Our strategic approach to managing impacts and conserving natural resources

Given these impacts, it is important that we demonstrate responsible stewardship of the resources we share with the societies in which we operate, particularly as our underground operations become deeper and consume greater amounts of energy and water. This involves taking measures not only to address security of resource supply (for example through efficiency, recycling and fuel-switching), but also to actively minimise our impact on natural resources and on the communities around our operations. Taking such measures has direct benefits in terms of reduced costs and liabilities, enhanced resource tenure and improved security of our licence to operate.

Our environmental mitigation activities focus on the following areas:

- Promoting responsible stewardship by minimising water use and pollution
- Minimising our negative impacts on air quality
- Responding to climate change risks and opportunities, and promoting responsible energy management
- Managing our waste streams
- Promoting responsible land management and biodiversity practices.

In October 2013 the Implats board approved a revised environmental policy, committing the Company to running our exploration, mining, processing and refining operations in an environmentally responsible manner, and ensuring the well-being of our stakeholders. Through our policy commitments we undertake to integrate environmental management into all aspects of the business with the aim of achieving world-class environmental performance in a sustainable manner.

All our operations are ISO 14001 certified, and are required to identify and report on all environmental incidents. Systems are in place to investigate and determine the root causes of high-severity incidents, and to address and close out all such incidents. Incident classification has been standardised across all operations in the reporting year and the five-tier incident classification matrix is currently being rolled out. This will enable reporting of incidents for the Group from the 2016 financial year.

During the year we implemented a FlexiCadastre software...
Our strategic approach to managing impacts and conserving natural resources

In addition to mitigating their direct environmental impacts, each of our operations are expected to develop or fund a flagship local community environmental project as part of our commitment to moving beyond compliance on environmental issues.

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system, and have completed the loading of Rustenburg mining rights environmental authorisations. Impala Springs tracks legal compliance to licence conditions on Isometrix. They have a community forum that meets quarterly and feedback is provided on compliance status as well as progress with the various projects.

This year the difficult socio-political environment in the Rustenburg area negatively affected our environmental impact assessment (EIA) and environmental management programme (EMP) amendment processes, with several public participation meetings being cancelled following community disruptions. Given the current challenges with community engagement, we have put some of the processes on hold, while with others we have chosen to finalise and submit the required documents to the authorities for their decision.

Although there are certain areas of improvement such as the operational tailings dam in particular, the general conclusion of the 2014 EMP assessment is that the level of environmental management performance at Impala has dropped since 2012. It is important to note that this may well be a direct consequence of the extended labour strikes that occurred for the first half of 2014. These strikes created a situation where on-site environmental management initiatives were not able to continue as required.

Impacts of most concern are safety of third parties, pollution of soils, surface water, ground water and air quality. These impacts have all been quantified by monitoring and/or specialist modelling. Impala should utilise this information to design and implement appropriate prevention and/or mitigation measures going forward.
Our strategic approach to managing impacts and conserving natural resources

Water stewardship

Our management approach to water stewardship
Water is a critical input into our mining, processing and refining operations. We recognise our obligations in terms of maintaining water quality, and not compromising the access rights of other users. The strategic importance of water was further highlighted this year, with rainfall in the Rustenburg area being a third of its usual levels.

The strategy focuses on water consumption and quality management, and proposes a framework for operation-specific water conservation strategies, in line with our strategic commitment to reduce the use of potable water and increase recycled water usage. The Group’s recycled water target is 40%. We have implemented various projects to reduce potable water consumption, optimise industrial use and increase water recycling. Surface and groundwater monitoring programmes are in place, and we review our water risk assessments annually. In fulfilment of our commitment to transparency on performance, we have once again participated in the CDP Water Disclosure Project.

We engage regularly with the South African and Zimbabwean regulatory authorities in an effort to ensure that all appropriate water-use licences are in place, and that due consideration is given to our proposals for water-use amendments. At our Rustenburg operation we have continued to experience some delays in the issuing of amended licences, largely as a result of government capacity constraints. We work closely with different stakeholders to ensure security of supply for our operations and the surrounding communities.

