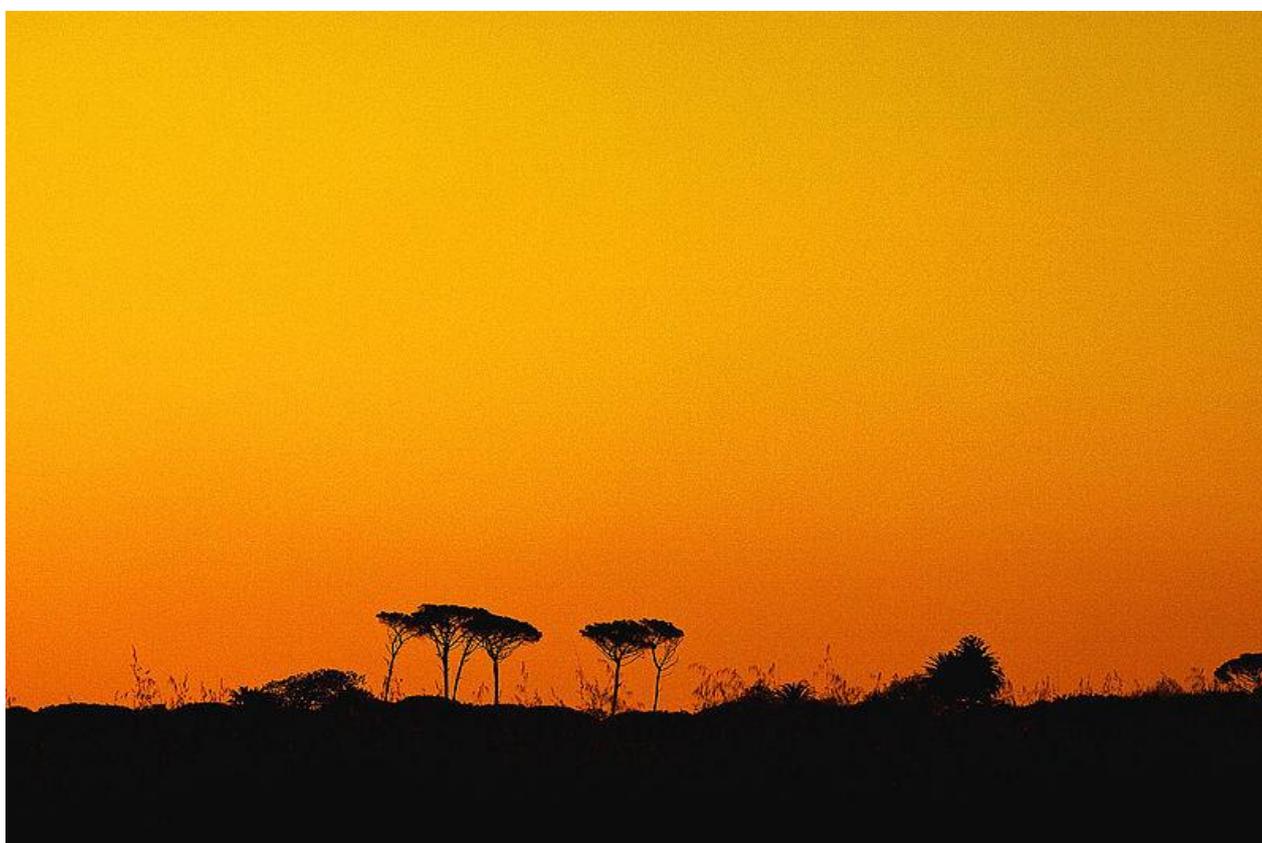


FINANCIAL PROVISIONING FOR REHABILITATION AND MINE CLOSURE:

A study of South African platinum and coal mining companies



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About this report

Financial Provisioning for Rehabilitation and Mine Closure is a report by Intellidex, funded by the Centre for Environmental Rights (CER). Intellidex is solely responsible for the research and content of the report. CER's funding was not contingent on any of the findings contained in this report.

The report considers data drawn from the annual financial statements of several companies listed on the Johannesburg Stock Exchange.

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Executive Summary

The Council for Geoscience (CGS), a scientific research body contracted by the Department of Mineral Resources (DMR) to manage the ownerless and derelict mines database, estimates that there are at least 6,000 abandoned mines in SA. The ongoing environmental impact of these mines is a problem for the state and therefore for the taxpayer. The DMR rehabilitated 50 mines during the 2015/16 financial year¹. This highlights the need for improved environmental maintenance and rehabilitation in the mining sector during years of operation and beyond. This report considers the amounts being set aside by operating South African mining companies to pay for environmental rehabilitation when mines cease to operate.

South African laws require mining companies to set aside money for the management, remediation and rehabilitation of the environmental impacts of mining operations. Before commencing with mining, companies are required to draw up an environmental management plan which details how environmental impacts will be dealt with, and they are required to provide for the costs required to implement the plan. This plan and any subsequent revisions should be verified and approved by the DMR.

We studied 11 JSE-listed companies to determine how much they are providing. The three coal mining houses and eight platinum companies were selected according to the criteria explained in the methodology section. Below are some of the key findings:

- Each of the 11 companies studied reports provisions for the management, remediation and rehabilitation of environmental aspects arising from mining operations.
- In most cases, the data is not sufficient to determine the financial provision at the level of each operation.
- Environmental rehabilitation and mine closure obligations reported by the 11 companies have increased from R5bn in their 2011 financial years to R10bn in the most recent financial year.
- The 11 companies each contribute to separate funds. Some of these are joint industry funds while others are set up by the companies themselves. Such funds are equivalent to slightly more than one third of the 11 companies' reported rehabilitation provisions at the end of FY16. In theory, the balance has to be funded before operations cease such that the provisions can be met with the funding that has been set aside. In the meantime, the shortfall is covered by guarantees provided by third parties. Table 1 shows the financial provisions and the value of rehabilitation funds in the companies' 2016/17 financial annual reports.

¹ NCOP Land and Mineral Resources Committee meeting minutes. Available at <https://pmg.org.za/committee-meeting/23069/>.

TABLE 1: Financial provisions and rehabilitation funds by SA mining companies

Company	Rehabilitation provisions (R'm)	Rehabilitation funds (R'm)	Percentage funded ²
Exxaro Resources	4 721	1 401	29.7%
Anglo American Platinum	1 938	1 015	52%
Lonmin ³	1 743	137	8%
Impala Platinum	764	225	30%
Northam	259	252	97%
Atlatsa	189	50	27%
Eastern Platinum	113	124	110%
Royal Bafokeng Platinum	96	147	153%
Wescoal	60	22	37%
Wesizwe Platinum	54	28	52%
MC Mining	34	4	12%
Total	9 971	3 405	35%

- The study was unable to draw definitive conclusions about either the provisions made, or the funds available, to cover rehabilitation expenses. This is because the disclosures that companies are currently making are not adequate to provide meaningful comparative information about provision for rehabilitation and mine closure. Most companies disclose the following:
 - The person/entity responsible for the estimation of the quantum of the environmental rehabilitation and mine closure obligations.
 - Basic assumptions used in the calculation of the environmental rehabilitation and mine closure provision and the frequency at which these estimates are reviewed.
 - The accounting treatment of the environmental rehabilitation obligations, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to those estimates.
 - Financial instruments used to provide for future rehabilitation obligations.
 - Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

- The above disclosures in our view, are not sufficient for stakeholders to have a clear picture of the provisioning being made by mining companies. Companies should go beyond the disclosure requirements of the International Financial Reporting Standards (IFRS). Disclosures should also be done at operational level, not at group level as most companies do currently. In our view, interested stakeholders should be able to:
 - Examine the mining plan of each operation.
 - Examine the rehabilitation plans that should correspond to such mining plans.

² Excludes guarantees provided by third parties

³ The figures were disputed by Lonmin. The CER wrote to Lonmin requesting for the correct figures but Lonmin did not respond

- Have access to annual reviews of these plans.
 - Obtain the estimated costs of the work set out in these plans.
 - Understand the provision that has been made in the balance sheet for each operation.
 - Assess the basis for how much funding is set aside to meet these provisions.
 - Assess the management of the funds.
 - Assess the guarantees and insurance policies that are in place to cover the provision.
 - Where mines are on care and maintenance, have access to the care and maintenance plan.
- Much of this information is contained in applications and reports that are submitted to the DMR, but this is not shared with the public. It would be of significant help to the public if the annual reports of the relevant companies routinely contain this data for each operation. Alternatively, all submissions to the DMR could be simultaneously published by companies. Currently only a few disclose figures at operational level. This makes it difficult or impossible for stakeholders to understand the rehabilitation plans and funding available at the level of each operation. There is little value in disclosures of consolidated group figures, particularly for multinational companies.
 - However, almost all the companies studied in this report indicated that they would not object to disclosing or publishing this information if it becomes a regulatory or financial reporting requirement.
 - Some of this should also be addressed by the 2015 Financial Provisioning Regulations published under the National Environmental Management Act (NEMA), particularly regulation 13 which requires companies to publish their environmental management programme on their websites. These regulations are in force, but do not yet apply to all mining rights holders. These regulations are also in the process of being reviewed and replaced.
 - Companies took an average of two months to respond to our requests for additional information.

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Methodology

This report analyses the financial provisions for environmental rehabilitation of mining sites reported by JSE-listed mining companies. In some cases, we attempt to contextualise these amounts by examining them relative to the volume of mining taking place, although there are significant limitations to the meaningfulness of these comparisons. The study also investigates the instruments being employed by companies to fund their environmental rehabilitation obligations.

There are 44 companies listed as mining companies on the JSE. From those we selected the ones which meet the following criteria:

- The company should be classified as a mining company according to the JSE sector classification and be legally required to make provision for mine rehabilitation and closure.
- The company should be conducting most of its operations in South Africa. If the company has both local and foreign operations, it should make rehabilitation provisions at asset level.
- The company should have been active on the JSE as at 30 June 2017.
- The company should have a five-year history of financial provisioning for rehabilitation.

These criteria eliminated most large multinationals and suspended mining companies. All gold mining companies were also eliminated because most have substantial operations outside of South Africa and report provisions at holdings level. This makes it difficult to impossible to understand provisions specifically for South African operations. This left the following 11 companies.

1. Anglo American Platinum
2. Impala Platinum
3. Royal Bafokeng Platinum
4. Northam Platinum
5. Lonmin
6. Wesizwe Platinum
7. Atlatsa
8. Eastern Platinum
9. Exxaro Resources
10. MC Mining
11. Wescoal

The study utilises financial data from the companies' annual reports of the past five years. For companies that report in foreign currencies, we converted into rands by multiplying the balance sheet figures by the exchange rate at the date of the financial year-end of that company.

A. Introduction: How provisions are made for mining rehabilitation

The general case

Mining companies must make provision for the costs of rehabilitation of the environment affected by mining before they even begin mining operations. That provision is to cover a liability that the mine has in that it will have to meet the costs of rehabilitating the environment. On the asset side of the balance sheet, the mine holds its mining rights and other equipment. As mining takes place the value of this asset depreciates until the end of the life of the mine. After all viable mining has taken place, it is worth zero. The rehabilitation provision, however, diminishes only if the expected costs of the rehabilitation come down, either because some rehabilitation has already taken place or because there is a change to the mining plan that has an impact on expected rehabilitation costs.

