice, it turns out that at least 1/3 of the country's coal mine operators haven't even bothered to apply for a water license. South Africa's Department of Mineral Resources lists 118 operating coal mines, but only 83 have been issued water licenses.¹³⁷ In a country where water shortage is a permanent problem, the further expansion of the coal sector is a recipe for disaster. South Africa's Department of Water Affairs projects that water demand will exceed supply by 2025. But already today, more than 1.9 million children have no access to clean water. Greenpeace South Africa comments aptly: "Water and coal cannot be strategic resources at the same time."

Nowadays, the new frontier of coal mining has spread into the north and so has the struggle for water. Soutpansberg ("Salt Pan Mountain") in Limpopo Province is one of the new battlefields. In this dry and semi-arid region, the local population is defending its scarce water resources against aggressive coal mining companies. Their worst enemy is called Coal of Africa Limited (CoAL).

CoAL, an emerging South African mining company, started operating the Vele mine in Limpopo Province in 2012. The company is prospecting for an additional project, the highly controversial Makhado mine. It is located in an area that has been shunned by other mining companies due to its constant water scarcity. CoAL estimated that the mine will need approximately 4.6 million liters of water per day. Even according to the company's own studies, the mine would exhaust ground water deposits within a couple of years, leaving local communities without a water supply.

This has prompted fierce resistance. Local farmers and traditional communities wrote letters to CoAL's investors and shareholders, stressing that 32 criminal charges

have been brought against the company. They told the company's shareholders: "We do not understand why visitors feel they can come into our ancestral land, destroy it totally in a few decades and walk away, leaving just a desert and a wasteland."¹³⁸ But CoAL seems to be well-connected, and the regional government issued a permit for the mine in September 2013. "There is a huge fight coming," said Jonathan Mudimeli, chairperson of the Mudimeli Royal Council, whose community is in the middle of the proposed mine.¹³⁹ The locals are determined to win this war, because "without water there is no life."¹⁴⁰

IV. The "Hot Spots"

Mozambique No Crops, Only Dust

Mozambique produced 4.9 million tons of coal in 2012, which were almost entirely exported.¹⁴¹ The country's high quality coking coal reserves have attracted the attention of international coal miners. Mozambique is considered to hold the most important new coking coal reserves in the world, after Mongolia. Various forecasts predict that Mozambique might produce up to 100 million tons of coal per year after 2015, but this would entail huge infrastructure investments first.

Most of the country's mineral reserves are situated in the Tete province, a region squeezed in between Zimbabwe, Zambia and Malawi. An estimated 100 firms are prospecting for minerals in this region already. More than 50 are looking for coal – and none is Mozambican.¹⁴² The projects that are furthest developed are Rio Tinto's Benga mine and Vale's Moatize mine. Together these two alone hold estimated reserves of 4.5 billion tons.¹⁴³ With these two projects, the era of large-scale mining has begun in Mozambique.

Although coal mining has just started, the problems are already as evident as in South Africa's Limpopo province. The contracts between the mining companies and the state are kept secret.¹⁴⁴ And, the relocation of communities living above the coal reserves has proved to be a catastrophe. Brazilian mining giant Vale relocated 716 families from Moatize to make way for an open-cast coal mine. In the process, however, Vale destroyed the community's sources of food production and income, without providing a viable alternative.

Many families from Moatize were relocated to Cateme, a dry, hot and desolate area, which produces no crops, only dust.¹⁴⁵ They wrote letters, first to the company, and then to the Mozambique National Assembly to complain about the unbearable living conditions there. When none of these actions had any impact, they marched on the company's offices and blocked VALE's rail link to the port of Beira, stopping all coal trains for about 24 hours. Riot police dispersed the peaceful demonstration, with 14 people arrested and four more severely injured.¹⁴⁶ The next day, police came to Cateme, threw teargas into the houses and arrested some of the men. Two of the victims reported being tortured in prison. Despite nationwide media coverage of their situation, the community still lives without water and electricity. VALE is making gigantic profits from the land in Moatize now, but its original owners have been dumped like waste.

The relocation of communities has been a real catastrophe.