Impala Springs are experiencing delays in receiving their amended licence. Amendment applications were submitted in 2011/2012. The Integrated Water and Waste Management Plan (IWWMP) and Rehabilitation Strategy and Implementation Plan (RSIP) are reviewed and submitted to the Department of Water and Sanitation (DWS) annually. A water balance has been developed at Impala Springs by Goldsim and is being tested. There is good control on our effluent pond levels and high recycling figures due to the operation of two crystallisers and the reverse osmosis (RO) plant.

Water management continues to receive particular focus at Impala Rustenburg. The persistently dry conditions experienced in the north-west of South Africa, together with municipal potable water supply problems, continue to present challenges to our operations and highlight the strategic long-term importance of effective water management practices. We have also been implementing a groundwater and surface-water treatment project to remediate the pollution plume around our tailings dam.

Our 2015 performance on water

This year Impala Rustenburg experienced 60% less rainfall during the summer season than the normally expected levels. The reduced rainfall impacted negatively on the operation’s water resources, such as the tailings dam return water and the Rockwall dam supplies. The extremely dry conditions also impacted negatively on water recycling levels.

Total water consumption for the Group this year was 39 701 megalitres, including both water withdrawn and water recycled. The increase of 14% on water consumption levels (2014: 34 775 megalitres) is largely attributable to the return to production this year following the termination of last year’s five-month strike, as well as the reduced rainfall levels. The maintenance in our unit consumption rate of water (megalitres per tonne ore milled) over the 2014 levels is a positive indication that we are improving our water management practices. This year, 14 325 megalitres of water was recycled, equating to 36% of all water consumed.

Further details on the total water withdrawn, consumed and recycled at each of our operations are provided in the performance table on page 137.
Our strategic approach to managing impacts and conserving natural resources

“Water is a critical input into our mining, processing and refining operations

<table>
<thead>
<tr>
<th>Water consumption units (Mℓ)</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Water from water service providers or municipalities</td>
<td>9 576</td>
<td>7 515</td>
<td>8 851</td>
<td>10 722</td>
<td>12 636</td>
</tr>
<tr>
<td>(2) Waste water from other organisations</td>
<td>3 104</td>
<td>2 313</td>
<td>2 598</td>
<td>2 767</td>
<td>3 769</td>
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<tr>
<td>(3) Water from rivers</td>
<td>2 164</td>
<td>2 175</td>
<td>2 344</td>
<td>2 124</td>
<td>2 337</td>
</tr>
<tr>
<td>(4) Water from dams</td>
<td>6 897</td>
<td>6 696</td>
<td>8 777</td>
<td>7 891</td>
<td>7 016</td>
</tr>
<tr>
<td>(5) Water from ground water</td>
<td>3 634</td>
<td>2 667</td>
<td>2 870</td>
<td>1 770</td>
<td>1 287</td>
</tr>
<tr>
<td>Water withdrawn (1 + 2 + 3 + 4 + 5)</td>
<td>25 376</td>
<td>21 365</td>
<td>25 440</td>
<td>25 274</td>
<td>27 045</td>
</tr>
<tr>
<td>Water internally recycled</td>
<td>14 325</td>
<td>13 409</td>
<td>15 271</td>
<td>14 840</td>
<td>14 823</td>
</tr>
<tr>
<td>Total water consumption</td>
<td>39 701</td>
<td>34 775</td>
<td>40 711</td>
<td>40 114</td>
<td>41 868</td>
</tr>
</tbody>
</table>

Notes:
Note 1: From 2011 the Zimplats and Mimosa water withdrawn from rivers and dams excludes water provided to communities (in line with the SA operations).
Note 2: At Marula and Zimplats, fissure water is included as groundwater from 2011. Our Zimplats operation uses a potentially significant amount of fissure water in one of its mining operations that has not as yet been quantified.
Note 3: From 2011 the Impala Springs water withdrawn includes domestic water (offices, stores, etc). This is in line with Group reporting.
Note 4: Unit consumption is in kl/tonne ore milled except for Impala Springs which is kl/tonne matte milled.