Figure 1: Mine balance sheet for environmental rehabilitation

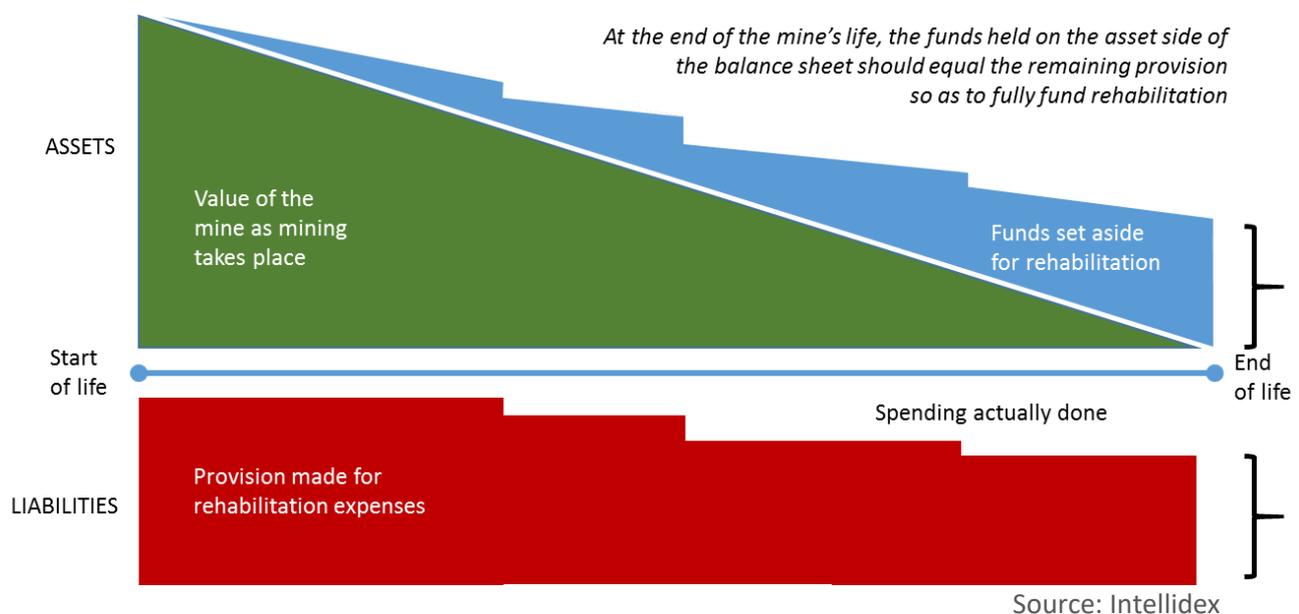


Figure 1, above, illustrates the general approach. Before mining begins, a mining company creates a provision on the liability side of its balance sheet to cover the present value of future rehabilitation expenses. This is a requirement of legislation and associated regulations and must be done before mining can commence. The provision has to be enough to cover the various rehabilitation requirements specified in NEMA. The mine has to develop clear plans to manage all of the environmental rehabilitation work it will be required to do. These have to be reviewed and adjusted annually as mining occurs and mining plans develop.

The provision is offset on the asset side of the balance sheet by the value of the mine. As mining takes place, the asset will decline in value as the economic potential of the mine diminishes. However, the mine has to ensure that it has sufficient assets to cover the provision for rehabilitation. It therefore sets aside funds out of its earnings. These accumulate as an asset, such that at the end of the life of

the mine, there are sufficient funds to cover the cost of rehabilitation. These funds are either held in a trust or in some other blocked account so that they are separate from the company and cannot be accessed by the company's creditors.

As the rehabilitation liability is settled, the funds on the asset side of the balance sheet and provision on the liability side cancel each other out. There could be some spending on rehabilitation during the life of the mine, depending on the type of mining. Opencast mines, for example, are usually required to rehabilitate sections of the mine as mining concludes, whereas underground mines usually incur most rehabilitation expenses at the end of the life of the mine. Figure 1 above illustrates how the provision can be reduced during the life of the mine with some spending from funds set aside, though the majority takes place at the end of the life of mine.

Some mines do not actually set aside funds for rehabilitation. In these cases, it is because the mine is able to obtain a guarantee or insurance to cover the rehabilitation costs. These assure the DMR that the mine will be able to fund the rehabilitation costs either when required according to the mining plan, or in the event of failure of the mine that leads to operations ceasing. Banks will not provide guarantees unless they are satisfied with the credit risk. Bank guarantees are usually used only by large mining companies that have several different operations so that the overall balance sheet of the company provides sufficient security for the bank to issue the guarantee. The bank is in effect saying that the mining company is good for the rehabilitation liability because it has sufficient other assets that could be used to cover the cost at the end of the mine's life. Rehabilitation insurance policies work similar to life policies in that the

CONTEXT

Tough times for small town blighted by mine closure

For more than 60 years, Blyvooruitzicht sat on one of SA's richest gold deposits. But a diminishing return on investment prompted the owner to shut the mine, leaving 1,700 workers without jobs. The following are edited extracts from a News24/AFP article from 29 May 2017:

Four years on from the mine's closure and the situation in the town has deteriorated dramatically. "We're just struggling to get something to eat, to get water from the municipality. Same with electricity (and) we're battling even to get our children to school," said Elliot Matshoba, 51, a former safety officer at the mine.

The outlook for the environment is not much better – taps only run intermittently and sewage flows through the streets.

"We're in a 'no man's land'. The government says there's nothing it can do for us. It's very painful because no one seems to care," said residents' spokesperson Pule Molefe, 38. "It's like we are abandoned here. All we need is for the government to step in and take over and manage and protect what's there."

The town's predicament is not uncommon. The ruinous and abrupt closures of mines, which have provided the majority of the country's wealth, have increased in recent years as commodity prices have fluctuated unpredictably.

Michael Clements, from Lawyers for Human Rights, which has investigated the impact of mine closure, said that communities are simply left in a vacuum. "You have local government that is not able to step up into that role, particularly when there is a premature and sudden closure like in Blyvoor."

premiums collected during the life of the mine accumulate such that the liability can be covered on the closure of the mine.

Unfortunately, the disclosure rules regarding the provisioning and investments set aside by mines are poor and inconsistent, though they are currently subject to revision with proposed amendments to NEMA. Ideally, separate information would be provided for each operating mine including the provision, annual adjustments to it, the value of bank guarantees or insurance policies and any funds set aside to cover rehabilitation. Separate information should also be provided on any rehabilitation carried out in the preceding financial year, and the cost thereof. Information should also be provided about the stage at which the operation is at, that is, at what point of the life of mine is it. In addition, the mine works programme, rehabilitation plans and reviews should be made publicly available so that interested parties can assess whether the amounts provided are sufficient. These plans are compiled by mining companies themselves, though usually with the help of outside experts. Auditors review estimates and may also obtain their own expert opinion. Regulators also review the provisions. Nevertheless, there is inevitable subjectivity involved in making estimates. Without access to the mining plans and other information it is very difficult for outside parties to assess the adequacy of provisions, which should be the purpose of disclosure.

In the case of listed companies with single operating assets, most financial information can be obtained at the level of the operation, but in the case of larger mining companies with multiple assets, only consolidated figures are given. This makes it impossible to analyse each mine. The DMR holds significant information about mine-level provisions and assets set aside, but this is also not generally made publicly available. Disclosure of this information would help local communities and other stakeholders understand how well-positioned mines are to rehabilitate the environment during mining and when operations cease. The varying ways in which companies assess, set aside and report on rehabilitation provisions also make it impossible to compare companies in each sector.

In the analysis that follows we assess the provisions that mines have made for environmental rehabilitation and the funds they have set aside to cover those provisions, based on their annual financial statements. Because of the role that bank guarantees and insurance policies play, these funds cannot be assumed to be sufficient to cover the costs of rehabilitation, whether mining was ceased at that point or when the mining is due to conclude.

The legal framework

There is a web of inter-related laws that govern mine closures but they are, to an extent, in flux. In this section, we give an overview of the laws that currently regulate environmental financial provisions.

On 20 November 2015, the minister of environmental affairs promulgated the Financial Provisioning Regulations – published under Government Notice R1147 (GNR 1147). Prior to that, financial

provisioning and rehabilitation were governed by the Mineral and Petroleum Resources Development Act⁴, 2002 (MPRDA).

The 2015 Financial Provisioning Regulations are currently in operation and apply to new mining rights holders, but do not yet apply to mining rights holders that made provision for rehabilitation under the MRPDA. Those mining rights holders were required to align their existing financial provision with the 2015 Regulations before 20 February 2017. However, owing to a legal challenge by industry,⁵ this date for alignment was amended to 20 February 2019. On 10 November 2017, following consultation with stakeholders, in particular the mining industry, the Minister of Environmental Affairs published the Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations for comment. These are intended to replace the 2015 Financial Provisioning Regulations.

GNR 1147 requires mining companies to determine and make financial provision to guarantee the availability of sufficient funds to undertake rehabilitation and remediation of the adverse environmental impacts of prospecting, exploration, mining or production operations. Regulation 5 specifies the applicant or holder of right or permit must make financial provision for:

- a) Rehabilitation and remediation.
- b) Decommissioning and closure activities at the end of prospecting, exploration, mining or production operations.
- c) Remediation and management of latent or residual environmental impacts which may become known in future, including the pumping and treatment of polluted or extraneous water.

Mining houses are required to determine the financial liability through a detailed itemisation of all activities and costs. GNR 1147 accepts three possible means of meeting these future obligations:

- a) A financial guarantee from a registered bank, or from a financial institution registered with the Financial Services Board as an insurer or underwriter.
- b) Deposits into an account administered by DMR.
- c) Contributions to a trust fund established in terms of applicable legislation as security for the provisions raised.

An applicant must determine the financial provision through a detailed itemisation of all activities and costs, calculated based on the actual costs of implementation of the measures required for:

- a) Annual rehabilitation, as reflected in an annual rehabilitation plan.
- b) Final rehabilitation, decommissioning and closure of the prospecting, exploration, mining or production operations at the end of the life of operations, as reflected in a final rehabilitation, decommissioning and mine closure plan.

⁴ <http://www.dmr.gov.za/publications/finish/109-mineral-and-petroleum-resources-development-act-2002/225-mineral-and-petroleum-resources-development-actmprda>

⁵ This litigation was brought by DRDGold Limited, Sibanye Gold Limited, John Hulme Scholes, and Malan Scholes Incorporated.

- c) Remediation of latent or residual environmental impacts which may become known in the future, including the pumping and treatment of polluted or extraneous water, as reflected in an environmental risk assessment report.

The determination, review and assessment of obligations must be undertaken by a specialist or specialists and audited by an independent auditor.

B. Analysis of financial provisions and company disclosures

1. Introduction

This section will cover the following:

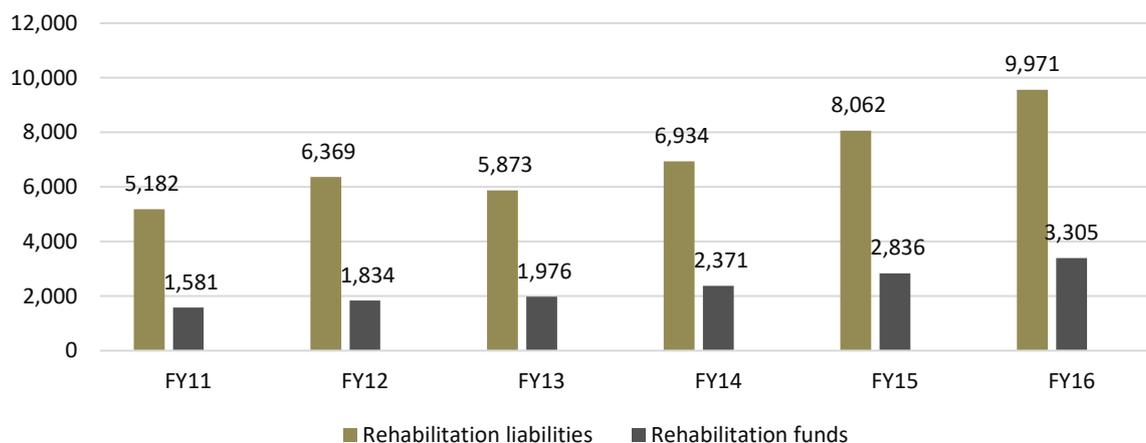
- 1) An assessment of the publicly available information on the companies' policies on environmental rehabilitation obligations and rehabilitation funds.
- 2) Analysis of financial provisions by each of the 11 companies over the past five years.

The main endeavour of this study is to assess whether the information being published by companies is sufficient to draw definitive conclusions about either the provisions made, or the funds available, to cover rehabilitation expenses. The information should be easy to access. Stakeholders should not have to jump through hoops to access it.

2. Total value of annual financial provisions for environmental rehabilitation

Before getting into the above issues we show the total value of annual financial provisions for environmental rehabilitation by the mining companies which meet our screening requirements. We chart the total financial provisions put up by the 11 companies against the total book value of the rehabilitation funds held in trusts and/or allowable deposits.

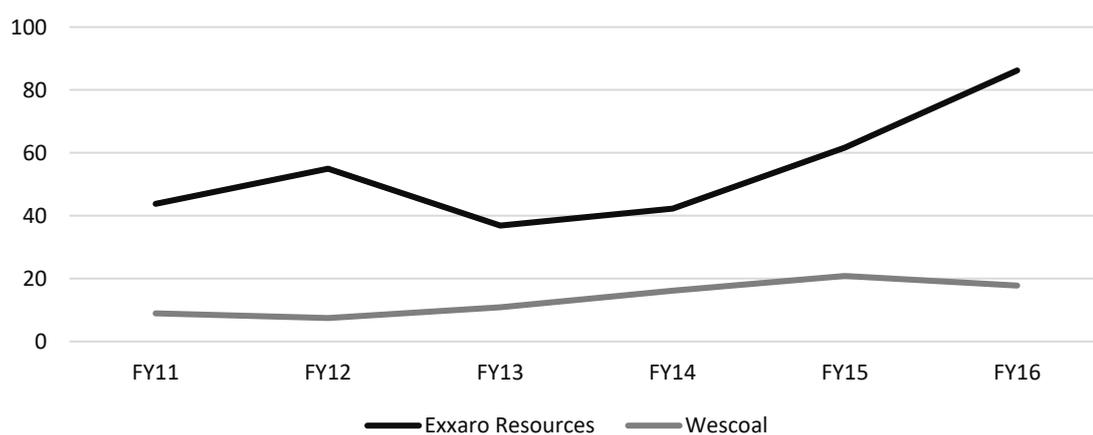
Figure 2: Rehabilitation provisions vs funding in place: SA platinum and coal mining companies (R'm)



The value of environmental rehabilitation provisions⁶ and rehabilitation funds⁷ have increased steadily over the past five years. Slightly more than a third of the environmental liabilities are funded through trusts and restricted cash deposits. This means close to two thirds of the provisions, as assessed by the mining companies, are secured through other off-balance sheet mechanisms such as insurance and bank guarantees. One possible explanation for this trend is that the average life of South African mines is declining, as fewer new mines are starting up.

