



2015  
SUPPLEMENTARY  
REPORT

**exxaro**  
POWERING POSSIBILITY

# Exxaro integrated report 2015

## Supplementary report

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## About this report

This supplementary report complements and expands on information in the integrated report 2015 and mineral resources and ore reserves report. The suite of 2015 reports, along with the Global Reporting Initiative index, is published on the Exxaro Resources website [[www.exxaro.com](http://www.exxaro.com)]. The summarised group annual financial statements for the year ended 31 December 2015 and notice of annual general meeting were emailed or mailed to shareholders, and are available online.

As with the integrated report, content is guided by our strategic objectives, legislative and regulatory requirements, including the Companies Act 71 of 2008, as amended (Companies Act), and the JSE Limited Listings Requirements (Listings Requirements), as well as global best-practice standards, including the International Integrated Reporting Committee's framework for integrated reporting, United Nations Global Compact, Global Reporting Initiative (GRI) and the King Report on Governance for South Africa 2009 (King III).

This report includes data for our Mayoko (Republic of the Congo) project. It also includes limited information on operations where we do not have management control but hold a significant equity interest or joint control, namely Cennergi (energy), Sishen Iron Ore Company (iron ore) and Tronox Limited (titanium dioxide). As our acquisition of Total Coal South Africa, renamed Exxaro Coal Central (ECC) was only effective August 2015, we include limited data on these operations while the process of standardising systems and indicators is under way. Given that ECC was only part of the group for four months, its results are disclosed separately this year but will be integrated into group results from 2016.



## Disclaimer

Opinions expressed in this report are, by nature, subject to known and unknown risks and uncertainties. Changing information or circumstances may cause Exxaro's actual results, plans and objectives to differ materially from those expressed or implied in any forward-looking statements.

Financial forecasts and data in this report are estimates which at times are based on reports prepared by experts who, in turn, may have relied on management estimates. Undue reliance should not be placed on such opinions, forecasts or data. No representation is made on the completeness or correctness of opinions, forecasts or data in this report. The company and its affiliates, advisors or representatives accept no responsibility for loss arising from the use of any opinion, forecast or data in this report. Forward-looking statements apply only from the date on which they are made and the company does not undertake any obligation to publicly update or revise its opinions or forward-looking statements to reflect new data or future events or circumstances. The financial information on which the forward-looking statements are based have not been audited nor reported on by Exxaro's independent external auditors.

Ongoing feedback from a range of stakeholders helps us to contextualise certain issues better for more informed understanding by readers. We welcome your suggestions, which should be directed to:

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## Strategic performance dashboard

The strategic performance dashboard measures the most important KPIs across the sustainability capitals, from governance and compliance to best practice. The board and the executive committee monitor the dashboard quarterly to ensure all sustainability-related risks and key metrics remain within Exxaro's risk appetite.

### The strategic dashboard journey

We constantly hear buzzwords like strategy, risk management, compliance KPIs, licence to operate, audits, assurance, performance measurement ... and how they should be linked to reflect an integrated approach to sustainability and value creation for stakeholders.

This is theoretical until one develops practical tools to help pursue stated goals.

Four years ago, Exxaro embarked on a journey to ensure we manage our strategy in an integrated and holistic way with the key steps including:

- Implementing an integrated risk management framework, ensuring everyone clearly understands what is material to the company and why
- Establishing a sustainability framework
- Identifying KPIs aligned with material issues, risks and sustainability framework and the board setting a tolerance level or appetite for each metric
- Linking the combined assurance plan with risks, material issues and KPIs.

The result of this process is a fully integrated strategic performance dashboard that gives the board and executive the most critical information required to measure and manage the company's strategy and performance. This also provides a transparent and consolidated view to stakeholders on our drivers of value and sustainability.



## Exxaro's material issues for 2015

In 2015 an additional material issue, business resilience, was identified as a direct response to the current economic downturn in the mining industry. The other five material have remained our focus despite the priority given to business resilience.

**2015 material issues**

- Business resilience (new)
- Dependency on Eskom
- Licence to operate
- Capital projects
- Operating efficiencies
- Employees


The dashboard in this report aligns the relevant key performance indicators (KPIs) for each material issue with the integrated report and qualitatively compares 2014's performance to 2015 to illustrate year-on-year movements.