Our water focus for 2016 and beyond
In South Africa we aim to:
- Increase the use of grey water sources by utilising fissure water emanating from Rustenburg operations 2, 2A and 5 Shaft into the water circuit.
- Continue with the water projects at Rustenburg operations where scavenger boreholes are drilled close to the operating tailings dam and floating wetlands constructed at the Rockwall dam.
- Continue lining the old BMR pond at Impala Springs operation by installing double lining with leak detection to ensure compliance with the WUL.

In Zimbabwe we aim to:
- Achieve a 40% recycling of water for the Zimplats operations.
- Improve water accounting at Selous Metallurgical Complex (SMC), by installing water meters to account for recycled sewage effluent and storm water.
- Conduct internal water and energy audits to ensure efficient use of resources at Mimosa.
Our strategic approach to managing impacts and conserving natural resources

“Our longer-term strategic investments include exploring and participating in collaborative efforts to develop fuel-cell technology”

Climate change and energy management

Our management approach to climate change and energy

Our operations are exposed both to the physical and policy implications of a changing climate, as well as to the more immediate impacts associated with regional electricity capacity constraints. As an organisation we are acutely aware of the risk associated with climate change, its impact on the environment and socio-economic implications. The possible impact on water supply, and possible drying up of water sources has meant that we need to continuously review this risk and look at mitigating measures for both the organisation and communities. A financial impact assessment has also been undertaken in this regard, taking into account the possible tax imposition by government for carbon emissions. Security of energy supply and rising energy prices remain significant material risks for our operations in South Africa and Zimbabwe.

Given these challenges, the primary focus of our carbon management strategy is on energy-efficiency projects. This year electricity consumption accounted for around 70% of our total energy consumption, and almost 10% of our overall cash cost base. Our projected expansion into deeper operations that are more energy intensive, coupled with the anticipated introduction of a carbon tax in South Africa, highlights the business imperative of focusing on reducing and optimising our energy use.

In Rustenburg energy efficiency initiatives are targeted mainly at our mining operations, as there is seen to be limited scope for further energy efficiency at our concentrators and smelter. At Impala Springs, a steam system assessment was completed by the National Cleaner Production Centre (NCPC) and a good operational control score was achieved that indicates efficient use of steam. An energy management plan is planned for the 2016 financial year. A 1.8MW fuel cell installed in two tranches of 900kW is expected in February/March 2016. In South Africa we are working closely with Eskom, and continue to participate in various demand-side management (DSM) programmes. Our longer-term strategy includes exploring and participating in collaborative efforts to develop fuel-cell technology (see box on page 116).

An important policy development this year has been the South African government’s work on setting desired emissions reduction objectives (DERO) and sectoral carbon budgets. We have kept a close watching brief on these policy developments and have submitted comments on DEROS, carbon budgets and the carbon tax through the Chamber of Mines (COM). At a Group level we have an absolute GHG-emissions reduction target of 5% by 2020 from the 2008 base year, when our first carbon footprint assessment was undertaken.

A more detailed review and assessment of the climate change risks and opportunities for Implats can be found in our submission to the CDP’s Climate Change Programme, available at www.cdpproject.net.

Our 2015 carbon and energy management performance

During 2015, our total CO2 emissions amounted to 3.4 million tonnes, up from 3 million tonnes in 2014. This increase is largely as a result of increased production levels following the end of last year’s strike action at Impala Rustenburg, which typically accounts for about 75% of the Group total CO2 emissions. Most of the GHG emissions (3.0 million tonnes) are associated with Eskom electricity usage, with the balance (0.3 million tonnes) associated with direct use of coal, diesel, petrol and industrial burning oil. In 2015 our emissions intensity (tonnes of CO2 per tonne of ore milled) was 0.209, down from 0.218 in 2014. This improvement reflects positively on energy efficiency initiatives.