In figures 3 and 4 below, we attempt to give context to the sizes of provisions being made by these companies. We express the financial provisions as a fraction of the run of mine for coal companies and tonnes milled for platinum companies. Companies that are not yet at production stage are excluded.

Figure 3: Rehabilitation provisions vs run of mine (R/tonne)

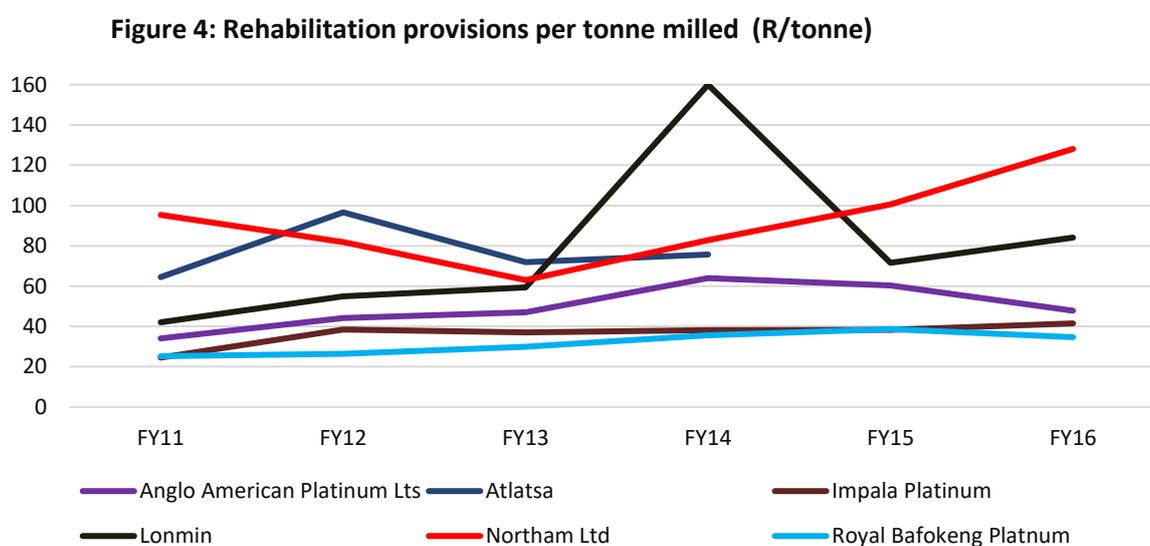


⁶ The present value of the estimated future costs for environmental rehabilitation and decommissioning of a mine. It appears as a liability on the balance sheet.

⁷ These are separate funds established to help fund closure and environmental obligations. They are recognised on the asset side of the balance sheet. The funds can be separately administered by independent trustees or be administered by the sponsoring company.

These two coal miners have generally seen the rehabilitation provisions as a percentage per tonnes mined increase over time. Exxaro holds higher provisions per tonne mined. However, these two companies are not directly comparable since Exxaro also mines minerals other than coal. They are also not particularly meaningful, as a mine that is reaching the end of its life could be expected to see decreasing volumes mined and therefore the provisions per tonne would naturally increase.

Figure 4 shows the ratio for platinum companies. We calculate the ratio by dividing the value of financial provisions with the total tonnes mined.



Northam and Lonmin's provisions have been consistently higher than most of their peers.

3. Platinum mining companies

i. Anglo American Platinum

Anglo American Platinum discloses information regarding its environmental rehabilitation and mine closure provisioning in its annual financial statements. The group also provides a brief discussion of its environmental policies in its sustainability report. Both reports are available on the group's website and disclose the following:

- 1) That management estimates the quantum of the environmental rehabilitation obligation.
- 2) Basic assumptions used in the calculation of the environmental rehabilitation provision and the frequency at which these estimates are reviewed.
- 3) The accounting treatment of the environmental rehabilitation obligations, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to those estimates.
- 4) Financial instruments used to provide for future rehabilitation obligations.

- 5) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in the group's 2017 financial statements.

Disclosure 1: Under significant accounting principles in the 2017 financial statements

The Group's mining and exploration activities are subject to various laws and regulations governing the protection of the environment. Management estimates, with the assistance of independent experts, the Group's expected total spend for the rehabilitation, management and remediation of negative environmental impacts at closure at the end of the lives of the mines and processing operations. The estimation of future costs of environmental obligations relating to decommissioning and rehabilitation is particularly complex and requires management to make estimates, assumptions and judgements relating to the future. These estimates are dependent on a number of factors including assumptions around environmental legislation, life of mine, cost and escalation percentages, and discount rates.

Disclosure 2: Note 34 of the 2017 annual financial statements

The Platinum Producers' Environmental Trust was created to fund the estimated cost of pollution control, rehabilitation and mine closure at the end of the lives of the Group's mines. The Group funds its environmental obligations through a combination of funding the Platinum Producers' Environmental Trust and providing guarantees to the Department of Mineral Resources. Contributions are determined on the basis of the estimated environmental obligation over the life of a mine. Contributions made are reflected in non-current investments held by the Platinum Producers' Environmental Trust if the investments are not short term.

Disclosure 3: Note 17 of the 2017 annual financial statements

Estimated long-term environmental obligations, comprising pollution control, rehabilitation and mine closure, are based on the Group's environmental management plans in compliance with current technology, environmental and regulatory requirements.

Decommissioning costs

When the asset reaches commercial production, an estimate is made of future decommissioning costs. The discounted amount of estimated decommissioning costs that embody future economic benefits is capitalised as a decommissioning asset and concomitant provisions are raised. These estimates are reviewed annually and discounted using a pre-tax risk-free rate that reflects current market assessments of the time value of money. The increase in decommissioning provisions, due to the passage of time, is charged to interest paid. All other changes in the carrying amount of the provision subsequent to initial recognition are included in the determination of the carrying amount of the decommissioning asset. Decommissioning liabilities are discounted over the lesser of the actual life of mine (LoM) or 35 years.

Restoration costs

Changes in the discounted amount of estimated restoration costs are charged to profit or loss during the period in which such changes occur. Estimated restoration costs are reviewed annually and discounted using a pre-tax risk-free rate that reflects current market assessments of the time value of money. The increase in restoration provisions, owing to the passage of time, is charged to interest paid. All other changes in the carrying amount of the provision subsequent to initial recognition are included in profit or loss for the period in which they occur. Restoration liabilities are discounted over the lesser of the actual life of mine or 35 years.

Ongoing rehabilitation costs

Expenditure on ongoing rehabilitation costs is recognised as an expense when incurred.

Findings

The study was unable to draw definitive conclusions about either the provisions made, or the funds available, to cover rehabilitation expenses. While Amplats' disclosures are in line with those of peers studied in this report and most likely in compliance with the IFRS, they do not provide a clear picture about the group's provisions.

Amplats' disclosures could be clearer in terms of who is responsible for the estimation of its environmental rehabilitation and mine closure obligations. Its disclosure on this aspect states: *"Management estimates, with the assistance of independent experts ..."* That gives an impression that estimations are done by Amplats management. The role of independent experts seems related to that of consultants.

Amplats does not disclose important information about the independent experts who are involved in the estimation of its environmental rehabilitation and mine closure obligations. Important information that needs to be provided includes the name, qualifications and experience of its external evaluators. The assessment of the costs of rehabilitation and remediation of environmental damage is a complex undertaking which requires the skills and expertise of a range of highly trained specialists. For stakeholders to have confidence in the estimates used by mining companies they also need to know the profile of the estimators.

Another problematic issue is that Amplats provides one consolidated figure for environmental rehabilitation provisions for all its operations. Without information on individual operations it's extremely difficult for users to make informed assessments of the group's overall position with regards to environmental provisions. Amplats also doesn't disclose how it treats provisions for jointly owned assets.

More transparency would also be beneficial in Amplats' reporting of the Platinum Producers' Environmental Trust (PPET), which is the main vehicle it uses to fund its environmental rehabilitation and mine closure obligations. For instance, stakeholders need to know who the trustees and beneficiaries of the Platinum Producers' Environmental Trust are; how the trust is managed; how funds in the trust are aggregated between companies and operations; how funds in the trust are accessed; whether funds from the trust have ever been utilised for rehabilitation and/or closure; and whether the funds are used for concurrent rehabilitation or reserved exclusively for the purposes of closure.

Importantly, all the information which the group submits to the DMR should be made public.

Anglo American Platinum's response

The CER wrote to Amplats finance director Ian Botha to comment on our findings above. The group took close to three months to respond but it did address all key issues.

Amplats clarified that the rehabilitation and closure liability estimates for all its managed operations are determined by independent experts. Company in-house experts only review these estimates. It also said that management adjusts the estimates based on predetermined formulas.

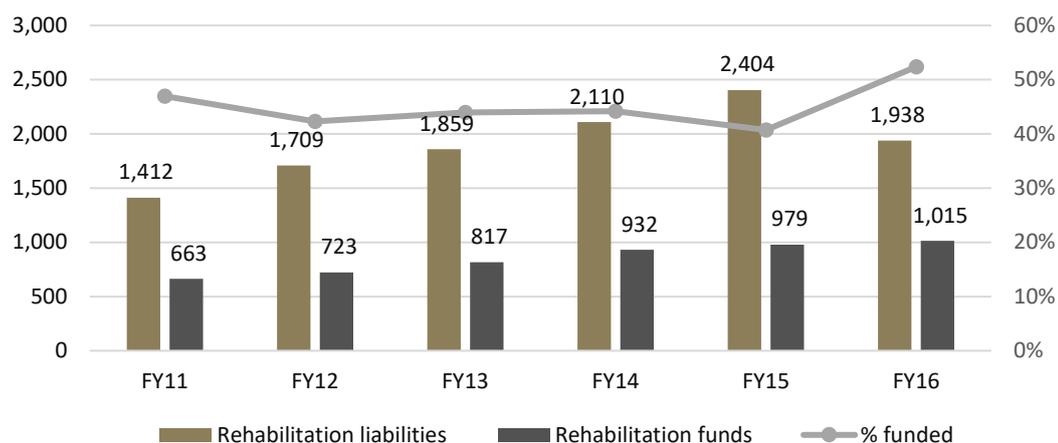
With regards to why the group does not report at the level of each operation, CEO Chris Griffith said the company adopted this practice because it feared the reports would be too voluminous.

Additional disclosures required

While Amplats' response to the request for information sent by the CER was satisfactory, it should be a simpler and quicker process for stakeholders to gain clarity on the group's environmental rehabilitation and mine closure policies. This information should be publicly available. Amplats can improve its disclosures by considering the following:

- 1) Rephrasing disclosure 1 above to make it clearer that it is independent experts who determine the liability, not management as implied.
- 2) Clearly describing the roles of management and independent experts.
- 3) Disclosing the names, qualifications and experience of all people responsible for the estimation of environmental rehabilitation and mine closure obligations.
- 4) Publishing the independent assessments of financial provisions for rehabilitation and environmental liability.
- 5) Providing a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 6) Publishing a statement indicating that financial provisions are sufficient to cover the group's rehabilitation costs.
- 7) Providing more details on the management of the trust.
- 8) Disclosing environmental provisions at asset level.

Figure 5 shows the group's financial provisions against rehabilitation funds.

Figure 5: Rehabilitation provisions vs funding in place: Amplats (R'm)

The provisions for rehabilitation increased steadily between 2011 and 2015 but dropped in FY16. This was largely due to Anglo American Platinum's divestment in the Rustenburg mines and concentrators, as part of the transaction involving Sibanye Stillwater in November 2016. Under the transaction, Anglo American Platinum transferred its environmental liability obligations for these operations to Sibanye.