### ***How to interpret the dashboard***

The dashboard lists all KPIs linked to a strategic priority or sustainability capital and material issue. Current performance and the status of the indicator (shown as a bulb under legend column) reflects whether the KPI is within our risk appetite thresholds. We aim to be within the target threshold: anything outside of worst tolerable and target means we act outside our defined risk appetite in pursuing our strategic objectives. This will require additional treatment or improving existing controls.

**An example of a KPI measure below**

Exxaro has a strategic objective of improving our portfolio; one of many KPIs linked to this objective is core operating margin. Anything outside of worst tolerable and target will mean that we act outside our defined risk appetite in the pursuance of our strategic objectives and this will require additional control or improving existing controls.


KPI current performance		Current Performance	Legend (indicator)
KPI			
Core operating margin (%)		18%	


  


KPI	Threshold				
	Out of appetite	Worst tolerable	Best realistic	Target	Possible waste/opportunity
Core operating margin	Less than 15%	15%	Between 15% and 20%	20%	More than 20%


  


**Legend**

 Out of appetite

 Worst tolerable

 Best realistic























 Target

 Possible waste/opportunity






## Material issues

### Business resilience




KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
Core operating margin (%)	Financial	17%		18%		Constant
Funds from operations to net debt	Financial	381%		2%		Negative
Annualised return on capital employed (ROCE) (%)	Financial	-2%		6%		Constant
Annualised return on equity based on core headline earnings (HEPS) (%)	Financial	14%		4%		Negative
Annual core HEPS (cents per share short-term target)	Financial	1374c		425c		Negative
Net debt to equity (%)	Financial	24%		23%		Constant
Net debt to annualised EBITDA (times)	Financial	1		1		Constant
EBITDA interest cover (times)	Financial	14		12		Constant
People productivity (total tonnages handled/full-time employee (FTE) average) (% improvement from base)	Manufactured	-	-	18%		***
People productivity (production tonnes/FTE) (% improvement from base)	Manufactured	-	-	16%		***
Growth from coal commodities (% deviation from budget)	Manufactured	12%		-4%		Positive
Core assets (priority 1 solutions) overall performance against service level agreement	Manufactured	-	-	99%		***
Asset availability of enterprise resource planning systems	Manufactured	-	-	99%		***









## Dependency on Eskom

KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
Core operating margin (%)	Financial	17%		18%		Constant
Commodity diversification	Manufactured	-	-	Coal, ferrous, mineral sands		***

## Capital projects

KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
Capital project delivery measure (time and cost variance)	Manufactured	>10%		Achieved		Positive
Country risk as per assessment criteria (key drivers physical security and security of tenure)	Manufactured	-	-	Achieved		***

## Licence to operate








KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
Ownership overall group (%) – mining charter	Social	52%		52%		Constant
Employment equity (%) in top, senior and middle management at every business unit – mining charter	Social	67%		60%		Constant
People living with	Social	<1%		1,2%		Positive












KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
disabilities – mining charter						
Human resources development (%payroll excl levies, incl internal and external training) – mining charter	Social	10%		6,8%		Constant
Woman in mining (%) (internal target as mining charter does not have specific targets)	Social	19%		20%		Positive
Preferential procurement – capital	Social	34%		40%		Positive
Preferential procurement – services	Social	71%		70%		Constant
Preferential procurement – goods	Social	69%		77%		Constant
BBBEE level (Against BEE Act (Act No. 53 of 2003))	Social	Level 3		Level 2		Constant
Skills development – learning programmes for black people and people living with disabilities – target as % of payroll to accommodate exclusion of mandatory sectoral training – BBBEE codes)	Social	-	-	2,34%		***
Project delivery measure – local economic development (LED) projects per social and labour plan (SLP)	Social	-	-	70%		***
Fatality frequency rate	Human	1 fatality		0		Positive










KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
(FFR) per 200 000 hours						
Lost-time injury frequency rate (LTIFR) per 200 000 hours	Human	0,19		0,17		Positive
Lost time injuries (LTIs)	Human	36		29		Positive
Occupational health incident frequency rate (OHIFR) per 200 000 hours – reported <ul style="list-style-type: none"> <li>Chronic obstructive airways disease (COAD)</li> <li>Pneumoconiosis</li> <li>Noise-induced hearing loss (NIHL)</li> <li>Silicosis</li> <li>Occupational TB</li> </ul>	Human	-	-	0,36		***
Number of reportable cases of environmental incidents	Natural	3 x level 2		18 x level 2 0 x level 3		Negative
Valid mining rights – % in place – mine works plan (MWP), environmental management plan (EMP) and SLP	Natural	94%		97%		Constant
Enforceable mining rights – based on conditions (% in place)	Natural	94%		98%		Constant
Environmental authorisations (%) in place (validity) (integrated water use	Natural	<90%		>90%		Positive