Additional data on our direct and indirect greenhouse gas emissions and our energy usage, by operation for each of the past five years, are provided in the performance table on page 138.
Our strategic approach to managing impacts and conserving natural resources

Each year we conduct a GHG emissions assessment to identify areas for mitigation and increasing efficiencies. Over the last three years we have invested over R100 million on energy conservation programmes, resulting in a reduction of 8% in indirect energy usage when compared against the year 2013. The 2014 financial year performance was impacted by the five-month strike and is thus not comparable year on year. Energy efficiency initiatives implemented across the Group are:

- The conversion of all underground lighting at Impala Rustenburg to a more energy efficient lighting source. This is estimated to reduce annual consumption by 15GWh
- The optimised use of compressed air systems at Impala Rustenburg which has achieved an estimated reduction of 7.8GWh per annum
- The underground compressed air optimisation project with an estimated future annual saving of 61.3GWh per annum
- The installation of power factor correction equipment at Rustenburg and Mimosa has resulted in an average 4% reduction in annual energy consumption
- Projects aimed at continuing to investigate opportunities for alternative lower-carbon and carbon-neutral fuel sources.

Climate change indicators

<table>
<thead>
<tr>
<th>Climate change indicators</th>
<th>Units</th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
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<tbody>
<tr>
<td>Direct CO\textsubscript{2} emissions</td>
<td>(t000)</td>
<td>349</td>
<td>323</td>
<td>401</td>
<td>418</td>
<td>436</td>
</tr>
<tr>
<td>Indirect CO\textsubscript{2} emissions</td>
<td>(t000)</td>
<td>3 002</td>
<td>2 714</td>
<td>3 387</td>
<td>3 289</td>
<td>3 587</td>
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<tr>
<td>Electricity purchased</td>
<td>(MWh000)</td>
<td>3 129</td>
<td>2 780</td>
<td>3 395</td>
<td>3 322</td>
<td>3 469</td>
</tr>
<tr>
<td>Direct energy</td>
<td>(GJ000)</td>
<td>4 671</td>
<td>4 386</td>
<td>5 350</td>
<td>5 584</td>
<td>5 661</td>
</tr>
<tr>
<td>Indirect energy</td>
<td>(GJ000)</td>
<td>11 266</td>
<td>10 008</td>
<td>12 224</td>
<td>11 958</td>
<td>12 561</td>
</tr>
<tr>
<td>Total energy</td>
<td>(GJ000)</td>
<td>15 937</td>
<td>14 395</td>
<td>17 574</td>
<td>17 542</td>
<td>18 222</td>
</tr>
</tbody>
</table>

Total CO\textsubscript{2} emissions

<table>
<thead>
<tr>
<th>Year</th>
<th>CO\textsubscript{2} emissions (t000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>4 022</td>
</tr>
<tr>
<td>2012</td>
<td>3 707</td>
</tr>
<tr>
<td>2013</td>
<td>3 788</td>
</tr>
<tr>
<td>2014</td>
<td>3 037</td>
</tr>
<tr>
<td>2015</td>
<td>3 351</td>
</tr>
</tbody>
</table>

Total energy consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Energy consumption (GJ000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>18 222</td>
</tr>
<tr>
<td>2012</td>
<td>17 542</td>
</tr>
<tr>
<td>2013</td>
<td>17 574</td>
</tr>
<tr>
<td>2014</td>
<td>14 395</td>
</tr>
<tr>
<td>2015</td>
<td>15 937</td>
</tr>
</tbody>
</table>

FY15: 3 351 – A 10% increase
FY15: 15 937 – A 11% increase
Our strategic approach to managing impacts and conserving natural resources

Case study: Managing energy security concerns

The continuing electricity supply constraints in South Africa present a significant and potentially prolonged impact on our South African operations. In its 2015 budget review National Treasury of the Republic of South Africa stated that the country will experience constrained electricity supply for at least the next two to three years.