Contributions to the Platinum Producers' Environmental Trust make up over 52% of the group's environmental obligations. The remainder is fully funded by the guarantees.

ii. Impala Platinum

Impala Platinum discloses information regarding its environmental rehabilitation and mine closure provisioning in its annual financial statements. The group also provides a brief discussion of its environmental policies in its sustainable development report. The reports are available on the group's websites and disclose the following:

- 1) That estimates are determined by independent environmental specialists in accordance with environmental regulations.
- 2) Basic assumptions used in the calculation of the provision for environmental rehabilitation and mine closure and the frequency at which these estimates are reviewed.
- 3) The accounting treatment of the environmental rehabilitation obligations, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to those estimates.
- 4) Financial instruments used to provide for future rehabilitation obligations.
- 5) The estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.
- 6) Implats does provide figures per operation, excluding joint ventures.

Below are the disclosures extracted from the group's reports.

Disclosure 1: Note 1.3.13 of 2017 annual financial results

Restoration costs

This cost will arise from rectifying the damage caused after production commences. The net present value of future restoration cost estimates as at year-end is recognised and provided for in full in the financial statements. The estimates are reviewed annually to take into account the effects of changes in the estimates. Estimated cash flows have been adjusted to reflect risks and timing specific to the rehabilitation liability. Discount rates that reflect the time value of money are utilised in calculating the present value.

Changes in the measurement of the liability, apart from unwinding of the discount, which is recognised in profit or loss as a finance cost, are expensed to profit or loss.

Ongoing rehabilitation cost

The cost of the ongoing current programmes to prevent and control pollution is charged against income as incurred.

Disclosure 2: Note 18 of the 2017 annual financial results

Provision for environmental rehabilitation

These long-term obligations result from environmental disturbances associated with the Group's mining operations. Estimates are determined by independent environmental specialists in accordance with environmental regulations.

Decommissioning costs

This cost will arise from rectifying the damage caused before production commences. The net present value of future decommissioning cost estimates as at year-end is recognised and provided for in full in the financial statements. The estimates are reviewed annually to take into account the effects of changes in the estimates. Estimated cash flows have been adjusted to reflect risks and timing specific to the rehabilitation liability. Discount rates that reflect the time value of

money are utilised in calculating the present value. Changes in the measurement of the liability, apart from unwinding of the discount, which is recognised in profit or loss as a finance cost, are capitalised to the environmental rehabilitation asset (note 1.3.5).

Guarantees, an insurance policy and the funds in the Impala Pollution Control, Rehabilitation and Closure Trust Fund are available to the Department of Mineral Resources to satisfy the requirements of the National Environmental Management Act with respect to environmental rehabilitation (note 36)

Rehabilitation trust investments are primarily invested with short-term maturity dates, which expose the Group to cash flow interest rate risk.

Findings

From the information available, this study was not able to draw definitive conclusions about either the provisions made, or the funds available, to cover rehabilitation expenses.

Implats does not disclose important information about the independent experts who are involved in the estimation of its environmental and rehabilitation liabilities. The group should at a minimum provide the names, qualifications and experience of its external evaluators. The assessment of the costs of rehabilitation and remediation of environmental damage is a complex undertaking which requires the skills and expertise of a range of highly trained specialists. For stakeholders to have confidence in the estimates used by mining companies, they also need to know the profile of the estimators.

Implats does not indicate whether its management makes any adjustments to the estimates calculated by independent environmental specialists.

Its financial statements say that the group funds its environmental obligations through a combination of contributions to the Impala Pollution Control, Rehabilitation and Closure Trust Fund, and through insurance policies and bank guarantees. More information is required on this. Stakeholders need to know who the trustees and beneficiaries of the Impala Pollution Control, Rehabilitation and Closure Trust Fund are; how the trust is managed and how funds in the trust are aggregated between operations; and whether the funds are used for concurrent rehabilitation or reserved exclusively for the purposes of closure. It would also be helpful for Implats to disclose the methodology applied to determine the quantum of contributions to the trust every year.

Importantly, the group should make the assessments submitted to the DMR available to the public.

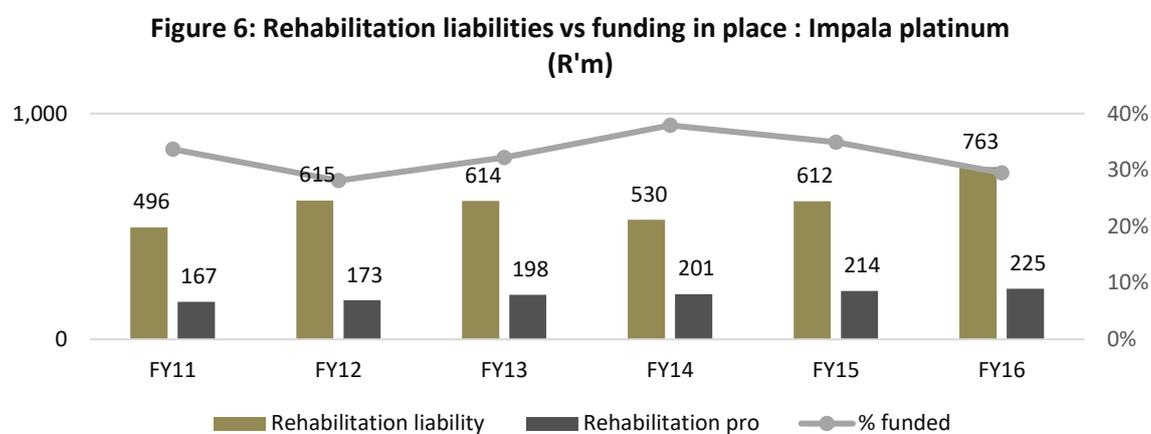
Impala's response

The CER wrote to Implats CEO Nico Muller to address the issues raised above. The group took more than two months to respond. Its response addressed all the questions and provided detailed information about its independent environmental specialists who estimate its rehabilitation and mine closure liabilities. The group also indicated that management makes no adjustments to the external estimations except on issues related to technical financial data.

Desirable additional disclosure

- 1) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 2) Publish any independent assessments of rehabilitation and mine closure obligations.
- 3) Provide commentary on any significant changes in the yearly review of obligations.
- 4) Provide a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 5) More details on the management of the Impala Pollution Control, Rehabilitation and Closure Trust.

Figure 6 shows the group's provisions against the book value of rehabilitation funds.



At the end of FY16 the Impala Pollution Control, Rehabilitation and Closure Trust covered about 29% of the group's estimated rehabilitation obligation. The group indicated that the shortfall is covered by guarantees.

iii. Royal Bafokeng

Royal Bafokeng discloses information regarding its environmental rehabilitation and mine closure provisioning in its annual financial statements. The reports are available on the group's websites and disclose the following:

- 1) That estimates are determined by independent environmental specialists in accordance with environmental regulations.
- 2) Basic assumptions used in the calculation of the provision for environmental rehabilitation and mine closure and the frequency at which these estimates are reviewed.
- 3) The accounting treatment of the environmental rehabilitation obligations, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to those estimates.
- 4) Financial instruments used to provide for future rehabilitation obligations.
- 5) The estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures extracted from the group's annual financial statements.

Disclosure 1: From Note 21 of the 2017 financial statements

Our long-term obligations comprising pollution control, rehabilitation and mine closure result from environmental disturbances associated with the Group's mining operations. Estimates are determined by independent environmental specialists in accordance with environmental regulations.

Decommissioning costs

This cost will arise from rectifying damage caused before production commences. The net present value of future decommissioning cost estimates as at year-end is recognised and provided for in full in the financial statements. The estimates are reviewed annually to take into account the effects of changes in the estimates. Estimated cash flows have been adjusted to reflect risks and timing specific to the rehabilitation liability. Pre-tax risk-free discount rates that reflect current market assessments of the time value of money are utilised in calculating the present value. Changes in the measurement of the liability, apart from unwinding the discount, which is recognised in profit or loss as a finance cost, are capitalised to the environmental rehabilitation asset. Decommissioning assets are amortised on a straight-line basis over the lesser of 30 years or the expected benefit period.

Restoration costs

Changes in the discounted amount of estimated restoration costs are charged to profit or loss during the period in which such changes occur. Estimated restoration costs are reviewed annually and discounted using a pre-tax risk-free rate that reflects market assessments of the value of money. The increase in restoration provisions owing to the passage of time is charged to finance costs. All other charges in the carrying amount of the provision subsequent to initial recognition are included in profit or loss in the period in which they are incurred.

Changes in the open pit accrual are recognised in the statement of comprehensive income as part of cost of sales. Ongoing rehabilitation cost. The cost of ongoing current programmes to prevent and control pollution is recognised as an expense when incurred.

Critical accounting estimates and assumptions

Environmental rehabilitation obligations

The Group's mining and exploration activities are subject to various laws and regulations governing the protection of the environment. The Group recognises management's best estimate for asset retirement obligations in the period in which they are incurred. Actual costs incurred and actual timing thereof in future periods can differ materially from the

estimates. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates can affect the carrying amount of this provision.

Estimated long-term environmental provisions, comprising pollution control, rehabilitation and mine closure, are based on the Group's environmental policy taking into account current technological, environmental and regulatory requirements. Provisions for future rehabilitation costs have been determined, based on calculations which require the use of estimates. closure liability assessments are completed annually by external service providers and our financial closure provisioning is updated and submitted to the DMR in line with the MPRDA requirements. Our closure liability assessments are audited by external financial auditors annually.

Royal Bafokeng's response

Royal Bafokeng Platinum's disclosures in relation to financial provision for environmental rehabilitation are in line with those of its peers. The CER wrote to Royal Bafokeng to request more information. RB Plats responded after two months in detail, addressing all our questions. The group provided full curriculum vitae of the external specialists who calculate its rehabilitation and mine closure liabilities. It also explained in detail the process which RB Plats follows in estimating the provisions. The group also indicated that the management team makes some adjustments to the calculations by external environmental specialists guided by the (then) Department of Minerals & Energy's guideline document for the evaluation of the quantum of closure-related financial provision.

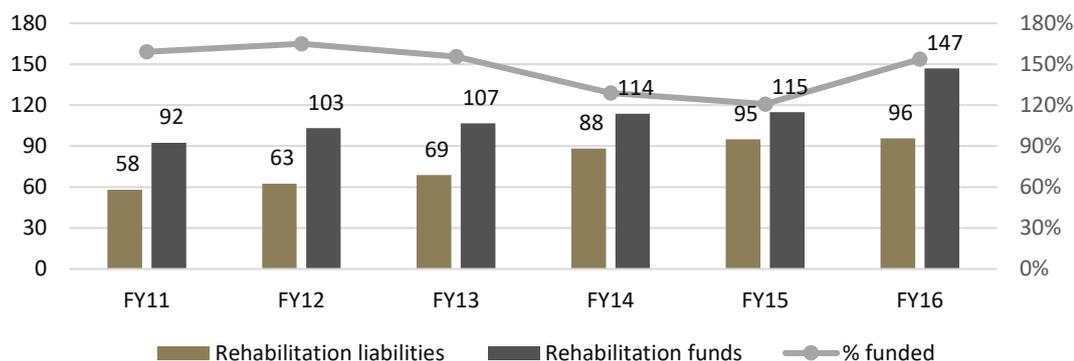
With regards to why the group does not report at the level of each operation, group CEO Stephen Phiri said the consolidated environmental liability calculations sufficiently addressed stakeholder needs.

Desirable additional disclosure

- 1) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 2) Publish any independent assessments of financial provision for rehabilitation and mine closure liability.
- 3) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 4) A statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 5) Disclose environmental provisions at the level of each operation.

Royal Bafokeng's financial provisions against the book value of rehabilitation funds.

Figure 7: Rehabilitation provisions vs funding in place: Royal Bafokeng Platinum (R'm)



RBPlats' contributions to the Bafokeng Rasimone Platinum JV Environmental Rehabilitation Trust more than cover its environmental obligations. It is the only company with such high levels of funded obligations.

iv. Northam Platinum

Northam Platinum discloses information regarding its environmental rehabilitation and provisioning in its annual financial statements. The following information is disclosed:

- 1) That management estimates the quantum of the environmental rehabilitation obligation.
- 2) Basic assumptions used in the calculation of the environmental rehabilitation provision and the frequency at which these estimates are reviewed.
- 3) The accounting treatment of the environmental rehabilitation obligations, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to those estimates.
- 4) Financial instruments used to provide for future rehabilitation obligations.
- 5) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Disclosure 1: Note 1.9 of the 2017 annual financial statements

Decommissioning provision

Provision is made for the present value of the estimated future decommissioning costs at the end of the mine's life. A decommissioning asset is recognised as part of the underlying property, plant and equipment.

With regards to the provision, the estimates are discounted at a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the liability.