138 "CoAL out of Africa," The Gaia Foundation, December 13, 2011

139 "Coal's Hidden Water Cost to South Africa," Yolandi Groenwald, Greenpeace Africa, 2012

140 Open Letter to shareholders and investors of CoAL, Dzomo la Mupo, 2011

141 "Jahresbericht 2013," Verein der Kohlenimporteure, 2013

142 As stated by provincial director for Mining Resources and Energy, Manuel José Sithole, 2012

143 "The New Frontier Mozambique," AME Group, 2013

144 "MOZAMBIQUE News Reports & Clippings," Joseph Hanlon, November 5, 2012

145 "What is a House without Food?" Human Rights Watch, 2013

146 "Notes from the Field: Vale-displaced communities in Cateme," Justica Ambiental, October 10, 2012

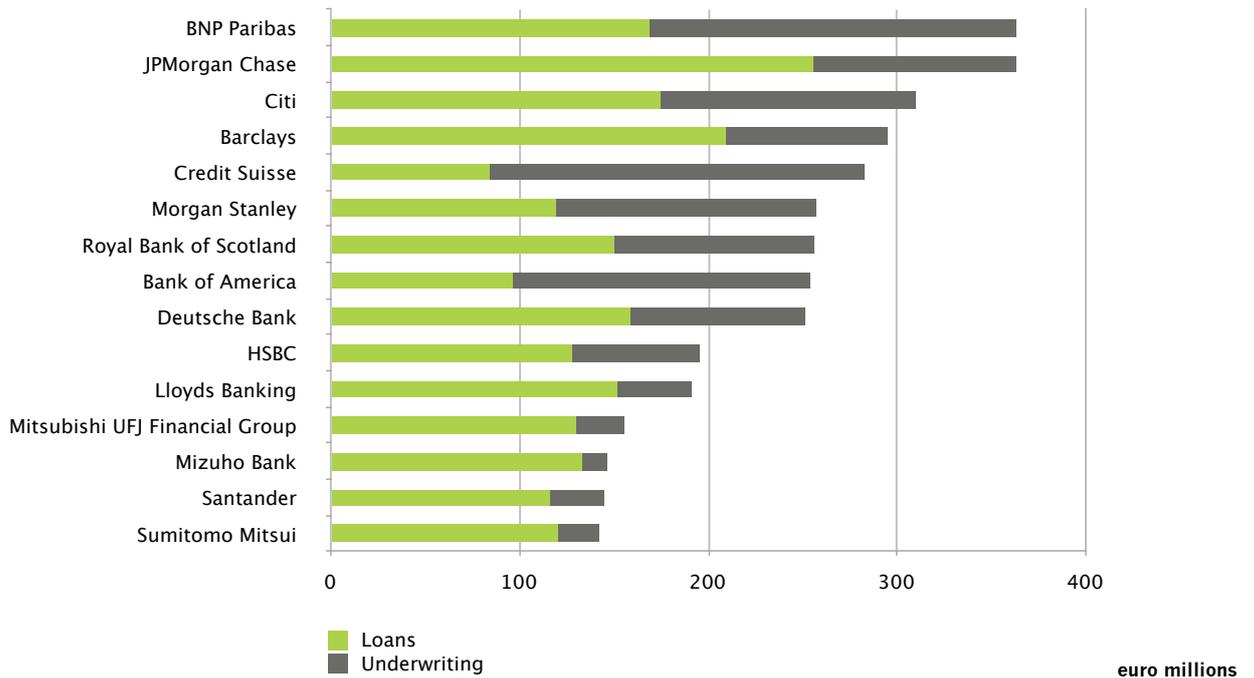
146 "Visual Letters to the UN on Forced Resettlement in Northern Mozambique," Peter Steudtner, 2013

The Top Coal Mining Banks for Southern Africa

The following chart shows the 15 banks that provided the most financing for companies involved in the Southern Africa hotspot between 2011 and mid-2013. BNP Paribas and JPMorgan Chase rank as equals in first position, lending or underwriting 363 million each. Citi ranks third with 310 million euros. The largest deals for this hotspot were for Glencore Xstrata, which received over 75% of the total finance provided.

JPMorgan Chase and Deutsche Bank were the main financiers of Coal of Africa Limited (CoAL), lending or underwriting 86 million and 18 million euros respectively, primarily through share issues.

Banking on Southern African Coal, 2011 – mid-2013



-  Hard Coal Deposits
-  Important Coal Ports