Eskom load curtailment

As a “key customer” or “energy-intensive user” with Eskom, Implats has specific agreements in place with the electricity provider. In terms of a signed ‘load curtailment document’, Impala Rustenburg is given timely caution to implement load curtailment measures whenever the power system becomes severely constrained. During a stage 1 and 2 load curtailment, we are required to reduce demand by 10% within two hours of notification, under stage 3 we have to reduce demand by 20% within two hours, while stage 4 represents an unscheduled requirement to reduce demand, as instructed by the National System Operator. As a result of our on-site real time power-monitoring system, we have been able to act swiftly and accurately when required. This information also makes Impala’s efforts to assist Eskom more credible, contributing to the ongoing good relationship that we have been careful to maintain with Eskom.

Energy reduction plans have been developed and modelled for a range of Eskom scenarios, designed to minimise risks to employee safety, and ensure minimal production loss.

During the year Impala received 56 stage 1 and stage 2 load curtailment requests to reduce electrical power usage by the required 10%. The total declared emergency amounted to 514 hours. The weekend requests were and are managed by ensuring the compressors do not exceed 60MW. For early morning week-day requests, load reduction first takes place at our Mineral Processing Plant (furnaces, slag plant and milling circuits) until such time as the Impala profile falls below the calculated Eskom average demand. Afternoon requests by Eskom have not impacted production thus far and this is due to significant reduction in the Impala demand profile from early afternoon through to early evening.

Exploring self-generation initiatives

Given the current energy context we are aggressively pursuing opportunities to take Implats along the path of sourcing alternative energy supply. As part of this initiative we have been partnering with local businesses to develop and deliver fuel cell solutions that provide sustainable economic returns. The first phase of the project involves the installation of cells using phosphoric acid fuel cell technology from Fuji Electric in Japan. This will operate off excess hydrogen piped to Impala Springs for the metal reduction process. The fuel cells will supply an initial 1.8MW of power in two tranches of 900kW and will also produce heat that will be integrated into the operation. The chemical reaction by the fuel cells produces zero emissions except for clean water that can be utilised within the plant. The first electricity from this project will be available in 2016, subject to final approval and implementation of a power purchase agreement. The second phase of the project will involve the installation of a Doosan fuel cell system producing up to 20MW operating on natural gas.

Additionally, a solar powered project to deliver sufficient power alleviating stage 1 load curtailment is being considered for installation and across the fence supply of power at Impala. The project will need a vast area for installation of the solar panels, which will require the cooperation/involvement of the Royal Bafokeng (land owners).
Our strategic approach to managing impacts and conserving natural resources

Our carbon and energy management focus for 2016 and beyond
We have prioritised the following climate change and energy management activities for the year ahead:

- Further improving our atmospheric emissions data management systems, to ensure that we are aligned with the requirements of the national atmospheric emissions inventory system (NAEIS) in South Africa, an online national reporting platform that will hold both air pollutants and greenhouse emissions inventories.
- Updating the Group carbon footprint and setting realistic reduction targets for each operation in line with our carbon management strategy.
- Further understanding the impact of climate change on our operations and surrounding communities.
- Continue to work with government and academic institutions on the development of fuel-cell technologies that will utilise PGMs as alternative energy sources. A total of R6 million budget for this project has been spent over the last three years.
- Zimplats is targeting a 1% reduction in carbon emissions through the implementation of energy efficiency initiatives and carbon offset projects.
Our strategic approach to managing impacts and conserving natural resources

Air quality management

Our management approach to air quality

The most significant air quality emission for the Group relates to the sulphur dioxide (SO₂) emissions from our smelting and refining operations in Zimplats, Rustenburg and Impala Springs. In August 2014 we received the new air emission licence required for Impala Rustenburg which expires in July 2019 when new permit conditions are anticipated. Impala Springs received their air emissions licence (AEL) in February 2014 and will be up for renewal in 2018. Both Impala Rustenburg and Impala Springs are located within priority areas as promulgated by the National Environmental Management Air Quality Act. We are fully compliant with the current licence conditions in Rustenburg.