The increase in the decommissioning provision due to the passage of time is recognised as a finance cost in profit or loss. Other changes in the carrying value of the provision subsequent to initial recognition are adjusted in the determination of the carrying value of the decommissioning asset as opposed to being recognised in profit or loss. If the adjustment result in

an addition to the decommissioning asset consideration is given as to whether this is an indication that the new carrying amount of the asset may not be fully recoverable. If it is such an indication, the asset is tested for impairment by estimating its recoverable amount in accordance with the respective accounting policies.

Provision for restoration costs

Provision is made for the estimated cost to be incurred on long term environmental obligations, comprising expenditure on pollution control and closure over the estimated life of the mine. The estimates are discounted at a pre-tax discount rate that reflects current market assessments of the time value of money. The increase in the restoration provision due to the passage of time is recognised as a finance cost in profit or loss. In assessing the future liability, no account is taken of the potential proceeds from the sale of assets and metals from the plant clean-up. The future liability is reviewed regularly and adjusted as appropriate for new facts and changes in legislation. The cost of ongoing programmes to prevent and control pollution and rehabilitate the environment is recognised as an expense when incurred.

Environmental rehabilitation fund

The group may contribute to a dedicated trust fund, the Northam Platinum Restoration Trust Fund ("the Fund"), to fund the expenditure on future decommissioning and restoration. Income earned by the fund is credited to the group's profit or loss in the period to which it relates. The group controls the trust and therefore consolidates it. The assets of the Fund are separately administered and the group's right of access to these funds is restricted

Disclosure 2: Note 2.2 from 2017 financial statements

The group's mining and exploration activities are subject to various laws and regulations governing the protection of the environment. Management estimates, with the assistance of independent experts, the expected total spend for the rehabilitation, management and remediation of negative environmental impacts at closure at the end of the lives of the mines and processing operations. Estimated long-term mine rehabilitation costs are based on the group's environmental policy, taking into account current technological, environmental and regulatory requirements.

The estimation of future costs of environmental obligations relating to decommissioning and rehabilitation is particularly complex and requires management to make estimates, assumptions and judgements relating to the future. These estimates are dependent on a number of factors including assumptions around environmental legislation, life-of-mine estimates and discount rates.

The group makes full provision for the future commercial cost of rehabilitating mine sites and related production facilities on a discounted basis at the time of developing the mines and installing and using those facilities. The rehabilitation provision represents the present value of rehabilitation costs relating to mine sites.

Assumptions based on the current economic environment have been made, which management believes are a reasonable basis upon which to estimate the future liability. However, actual rehabilitation costs will ultimately depend upon future market prices for the necessary rehabilitation works required that will reflect market conditions at the relevant time. Furthermore, the timing of rehabilitation is likely to depend on when the mines cease to produce at economically viable rates. This, in turn, will depend upon future platinum group metal prices, which are inherently uncertain

Findings

Northam's disclosures are similar to its peers. As with Amplats, Northam should make it clear who estimates its environmental rehabilitation liabilities. Its disclosure on this aspect simply says: "*Management estimates, with the assistance of independent experts*". This gives the impression that estimates are done by Northam management, with the role of independent experts not being clearly defined.

Other important information about the independent experts is also lacking. The group should at a minimum provide the names, qualifications and experience of its external evaluators. The assessment of the costs of rehabilitation and remediation of environmental damage is a complex undertaking which requires the skills and expertise of a range of highly trained specialists. For stakeholders to have confidence in the estimates used by mining companies they also need to know the profile of the estimators.

The other aspect we find problematic is that Northam provides one consolidated figure for environmental rehabilitation provisions for all its operations. Without information on individual operations it's extremely difficult for users to make informed assessments of the group's overall position with regards to environmental provisions. Northam also does not disclose how it treats provisions for jointly owned assets. Again, transparency on this will be welcome.

Northam also needs to be more transparent in its reporting on the Northam Platinum Restoration Trust Fund, which is one of the vehicles it uses to fund its rehabilitation and mine closure obligations. As with the companies discussed above, the trustees and beneficiaries should be identified and the management and use of funds clearly spelt out.

Northam's response

The CER wrote to Northam CEO Paul Dunne for comment, who responded within two weeks – the fastest of all companies covered in this study.

The response clarified that the rehabilitation and closure liability estimates for all its managed operations are determined by independent experts. Company in-house experts review these estimates and don't make any adjustments.

With regards to why the group does not report at the level of each operation, Mr Dunne said the company was complying with International Financial Reporting Standards (IFRS) requirements but would have no problem with reporting at asset level if required to do so by regulations.

Desirable additional disclosure

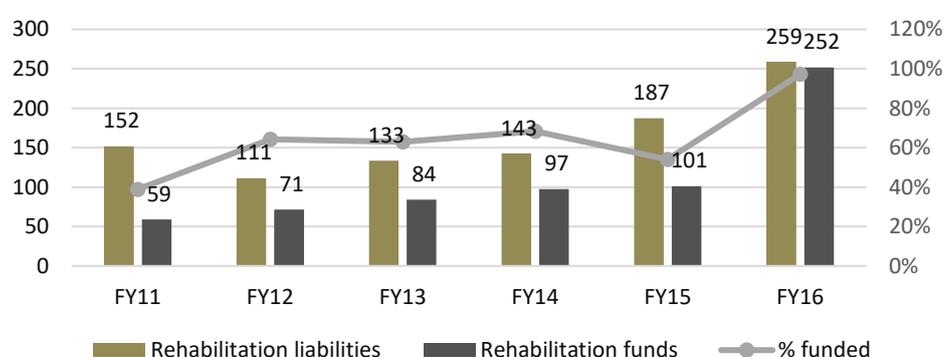
Northam provided detailed responses that addressed most of our concerns. However, the following would improve disclosure:

- 1) Consider rephrasing Disclosure 1 above to make it clearer as to whether management or independent experts estimate the rehabilitation obligations.
- 2) Clearly describe the roles of management and independent experts.

- 3) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental rehabilitation and mine closure.
- 4) Publish the independent assessments of financial provisions for rehabilitation and mine closure obligations.
- 5) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 6) A statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 7) More details on the management of the Northam Platinum Restoration Fund.
- 8) Disclose environmental provisions at asset level.

Financial provisions against the book value of rehabilitation funds.

**Graph 8: Rehabilitation liabilities vs funding in place :
Northam (R'm)**



The group is slightly underfunded. However, it indicated to the CER that, based on the DMR assessment, it is over-funded by R3.5m. It said the rehabilitation liabilities based on DMR's assessment at the end of the group's 2016 financial year were R248m.

v. Lonmin

Lonmin discloses the following in its annual report and accounts:

- 1) That independent specialists are responsible for estimating the quantum of the provisions for environmental rehabilitation.
- 2) Basic assumptions used in the calculation of environmental rehabilitation obligations and the frequency at which these estimates are reviewed.
- 3) Accounting treatment of environmental rehabilitation provisions, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- 4) Financial instruments used to provide for environmental rehabilitation obligations.
- 5) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in the group's 2017 financial statements.

Disclosure 1: Note 1 of the 2017 annual report and accounts

Rehabilitation costs are provided in full based on estimates of the future costs to be incurred, calculated on a discounted basis. As the provision is recognised, it is either capitalised as part of the cost of the related mine or written off to the income statement if utilised within one year. Where costs are capitalised the impact of such costs on the income statement is spread over the life of mine through the accretion of the discount of the provision and the depreciation over units of production basis of the increased costs of the mining assets.

Disclosure 2: Note 18 the 2017 annual report and accounts

..... the residual balances relate to cash deposits held in respect of rehabilitation obligations for which carrying values are at fair value...

Disclosure 3: Note 20 of the 2017 annual report and accounts

Non-current provisions represent site rehabilitation liabilities and generally assume the cash flows occur at the end of the life of the mine. The Group provided third party guarantees to the Department of Mineral Resources amounting to \$66 million (2016 – \$45 million) in connection with these rehabilitation obligations which the Group has to fund in order to restore the environment once all mining operations have ceased. Current cash and cash equivalents to the value of \$nil (2016 – \$6 million) is treated as restricted cash to be utilised for rehabilitation obligations.

Disclosure 4: Disclosure in the sustainable development report

Lonmin's unscheduled and scheduled closure cost assessments, to determine liability for our mining and prospecting rights, are undertaken by independent specialists on an annual basis with reports submitted to the DMR for verification. Any shortfall required in financial provision is made primarily through the issuing of bank guarantees, or transfers to the Lonmin Platinum Pollution and Rehabilitation Trust Fund. The full costing of unscheduled closure, which includes the environmental liability associated with all our assets, remediation and rehabilitation required, is included in Lonmin's Annual Report and Accounts, available at www.lonmin.com/investors/reports-and-presentations.

Findings

We found Lonmin's disclosures to be fragmented. It is the only company that does not specify the person/entity responsible for estimating its environmental rehabilitation and mine closure liabilities in its annual reports. This is only disclosed in the sustainability report. We also struggled to get basic financial information such as the annual financial provisions and rehabilitation funds. While the information is in the group's reports, the way it is presented makes it difficult to draw definitive conclusions about either its provisions made, or the funds available, to cover rehabilitation expenses.

Lonmin's response

The CER wrote to CEO Ben Magara. Lonmin's Head of Legal, Peter McElligot, responded after two months. In response, Mr McElligot confirmed that Lonmin makes use of independent specialists.

Nevertheless, he did not provide specific details on the profile of these independent specialists. With regards to why the group does not report at the level of each operation, Mr McElligot said that it is not a regulatory or reporting requirement. However, he said Lonmin would consider doing so, but gave no undertaking in this regard.

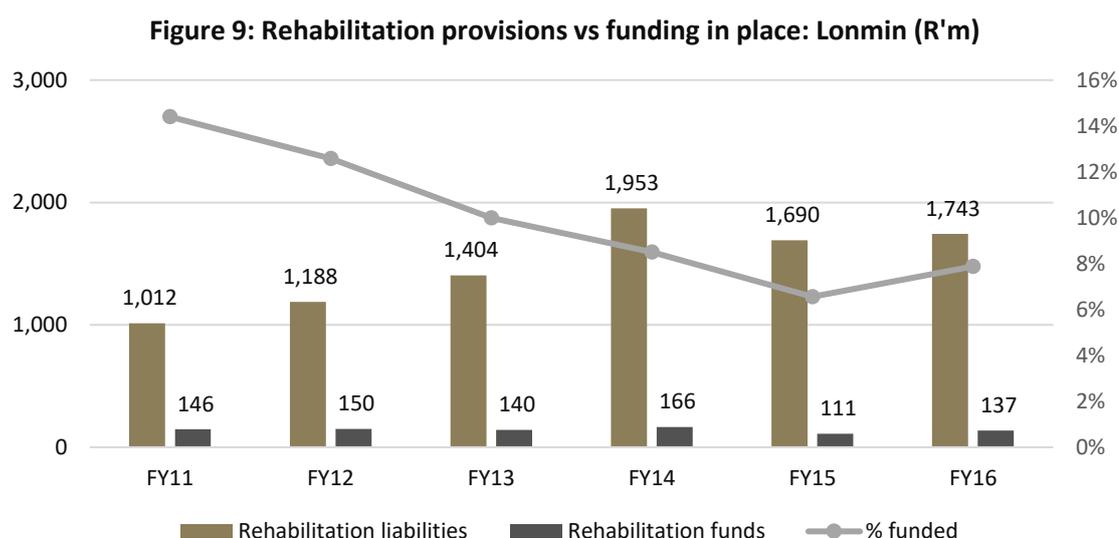
Desirable additional disclosures

Below are ways for Lonmin to make it easier for users to understand its environmental rehabilitation and mine closure policies and provisions:

- 1) Provide global figures for financial provision for rehabilitation and mine closure as well as rehabilitation funds.
- 2) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 3) Publish on its website any independent assessments of financial provision for rehabilitation and environmental liability.
- 4) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 5) Publish a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 6) Disclose environmental provisions at asset level.

Provisions against the book value of rehabilitation funds.

Lonmin reports its financials in dollars so we used the exchange rate at the end of each financial year to convert into rands.



The group secures the bulk of its obligations with a bank guarantee. Restricted cash deposits account for a small portion of its obligations.

vi. Wesizwe Platinum

Wesizwe Platinum makes most of its material disclosures on environmental rehabilitation and mine closure in its annual financial statements. These are easily accessible on its website. The group discloses the following:

- Accounting treatment of environmental rehabilitation provisions, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- Financial instruments used to provide for environmental rehabilitation obligations.
- Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in the group's 2017 financial statements.