		2014		2015		
KPI (as disclosed in dashboard)	Sustainability capital	Actual	Indicator	Actual	Indicator	Trend
licence (IWUL), environmental impact assessment (EIA) and waste)						
Environmental authorisations (% compliance to conditions)	Natural	<90%		<90%		Constant
Number of stoppage directives (incl section 54 under MHSA, section 93 under MPRDA and stoppage directives under NWA and NEMA)	Natural	7		2		Positive
% environmental liability provisions in place (gap between immediate closure cost and rehabilitation funds available, incl guarantees)	Natural	-	-	67%		***
Material compliance to King III, full compliance to JSE Listings Requirements and Companies Act	Financial	100%		100%		Constant

## Operating efficiencies







KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
People productivity (total tonnages handled/FTE average) (% improvement from base)	Manufactured	-	-	18%		***
People productivity (production tonnes/FTE) (% improvement from base)	Manufactured	-	-	16%		***
Growth from coal commodities (% deviation from budget)	Manufactured	12%		-4%		Positive
Core assets (priority 1 solutions) performance against service level agreement	Manufactured	-	-	99%		***
Asset availability of enterprise resource planning systems	Manufactured	-	-	99%		***

## Employees

KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
Organisational culture assessment	Human	Level 4		Level 4		Constant
% people who received HIV/Aids awareness training (% of organisation)	Human	64%		18%		Negative
% of employees who received awareness training and voluntarily tested for HIV/Aids	Human	-	-	50%		***
% people tested positive, enrolled in HIV management programme	Human	60%		26%		Negative





KPI (as disclosed in dashboard)	Sustainability capital	2014		2015		Trend
		Actual	Indicator	Actual	Indicator	
and receiving ARV treatment						
HIV/Aids prevalence rate (%) compared to country prevalence rate	Human	12%		4%		***
Skills provision (% of internal appointment of critical skills)	Human	80%		82%		Constant
Skills retention (% turnover)	Human	5%		5%		Constant

\* 2014 scorecard reflects the average across eight operational mining right sites only

\*\* 2015 scorecard reflects average across seven operational mining rights sites only and excludes ECC mines

\*\*\* KPI not measured or reported in 2014, or the KPI measurement differs from year to year

## Detailed governance disclosure

### Application of King III

Exxaro is committed to applying the principles and practices in King III. In 2015 we continued to apply these principles, as detailed below.

We eagerly awaited the release of the draft King IV report on 15 March 2016 and, although our group company secretary contributed to the process and our chairman serves on the task team, we will assess it in detail and intend submitting comments to fulfil our role in helping to shape the future of governance in South Africa.

Full application of King III and compliance with the Listings Requirements and Companies Act is a key performance indicator on our strategic dashboard (refer to integrated report and the first section in this report).



Principle	Indicator	Comment
<b>Ethical leadership and corporate citizenship</b>		
1.1	The board should provide effective leadership based on an ethical foundation	Refer principle 2.3 under boards and directors
1.2	The board should ensure that the company is and is seen to be a responsible corporate citizen	Refer principle 2.4 under boards and directors
1.3	The board should ensure the company's ethics are managed effectively	Refer principle 2.5 under boards and directors
<b>Boards and directors</b>		
2.1	The board should act as the focal point for and custodian of corporate governance	<p>The board operates in accordance with a detailed charter, based on King III. This charter deals, inter alia, specifically with the roles, responsibilities and accountabilities of the board. It meets at least four times a year and corporate governance best practice, trends and developments are standing items on the agenda. In addition, the board is informed of governance matters through ongoing development interventions and sessions – refer principle 2.20 for further details.</p> <p>A detailed annual plan ensures the board executes all its responsibilities and complies with its charter. The board charter, committee terms of reference and the board and committee annual plans are reviewed and amended in November of each year.</p>