Ambient air quality is monitored at our Impala Springs and Rustenburg operations via a network of ambient monitoring stations. These monitoring stations measure SO₂, NOₓ and particulate matter and provide an indication of ambient air quality levels and associated trends. The ambient monitoring results reflect the quality of ambient air in the region and not just around the operations. Source apportionment analysis has been conducted at the Impala Springs operations. However, it is much more difficult to accurately attribute the source of pollution at the Rustenburg operations, due to the extent of the mine lease area. Various factors influence the ambient measured data. We report on the results of the ambient monitoring to the relevant authority on a quarterly basis and as and when requested. In terms of managing our direct impacts we are operating within the conditions of our air emissions licence for both these operations.

In addition, at Impala Springs, a R250 million project to address airborne emissions from the coal-fired boilers is due for completion during the 2017 financial year. In a phased approach, this will ensure sustained compliance to NOₓ, SO₂ and particulates emissions from these operations as prescribed by both current and future limits in our air emissions licence.

At the Zimplats operations an SO₂ emissions abatement bankable feasibility study was commissioned in the 2015 financial year to ensure both smelter stack point source and ground level concentrations around the Selous Metallurgical Complex communities fall within the South African legislative limits. The sizing of the acid plant required the definition of the future smelter expansion road map. A conceptual study of the smelter expansion was completed and resulted in the smelter expansion road map. Air dispersion modelling of the smelter expansion scenarios resulted in a sulphur emissions reduction plan (SERP). The SERP identified the installation of a higher
Our strategic approach to managing impacts and conserving natural resources

Managing our waste
Our waste management activities across the Group seek, as a minimum, to ensure compliance with emerging legislative requirements relating to waste.

One of the key requirements of the various regulations published this year under the National Environmental Management: Waste Act is the statutory obligation on our South African operations to reclassify waste streams by October 2016. We have commenced with a pilot study at Impala Rustenburg, focusing on a few of these waste streams. We will commence with the full reclassification of the bulk of the waste streams early next year. The legislation as currently drafted has important implications for the Company, both in terms of additional administrative demands as well as potentially significant cost implications. It is anticipated, for example, that in future, tailings dams and waste rock dumps’ design will be required to include some form of plastic (HDPE) liner. Clarifying and understanding the uncertainties between the newly imposed requirements under the Waste Act, and the current regulations under the MPRDA, will remain a focus for Implats in the coming year.

At Zimplats, SO₂ emissions decreased by 18% from the previous year, primarily due to a furnace break out incident.

As a result of the unseasonably low rainfall levels experienced in the Rustenburg area, dust has become a particular concern. We have undertaken climatic modelling around the tailings dam to model the zone of influence, and will be extending the exercise for other dust sources. We are also investigating opportunities for further improving dust suppression.

Our air quality focus 2016 and beyond
At the South African operations we aim to:
• Maintain adherence to Atmospheric Emission Licences
• Complete the coal-fired boilers emission project by end of the 2016 financial year at Impala Springs.

At the Zimbabwean operations we aim to:
• Conduct and complete the higher stack definitive study for the SO₂ management plan in Zimplats.

The hazardous waste situation remains challenging in Zimbabwe, with no facilities in line with South African or international best practices being available.

At Impala Springs the reclassification of waste streams commenced and are investigating the export of jarosite to Europe as an option to divert waste from landfill. All legal requirements in terms of the Basel Convention are being assessed. All operations continue to investigate reuse and recycling opportunities.

This year the Group’s recycling was 67.1% down from 69.1% in 2014. A large portion of the waste from Impala Rustenburg and Impala Springs is treated; although treatment is regarded as a better waste management solution than disposal, technically it is not considered a ‘recycling’ method.

Our activities for the coming year will continue to centre on clarifying and complying with regulatory requirements.
Our strategic approach to managing impacts and conserving natural resources

Land management and biodiversity
A principal focus of our land stewardship practices is on ensuring effective rehabilitation. This is an important regulatory, financial and reputational risk for the Company and is linked to our closure liabilities, which are reviewed and updated annually in line with regulations.