Disclosure 1: Note 10 of the 2017 annual report

This long-term obligation reflects the net present value of closure, restoration and environmental rehabilitation (which include the dismantling and demolition of infrastructure, removal of residual materials and remediation of disturbed areas) cost. The annual changes can be ascribed to additional disturbances caused during the year and changes in the escalation and discount rates. This estimate is based on the current cost estimate and escalated to the future planned closure date and then discounted at an appropriate rate. The current estimates are based on environmental plans in accordance with current technology, environmental and regulatory requirements and the measurements of an independent professional surveyor. The discount rate is based on a pre-tax risk-free rate available in the current market. At the time of establishing the provision, a corresponding asset is recognised that will be depreciated over the future life of the asset to which it relates. The provision is re-assessed on an annual basis for changes in cost estimates, discount rates and useful lives. As required by the Department of Mineral Resources a deposit of R28.0 million (2016: R28.0 million) is held with a financial institution. The deposit has been guaranteed to the Department of Mineral Resources for the mine closure and environmental rehabilitation

Disclosure 2: Stainable development report

As required by the Department of Mineral Resources, a deposit of R27 million is held with a financial institution to ensure that sufficient funds are set aside and are available for rehabilitation and closure, should this be necessary. The closure costs as calculated according to the quantum format were given to the department in March 2016. During the current EIA amendment application, the department requested that an additional R13 million be set aside by means of a guarantee for rehabilitation. The guarantee has been finalised and a phased approach to the provision of the funds over the next five years has been agreed to by the department and adopted.

Findings

Wesizwe's only mine is still largely under development, so disclosure is minimal. We believe Wesizwe should consider the following:

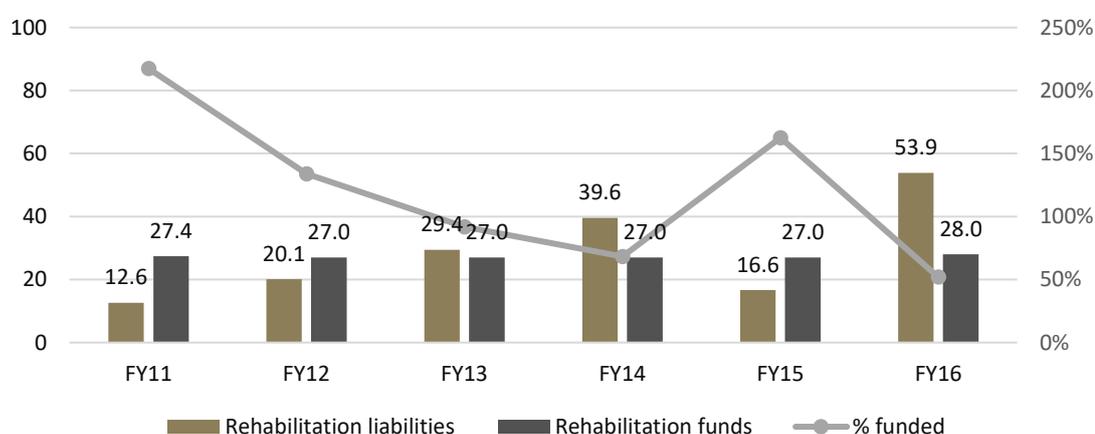
- 1) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental provisions, similar to the practice by property companies about their external valuers.

- 2) Publish on its website any independent assessments of financial provision for rehabilitation and environmental liability.
- 3) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 4) Publish a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.

Wesizwe did not respond to the letter sent to its CEO by the CER requesting comments on the preliminary findings.

Wesizwe's provisions against the book value of rehabilitation funds.

Figure 10 : Rehabilitation provisions vs funding in place: Wesizwe Platinum (R'm)



More than half of the group's environmental obligations are funded by a restricted cash deposit.

vii. Atlatsa

Atlatsa provides detailed discussions of its environmental rehabilitation and mine closure policies in its annual information form. The following information is disclosed:

- 1) Basic assumptions used in the calculation of the environmental rehabilitation obligations and the frequency at which these estimates are reviewed.
- 2) Detailed explanation of how the environmental rehabilitation was calculated.
- 3) Detailed discussion of issues pertaining to the environmental rehabilitation provisions at operational level.
- 4) Accounting treatment of environmental rehabilitation provision, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- 5) Financial instruments used to provide for environmental rehabilitation obligations.
- 6) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in Atlatsa's annual information form:

Disclosure 1: Note 4d in the 2017 financial statements

The South African National Environmental Management Act 107 of 1998, as well as the MPRDA, which applies to all prospecting and mining operations, requires that these operations are carried out in accordance with generally accepted principles of sustainable development. It is a MPRDA requirement that an applicant for a mining right must make prescribed financial provision for the rehabilitation or management of negative environmental impacts, which must be reviewed annually. The financial provisions deal with anticipated costs for premature closure; planned decommissioning and closure; and post closure management of residual and latent environmental impacts. The financial provisions deal with anticipated costs for:

- planned decommissioning and closure; and
- post closure management of residual and latent environmental impacts.

The Company makes full provision for the future cost of rehabilitating mine sites and related production facilities on a discounted basis at the time of developing the mines and installing the facilities.

The rehabilitation provision represents the present value of rehabilitation costs relating to mine sites, which are expected to be incurred up to 2039, which is the expiry of the mining right. These provisions have been created on the Company's internal estimates. Assumptions based on the current economic environment have been made, which management believes are a reasonable basis upon which to estimate the future liability. These estimates are reviewed regularly to take into account any material changes to the assumptions. However, actual rehabilitation costs will ultimately depend upon future market prices for necessary rehabilitation works which will reflect market conditions at the relevant time. Furthermore, the timing of rehabilitation will likely depend on when the mine ceases to produce at economically viable rates which will, in turn, depend on future PGM prices, which are inherently uncertain.

An assessment to determine the environmental rehabilitation liability of the Bokoni Mine as at December 31, 2017, was completed in Q4 2017. The total environmental rehabilitation liability for the Bokoni Mine, in current monetary terms as of December 31, 2017 (discounted at the 2017 risk free rate of 8.6% (2016:10.4%)), was estimated at \$11.8 million (ZAR116.0 million) and \$18.5 million (ZAR189.1 million) as at December 31, 2016. The undiscounted future environmental rehabilitation liability was estimated at \$21.3 million (ZAR210.6 million) as at December 31, 2017, and \$27.2 million (ZAR277.1 million) as at December 31, 2016.

The Company makes annual contributions to a dedicated trust fund (the "Bokoni Environmental Trust Fund") to cover the estimated cost of rehabilitation during and at the end of life of the Bokoni Mine. As at December 31, 2017, the amount invested in the Bokoni Environmental Trust Fund was \$5.0 million (ZAR50.0 million) compared to \$4.5 million (ZAR45.8 million) at December 31, 2016. The \$4.5 million (ZAR44.5 million) shortfall between the funds invested in the Bokoni Environmental Trust Fund and the estimated rehabilitation cost is covered by a guarantee from RPM.

Atlatsa's mining and exploration activities are subject to extensive environmental laws and regulations. These laws and regulations are continually changing and are generally becoming more restrictive. The Company has incurred, and expects to incur in future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such expenditures. Estimated future reclamation costs are based principally on current legal and regulatory requirements. The Company is evaluating the implications of the release of the financial provision regulations under the National Environmental Management Act ("NEMA") in November 2015, and will assess the impact of these regulations in due course (for further detail, refer to "Risk Factors").

Currently, the most significant environmental liabilities that have been identified at Bokoni Mine are dust generation from the tailings dams and seepage of contaminated water from the settling dams.

The Merensky tailings dam at the Bokoni Mine has been identified as a major source of dust in this relatively arid area. At present, some remedial steps have been undertaken to allay the dust and these include partial vegetation of the slopes of the dam as well as the construction of wind-screens on the top of the tailings dam. Both remedial steps are considered inadequate and as legislation becomes stricter, it is expected that the slopes and top of the tailings dams will be required to be clad with rock and/or adequately vegetated.

Initial shallow underground mining at the Bokoni Mine intersected both weathered and fractured overlying aquifers, which has resulted in an on-going seepage of ground water into the workings from the Rapholo River. In addition, water from the decant water catchment dam below the tailings dam also seeps into the workings. Total ingress is in the order of 11,000 cubic metres per day. Subsequently there is on-going pumping of a significant amount of water out of the mines and into surface settling dams.

Disclosure 1 continued: Note 4d in the 2017 financial statements

Currently, the existing Water Usage License ("WUL"), granted in October 2008, permits discharge up to 1.9 million cubic metres of water annually into the Rapholo River until April 2009. The Bokoni Mine requested an amendment to the WUL, which was declined by the Department of Water Affairs, but an appeal was submitted to the water tribunal. Currently a water study is in progress to update the water model for the mine, to increase the understanding of the aquifer. No water was discharged into the Rapholo River during 2013 and 2014. All discharges into the river have been stopped.

In December 31, 2013, Bokoni Mine has identified a future pollution risk posed by deep groundwater in certain underground shafts. Various studies have been undertaken by the mine since 2012. In view of the documentation of current information for the accurate estimation of the liability, the Company are unable to quantify the extent of pollution or its source, if any. As such, the criteria in IAS 37 for recognizing a liability have not been met

Atlatsa's mining and exploration activities are subject to extensive environmental laws and regulation.

Findings and company response

Atlatsa discloses significantly more information than its peers in this study. The group discusses in detail its rehabilitation and mine closure policies. It also provides a detailed discussion on the changes in its yearly financial provisions. However, the group does not provide the name, qualifications and experience of its employees who it says are responsible for estimating its rehabilitation and mine closure liabilities.

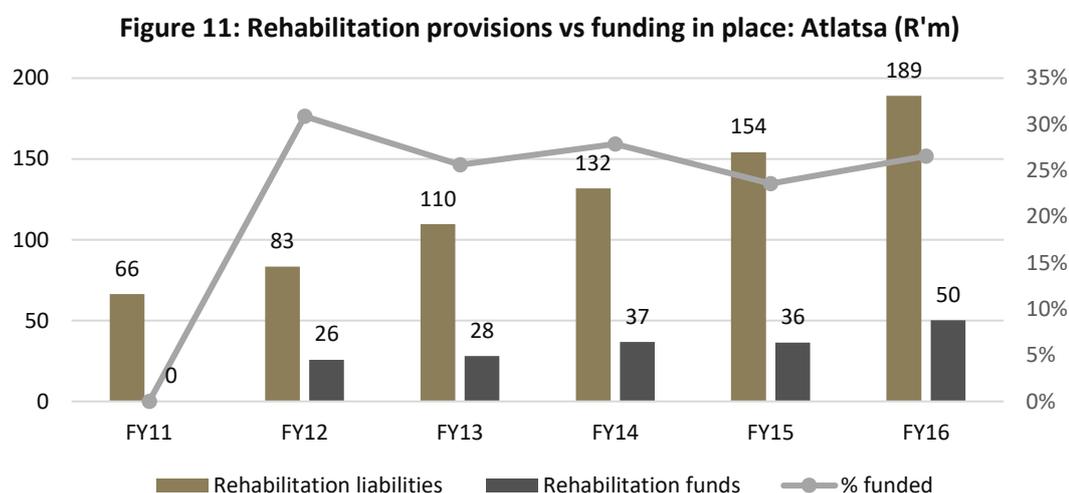
The CER wrote to Atlatsa but received no response.

Desirable additional disclosures

- 1) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental rehabilitation and closure liability.
- 2) Publish any independent assessments of financial provision for environmental rehabilitation and mine closure liability.

- 3) Publish a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 4) Provide more details on the management of the Bokoni Rehabilitation Trust.

Financial provisions against the book value of rehabilitation funds.



Contributions to the environmental funds cover slightly more than a quarter of the group's rehabilitation obligations.

viii. Eastern Platinum

Eastern Platinum discloses environmental rehabilitation policies in its annual financial statements. They disclose the following:

- That appropriately qualified external persons are responsible for estimating environmental rehabilitation obligations.
- Basic assumptions used in the calculation of the environmental rehabilitation obligations and the frequency at which these estimates are reviewed.
- Accounting treatment of environmental rehabilitation provision, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- Financial instruments used to provide for environmental rehabilitation obligations.
- Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in Eastern Platinum's annual report:

Disclosure 1: Note 4 n of the 2016 financial report

Environmental rehabilitation

The Company recognizes liabilities for statutory, contractual, constructive or legal obligations associated with the retirement of property, plant and equipment, when those obligations result from the acquisition, construction, development or normal operation of the assets. The net present value of future rehabilitation cost estimates arising from the decommissioning of plant and other site preparation work is capitalized to mining assets along with a corresponding increase in the rehabilitation provision in the period incurred. Discount rates using a pre-tax rate that reflect the time value of money are used to calculate the net present value.

The rehabilitation provision is accreted over time to reflect the unwinding of the discount with the accretion expense included in finance costs in the consolidated statements of comprehensive loss. The rehabilitation asset is depreciated on the same basis as mining assets.