The Group has entrenched the concept of ‘design for closure’ throughout our operations. Our short-term goal is to ensure that all aspects of rehabilitation are defined at the project-planning phase. In support of this, determination of the closure cost liability and the associated financial provision remains a priority. Our rehabilitation activities are focused on ecosystem functionality which is essential in ensuring sustainability beyond mine closure.

Developments in 2015
This year, there was a strong focus on maintaining an active rehabilitation monitoring programme at the Rustenburg operation. We have continued to maintain previously rehabilitated side slopes and grass new risings at our tailings facilities. All opencast sites have successfully been rehabilitated and are currently monitored using a defined monitoring methodology called ecosystem function analysis (EFA). Extensive alien and invasive weed control was also conducted at the sites during the reporting period. We have also completed an agricultural land use potential assessment with the aim of defining achievable post-closure land uses for both the landowner and surrounding communities of all rehabilitated opencast areas.

Following the cessation of all opencast mining at Zimplats in 2008, an opencast rehabilitation programme has been in progress since 2011. To date, 1,703,328m³ of waste rock material has been backfilled and the project reached 69% completion by year end. We aim to backfill all the voids with waste rock and re-establish indigenous grass and tree species by 2017 at an estimated cost of US$5.8 million.

This year a total of 9.37ha was rehabilitated at our various tailings dam facilities. This figure is low as compared to the 2014 financial year as the last open pit was rehabilitated in the 2014 financial year. The current cost estimate for Rustenburg closure amounted to R1 013.7 million; financial provisions for this amount are in place as per DMR requirements. At Refineries, the Aurora mineshaft has been decommissioned and closed. Rehabilitation obligations and closure of the shaft are being investigated with the DMR.

Biodiversity
Given the potential of mining activities to affect habitats through land disturbance, land use change and pollution, biodiversity monitoring and management is a requirement at our operations. All our operations have site-specific procedures and standards to manage the impacts associated with their activities. A formal biodiversity management plan, which incorporates the published mining biodiversity guidelines from the South African National Biodiversity Institute (SANBI), was implemented at our Rustenburg operation. Our Marula operation has also implemented a site-specific biodiversity management plan. We plan to develop and implement strategic biodiversity management plans at all our operations.

Zimplats and Impala Springs both operate within close proximity to areas of recognised high biodiversity; Impala Springs commenced with an invader species eradication programme. Our refining operation is near the Cowles dam that feeds into the Blesbokspruit, an ecosystem deemed under threat and that appears on the Montreux record. Although Impala Springs is not seen to have any direct impact on this ecosystem, it is nevertheless represented on the Blesbokspruit forum and continues to be involved with environmental education and conservation initiatives at the Blesbokspruit GrootVlei Trust. In Zimbabwe, a total of 276ha of the Zimplats operation is located within the Ngezi National Park. This area, which was associated with historic opencast mining, has subsequently been rehabilitated and is deemed non-operational. Work is currently in progress to renew the memorandum of agreement of lease of the Ngezi mining claims that will expire in October 2015.
CONSERVE NATURAL RESOURCES AND MITIGATE IMPACTS

Our strategic approach to managing impacts and conserving natural resources

Our focus on waste, land and biodiversity 2016 and beyond

At the South African operations we aim to:
- Conduct an external legal compliance audit as specified by all waste licences
- Ensure that biodiversity heritage standards align with all legislative changes
- Conduct the closure and liability assessments for the Rustenburg mining rights for submission to the DMR
- Ensure all listed waste streams are reclassified as per South African National Standard 10234 at all South African operations in 2016
- Compile and report waste disposal figures at the Impala landfill site onto the National Waste Information system.

At the Zimbabwean operations we aim to:
- Continue with the Ngezi open pit rehabilitation programme at the Zimplats operations
- Plant 500 indigenous trees at the open pit rehabilitated areas
- Set up waste segregation systems at the Zimplats landfill sites to enable recycling
- Renew all environmental licences permits for Zimplats.