The rehabilitation provision is re-measured at the end of each reporting period for changes of estimates and circumstances. Changes in estimates and circumstances include changes in regulatory requirements, discount rates and assumptions regarding the amount and timing of the future expenditures. The carrying amount of the liability is increased for the passage of time and adjusted for changes to the current market-based discount rate, amount or timing of the underlying cash flows needed to settle the obligation.

The net present value of restoration costs arising from subsequent site damage that is incurred on an ongoing basis during production are charged to profit or loss in the period incurred.

The costs of rehabilitation projects that were included in the rehabilitation provision are recorded against the provision as incurred. The cost of ongoing current programs to prevent and control pollution is charged against profit or loss as incurred.

Disclosure 2: Note 4 v (ii) n of the 2016 financial report

Environmental rehabilitation provision

Environmental rehabilitation obligations have been estimated by appropriately qualified external persons based on the Company's interpretation of current regulatory and best practice requirements and have measured at the net present value of expected future cash expenditures that would be required upon mine closure. These estimates require significant judgement about the nature, cost and timing of work to be completed, and may change with future changes to costs, environmental laws, regulations and remediation practices and the expected timing of remediation work. The details of assumptions used in calculation of the Company's environmental rehabilitation provision are disclosed in Note 18.

Disclosure 3: Note 18 of the 2016 financial report

The environmental rehabilitation provision was estimated based on information currently available, including closure plans and applicable regulations. Significant closure activities include land rehabilitation, demolition of buildings and mine facilities and other costs.

The provision for environmental rehabilitation at December 31, 2016 is \$8,279 (ZAR113,451) (December 31, 2015 – \$6,590 (ZAR101,912)). The provision was determined using the following assumptions:

As at December 31, 2016, cash in the amount of \$9,779 (December 31, 2015 - \$8,049) was pledged as security for the guarantee issued to the Department of Mineral Resources of South Africa in respect to environmental rehabilitation (Note 16). Furthermore, as at December 31, 2016, certain of the Company's residential properties in the amount of \$1,547 (ZAR21,200) (December 31, 2015 - \$1,371 (ZAR21,200)) was also pledged as security for the guarantee issued to the Department of Mineral Resources for the same reason. These guarantees will be utilized to cover expenses incurred to rehabilitate the mining area upon closure of the mine.

The undiscounted and inflated value of this liability is approximately \$40,774 (ZAR558,771) (December 31, 2015 – \$34,872 (ZAR538,982)).

Findings and Eastplats' response

Eastern Platinum's disclosures are in line with those of its peers. Eastern Platinum's response provides detailed explanations of its policies on environmental rehabilitations obligations and provisions. It provided us with a detailed explanation of the process it follows in assessing its environmental rehabilitation obligations and a detailed profile of its independent specialists. This information should be made public, and should be easily accessible to stakeholders.

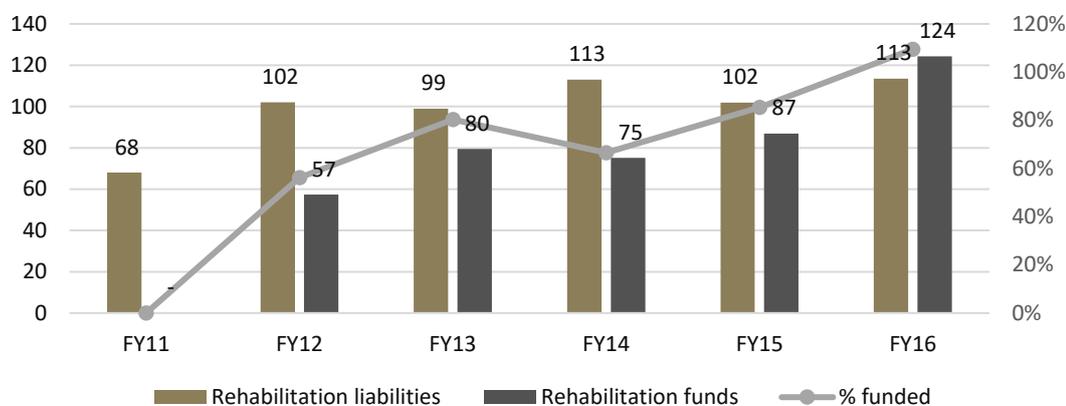
Desirable additional disclosures

Below are additional disclosures which we think Eastplats should consider:

- 1) Disclose the names, qualifications and experience of all people responsible for the estimation of environmental provisions, as property companies about their external valuers.
- 2) Publish the independent assessments of financial provisions for rehabilitation and mine closure liability.
- 3) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 4) Publish a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 5) Disclosures should be done at the level of each operation

Eastern Platinum's provisions against the book value of rehabilitation funds.

Figure 12: Rehabilitation provisions vs funding in place: Eastern Platinum (R'm)



The group's money market funds more than cover its rehabilitation obligations.

4. Coal mining companies

i. Exxaro Resources

Exxaro discloses information on its environmental rehabilitation and mining closure provisioning in its annual financial statements as well as in the supplementary report. The reports are available on the group's website. The reports disclose the following:

- 1) That the calculations of financial provisions "require[s] management judgment in estimating these future costs".
- 2) Basic assumptions used in the calculation of the environmental rehabilitation obligations and the frequency at which these estimates are reviewed.
- 3) Estimated immediate closure costs, estimated life of mine, closure cost trust fund balance, guarantees, further contributions required over remaining life and remaining years for each operation.
- 4) Accounting treatment of environmental rehabilitation provision, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- 5) Financial instruments used to provide for environmental rehabilitation obligations.
- 6) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in Exxaro's supplementary report.

Disclosure 1: full supplementary report FY16

Environmental liabilities and rehabilitation

Internal annual updates

All business units annually review their financial provisions. They also consider amendments to rehabilitation plans and closure objectives based on regular EMP performance assessments. The cost estimates of activities in the concurrent and final-closure rehabilitation programme are reviewed and adjusted where necessary.

Water-related liabilities are calculated by site according to predicted decanted water quality and quantity. Treatment solutions are constantly questioned to include the latest technologies available.

In November 2015, the DMR published the financial provisioning regulations 2015 for implementation. These contain more onerous and detailed requirements than previously required by the MPRDA. Numerous interactions with the Chamber of Mines and industry subsequently took place to clarify uncertainties in the regulations. In September 2016, the minister published amendments to the regulations and a consultative process is under way to finalise this legislation.

Risk-based external reviews

In the first quarter each year, our sustainability department and each business unit perform a risk analysis based on the group environment and risk assurance process, with risks reported to appropriate management in terms of Exxaro's governance process. Where mines are eligible for an external review, these are conducted under commercial agreements with competent third parties.

Concurrent rehabilitation plans

All business units have a detailed concurrent rehabilitation plan and supporting material (plan, schedule and budget). These are revised and updated at least annually. The mine manager or person in charge of a site reports on any deviation from the rehabilitation programme (reasons and how this affects future activities; financial provisions; corrective steps to rectify the deviation, especially to prevent financial shortfalls accumulating and closure liabilities rising).

In addition to this it discloses the estimated immediate closure costs, estimated life of mine closure cost trust fund balance guarantees further contribution required over remaining life and remaining years per asset.

Findings

Exxaro should be commended for providing financial information on environmental rehabilitation and mine closure at the level of each operation. It is one of the few large players that does so. The group also provides detailed management commentary on the changes in its financial provisions and rehabilitation funds and the inputs used in the calculations.

However, further disclosures could be made. It does not clearly state who is responsible for estimating the rehabilitation and mine closure obligations, or the names, qualifications and experience of its external evaluators. The assessment of the costs of rehabilitation and remediation of environmental damage is a complex undertaking which requires the skills and expertise of a range of highly trained specialists. For stakeholders to have confidence in the estimates used by mining companies they also need to know the profile of the estimators.

Exxaro's policy is also not clear on how often or when the group uses external specialists. The CER wrote twice to Exxaro to get clarity on this. The group's first response simply said it "often" makes use

of independent external service providers, which is vague. The group clarified this in its second response, indicating that external experts review “unscheduled closure costs relating to rehabilitation and remediation of environmental damage... every three years”.

Exxaro’s financial statements say that the group funds its environmental obligations through contributions to the Exxaro Environmental Rehabilitation Fund (EERF) and by providing guarantees to the DMR. While this is a commendable practice, the group provides very little information on the EERF.

The names and beneficiaries of the EERF should be provided with a description on how the trust is managed; how the funds are aggregated between operations; how the funds in the trust are accessed; whether the funds have ever been utilised for rehabilitation and/or closure; and whether the funds are used for concurrent rehabilitation or reserved exclusively for the purposes of closure.

Exxaro’s response

The CER wrote to Exxaro requesting for comments on our findings. The group responded two months later through its Executive Head of Sustainability, Mongezi Vetu.

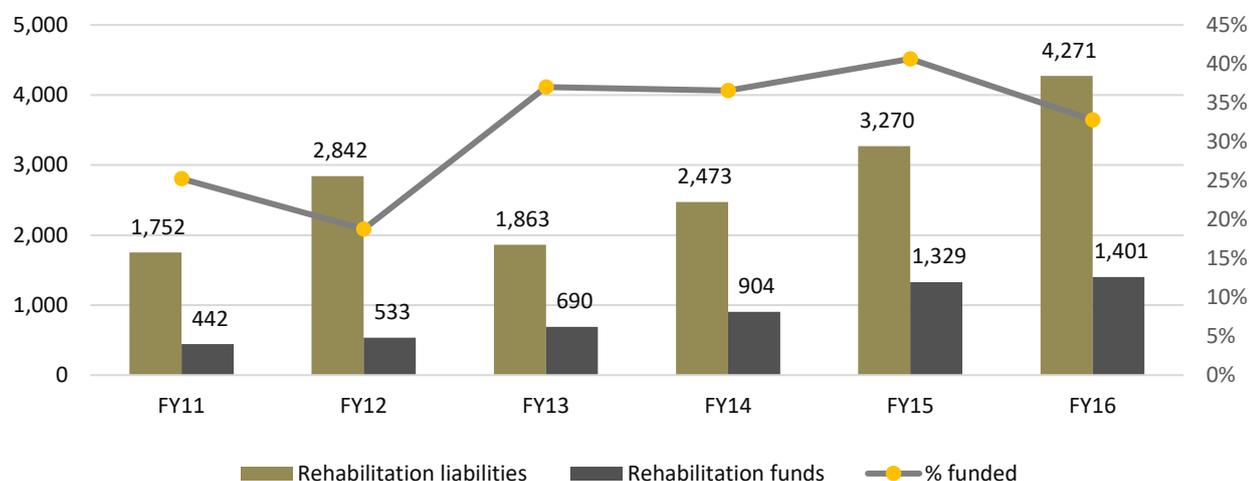
Desirable additional disclosures

The response from Exxaro addressed most of our questions. However, it would be preferable if the following was publicly available as a matter of routine:

- 1) Clear descriptions of the roles of management and independent experts in the estimation of environmental liabilities.
- 2) Disclosure of the names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 3) Publish the independent assessments of financial provision for rehabilitation and environmental liability on its website.
- 4) Publish a statement indicating that financial provisions are sufficient to cover its rehabilitation costs.
- 5) More details on the management of the EERF.

Exxaro's rehabilitation provisions against funds in Exxaro Environmental Rehabilitation Trust and guarantees

Figure 13: Rehabilitation liabilities vs funding in place : Exxaro Resources (R'm)



The group's contribution to its environmental trusts account for 29% of its environmental rehabilitation and mine closure liability. The percentage funded has increased gradually since 2012.

ii. MC Mining (previously Coal of Africa)

MC Mining makes its disclosures on environmental rehabilitation and mine closure in its annual financial statements. It discloses the following:

- 1) Basic assumptions used in the calculation of the environmental rehabilitation and mine closure liabilities and the frequency at which these estimates are reviewed.
- 2) Accounting treatment of environmental rehabilitation provision, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- 3) Financial instruments used to provide for environmental rehabilitation obligations.
Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.

Below are the disclosures as they appear in MC Mining's 2016 financial statements:

Disclosure 1: Note 2.18 of FY16 FS

Rehabilitation provision

A provision for rehabilitation is recognised when there is a present obligation as a result of exploration, development or production activities undertaken, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the provision can be measured reliably.

The nature of these restoration activities includes: dismantling and removing structures; rehabilitating mines and tailings dams; dismantling operating facilities; closing plant and waste sites; and restoring, reclaiming and revegetating affected areas.

The provision for future rehabilitation costs is the best estimate of the present value of the expenditure required to settle the rehabilitation obligation at the reporting date, based on current legal and other requirements and technology. Future rehabilitation costs are reviewed annually and any changes in the estimate are reflected in the present value of the rehabilitation provision at each reporting date.

The initial estimate of the rehabilitation provision relating to exploration, development and production facilities is capitalised into the cost of the related asset and depreciated or amortised on the same basis as the related asset. Changes in the estimate of the provision are treated in the same manner, except that the unwinding of the effect of discounting on the provision is recognised as a finance cost rather than being capitalised into the cost of the related asset.

REHABILITATION AND RESTORATION PROVISIONS

Certain estimates and assumptions are required to be made in determining the cost of rehabilitation and restoration of the areas disturbed during mining activities and the cost of dismantling of mining infrastructure. The amount the Group is expected to incur to settle its future obligations includes estimates regarding:

- the future expected costs of rehabilitation, restoration and dismantling.*
- the expected timing of the cash flows and the expected life of mine (which is based on coal reserves noted above);*
- the application of relevant environmental legislation; and*
- the appropriate rate at which to discount the liability;*

Changes in the estimates and assumptions used could have a material impact on the carrying value of the rehabilitation provision and related asset. The provision is reviewed at each reporting date and updated based on the best available estimates and assumptions at that time. The carrying amount of the rehabilitation provision is set out in note 24.

Disclosure 3: Note 20 the annual financial statements for 2016

The restricted cash balance of \$0.2 million (2015 – \$1.0 million) is held on behalf of subsidiary companies in respect of the rehabilitation guarantees issued to the DMR in respect of environmental rehabilitation costs of \$6.3 million (2015: \$10.1 million). This cash is not available for use other than for those specific purposes.

Disclosure 4: Note 20 the annual financial statements for 2016

The rehabilitation provision represents the current cost of environmental liabilities as at the respective year end. An annual estimate of the quantum of closure costs is necessary in order to fulfil the requirements of the DMR, as well as meeting specific closure objectives outlined in the mine's Environmental Management Programme (EMP).

Although the ultimate amount of the obligation is uncertain, the fair value of the obligation is based on information that is currently available. This estimate includes costs for the removal of all current mine infrastructure and the rehabilitation of all disturbed areas to a condition as described in the EMP. The period assumed in the calculation of the present value of the obligation is the aggregate of the construction period of the mine and the total estimated LOM.

The current estimate available is inflated by the South African inflation rate of 6% annually and the discount rate applied to establish the current obligation is a South Africa government bond rate at 30 June 2016 of 8.75% (2015: 8.32%) annually. Due to the delay on the Vele Colliery start-up the estimated LOM has been extended causing a decrease in the present value of the environmental obligation.

The Makhado Project is still in Exploration phase and no formal decision to mine is currently in place. Provisions have been analysed between current and non-current as follows....

Comment on the disclosures

MC Mining's disclosures are largely in line with its peers studied in this report. As with the others, it should disclose more. For instance, its disclosures do not specify who is responsible for making the estimations. The group also provides one consolidated figure for environmental rehabilitation and mine closure provisions for all its operations. Without information on individual operations it is extremely difficult for users to make informed assessments of the group's overall position with regards to environmental provisions.

MC Mining's response

MC Mining responded to the CER letter after about a month. The group indicated that the rehabilitation and mine closure liability estimates for all its managed operations are determined by independent experts. However, it did not disclose their names, qualifications or experience.

As to why the group does not report at the level of each operation, CEO David Brown said it was because it is not a requirement to do so.

Additional disclosures required

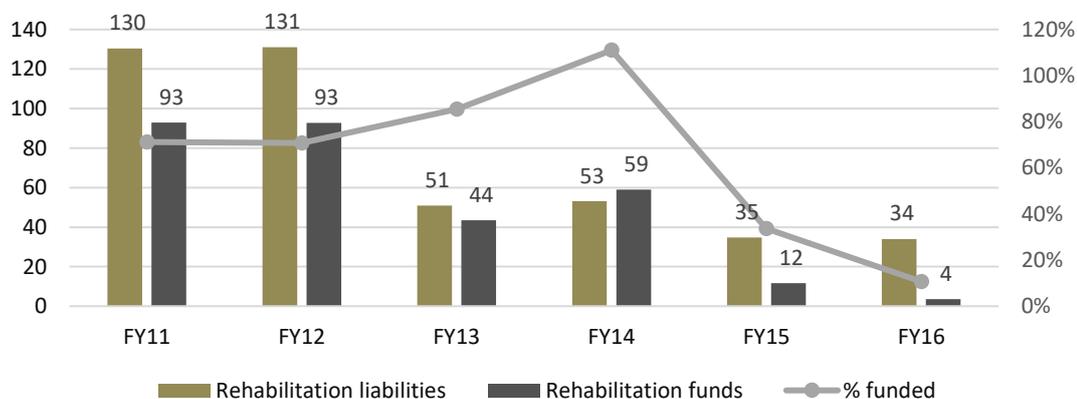
MC Mining provided adequate information, but it would be preferable if the information were available in the public domain as a matter of routine. Disclosure could be improved by:

- 1) Clearly stating who is responsible for estimating its rehabilitation and mine closure liabilities.

- 2) Disclosing the names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 3) Publishing on its website any independent assessments of financial provisions for rehabilitation and environmental liability.
- 4) Provide a commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 5) Publishing a statement indicating that financial provisions are sufficient to cover the group's rehabilitation and mine closure costs if it ceases to operate now.
- 6) Publicising environmental provisions at asset level.

MC Mining's rehabilitation provisions against available funds

Figure 14: Rehabilitation provisions vs funding in place: MC Mining (R'm)



The graph shows a gradual decline in both the rehabilitation liabilities and rehabilitation funds. This was largely because the group's significant colliery was reclassified as held for sale during FY13. This change knocked off \$9.6m, equivalent to about R94m, from the rehabilitation liabilities. The provisions are also affected by fluctuations in the rand/dollar exchange rate.

The portion of funded rehabilitation liabilities has been declining and is now at 11%. But management indicated that the company has enough guarantees in place to cover the shortfall.

iii. Wescoal

Wescoal discloses information on its environmental rehabilitation and provisioning in its annual integrated report. The group discloses the following:

- 1) That independent environmental specialists are responsible for determining its rehabilitation and closure liability estimates.

- 2) Basic assumptions used in the calculation of the environmental rehabilitation obligations and the frequency at which these estimates are reviewed.
- 3) Accounting treatment of environmental rehabilitation provision, decommissioning costs, ongoing rehabilitation costs, rehabilitation funds and changes to the estimates.
- 4) Financial instruments used to fund the environmental rehabilitation obligations.
- 5) Estimated figures for environmental rehabilitation and mine closure obligations, and funds and guarantees available to meet those obligations.
- 6) Wescoal does provide figures per operation.

Below are the disclosures as they appear in Wescoal's 2017 annual report

Disclosure 1: Note 1.2 of 2017 annual report

Mine rehabilitation provision

In applying IAS 37, Provisions, Contingent Liabilities and Contingent Assets, estimates of determining the present obligation of environmental and decommissioning provisions is required. Environmental and decommissioning costs are provided for, where either a legal or constructive obligation is recognised as a result of the Group's coal mining operations (refer note 20).

Significant estimates and assumptions are made in determining the present obligation of environmental and decommissioning provisions, which include the actual estimate, the inflation rate, the discount rate used and the expected date of closure of mining activities. Estimates are based on costs that are annually determined by independent environmental specialists in accordance with environmental regulations and adjusted as appropriate for new circumstances.

Numerous factors will affect the ultimate liability payable. These factors include estimates of the extent and cost of rehabilitation activities, technological changes and environmental legislation changes.

Unwinding of discount due to the passage of time is included as an element of finance costs in arriving at profit or loss for the year in terms of IAS 37, Provisions, Contingent Liabilities and Contingent Assets (refer note 20 and 31). The present value of environmental disturbances created as well as changes to estimates are capitalised to mining assets against an increase in the rehabilitation provision. Change in estimates for operations in the development and production phase is capitalised and amortised over the life of mine on the units of production method. Rehabilitation costs incurred that are included in the estimates.

Disclosure 2: Note 1.9 of 2017 financial statements

Rehabilitation investment

The rehabilitation investment with Old Mutual is designated as a financial asset at fair value through profit or loss as this investment is managed on a fair value basis. This investment is measured at fair value, with fair value movements accounted for in profit or loss.

Disclosure 3: Note 20 of the 2017 financial statements

The Group's mining and exploration activities are subject to extensive environmental laws and regulations. These laws and regulations are continually changing and are generally becoming more restrictive. The Group has made and expects to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures. Estimated future reclamation costs are based principally on legal and regulatory requirements. The above is a reconciliation of the total liability for environmental rehabilitation.

While the ultimate amount of rehabilitation costs to be incurred in the future is uncertain, the Group has estimated that, based on current environmental and regulatory requirements, the total cost for the mines, in current monetary terms, is approximately R157.57 million (2016: R60.08 million).

The Group intends to finance the ultimate rehabilitation costs from the money invested in and ongoing contributions to environmental rehabilitation investments, as well as the proceeds on sale of assets at the time of mine closure. The Group has guarantees in place relating to environmental liabilities. These guarantees have been issued by third parties on behalf of the Group.

Disclosure 4: Note 40 of the 2017 financial statements**Rehabilitation guarantees**

Additional rehabilitation guarantees to the value of R38 million were issued to the DMR during June 2017.

Findings

Wescoal states that its rehabilitation liabilities are estimated by independent environmental specialists. However, like most of its peers, it does not disclose the names, experience and qualifications of these external specialists. In our view this information should be public. The assessment of the cost of rehabilitation and remediation of environmental damage caused by mining is a complex undertaking which requires the skills and expertise of a range of highly trained specialists. For investors to have confidence in the estimates being disclosed, they need to know if the specialist is competent and credible. Also related to this, management should indicate if it makes any adjustments to the estimates provided by the independent experts.

Wescoal's response

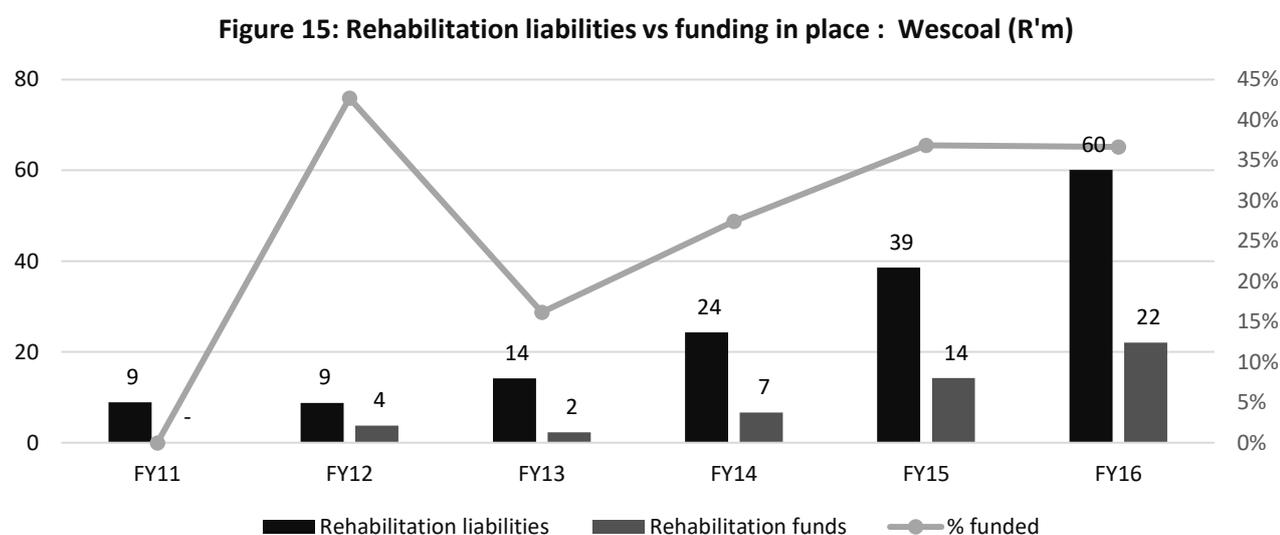
The CER wrote to Wescoal requesting comment on the above findings. While the group responded much quicker than most of its peers, it did not address our questions. It did not provide the name/s and profile of its independent experts but simply said it uses external experts who are registered with the Engineering Council of South Africa. Most companies included in the study disclosed the names, qualifications and experience of their independent external experts.

Additional disclosures required

The following would improve disclosure:

- 1) Clear description of the roles of management and independent experts in the estimation of rehabilitation and mine closure costs.
- 2) The names, qualifications and experience of all people responsible for the estimation of environmental provisions.
- 3) Publication of any independent assessments of financial provision for the rehabilitation and environmental liability.
- 4) A commentary on any significant changes in the yearly provisions of rehabilitation obligations.
- 5) A statement indicating that financial provisions are sufficient to cover its rehabilitation costs.

Wescoal rehabilitation provisions against available funds



Wescoal funds its obligations using bank guarantees and contributes cash to a rehabilitation investment with Old Mutual.

[ends]

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