Principle		Indicator	Comment
			<p>The board, as custodian of corporate governance, has made the office of the group company secretary responsible for implementing and monitoring compliance to associated best practices across the group. Our group company secretary, Carina Wessels, is a member of the executive committee (Exco); she reports directly to the CEO and has direct access to the chairman. She works closely with internal audit, the compliance and risk management functions, chief audit executive and our outsourced legal advisers to promote a culture of good governance and compliance in the group.</p>
2.2	The board should appreciate that strategy, risk, performance and sustainability are inseparable		<p>The board charter specifically emphasises the fact that the board acknowledges that strategy, risk, performance and sustainability are inseparable. The board gives effect to this philosophy by:</p> <ul style="list-style-type: none"> <li>• Contributing to and approving the strategy annually, at which point past performance, key risks and sustainability matters are also debated</li> <li>• Testing the strategy against the company's long-term vision, values, business principles, ie the capitals framework and stakeholder expectations</li> <li>• Satisfying itself that strategy and business plans do not result in risks that have not been thoroughly assessed and addressed by management and captured through the comprehensive enterprise risk management process</li> <li>• Identifying key performance and risk areas</li> <li>• Ensuring the strategy will produce sustainable outcomes</li> <li>• Considering sustainability as a business opportunity that guides strategy formulation.</li> </ul> <p>The discussion of our strategic objectives remains a method to further highlight the integration and importance of strategy, risk, performance and sustainability to</p>



Principle		Indicator	Comment
			<p>stakeholders.</p> <p>The board and all committees also monitor the strategic performance dashboard, which has been scaled to acceptable and tolerable risk appetite measures for all material issues against all capitals in the broader sustainability framework.</p> <p>In 2015, for the first time, the board and its committees also agreed specific KPIs for each entity, in addition to activities detailed in the annual plans. This is the first step in a maturing process where the board can, during its annual evaluation, be specifically measured against actions directors were required to take in that period (to support the company in achieving its strategic objectives for that year). Although some 2015 indicators have been largely input-related, these will improve and mature over time and, in future, give stakeholders more meaningful information on the performance of the board on specific strategic issues. The KPIs for the board and each committee are disclosed in the integrated report 2015.</p>
2.3	The board should provide effective leadership based on an ethical foundation		<p>We are driven by our desire to always operate as a responsible corporate citizen and recognise that an ethical culture underpins corporate governance and contributes to our licence to operate. Exxaro and its board of directors are committed to ensuring ethical and sustainable business practices, guided by our values. Our values are captured in our ethics and related policies, which are approved by the social and ethics (SE) committee on behalf of the board. Our ethics management practices (including anti-bribery and corruption initiatives) and processes are aligned with international best practice.</p> <p>Refer to the SE committee report for more detail.</p>





Principle	Indicator	Comment
<p>2.4 The board should ensure that the company is and is seen to be a responsible corporate citizen</p>		<p>The board and management subscribe to the philosophy that corporate governance – built on an ethical and values-based foundation that considers the expectations of all stakeholders – permeates all business activities and enables us to achieve our short- and medium-term strategic objectives, while contributing to reaching Exxaro’s vision.</p> <p>The board provides strategic guidance to Exxaro and ensures all decisions consider the immediate and long-term impact these have on the environment, the communities in which we operate, internal and external stakeholders and business sustainability in general.</p> <p>Individual directors are very aware of their duties and obligation to fulfil these duties, as well as the principles of responsibility, accountability, fairness and transparency, which are tested through the annual board evaluation process – refer principle 2.22 for more information.</p> <p>The board supports the group’s brand and communications strategy which strives to effectively communicate its corporate citizenship.</p> <p>During the reporting period, R56,3 million (2014: R88 million) was spent through the chairman’s fund and foundation on social and labour plans, uplifting and supporting the communities in which we operate, as well as charitable projects and initiatives. Use of the social return on investment assessment tool was further entrenched and is now proactively used to better predict and ensure a project’s sustainability before it is approved. The social and ethics (SE) committee plans to receive detailed feedback on</p>



Principle		Indicator	Comment
			<p>the efficacy of this process in 2016.</p> <p>Refer principle 2.11 for more information on stakeholder engagement.</p> <p>Exxaro has a board-approved political donations policy, which acknowledges that the primary purpose of these donations is to strengthen and consolidate democracy by ensuring political parties are able to function effectively. Sustaining a number of political parties that reflect diverse political views and opinions is necessary to consolidate democratic transformation in South Africa. The company believes the principle of multiparty democracy, as contained in the founding provisions of the Constitution of the Republic of South Africa 1996, deserves support by corporate South Africa.</p>
2.5	The board should ensure the company's ethics are managed effectively		<p>Exxaro remains committed to the highest standards of honesty, integrity and fairness.</p> <p>Ethics processes and policies are managed either by the general manager: risk, compliance and assurance or the group company secretary.</p> <p>Established policies, on which employees are regularly trained and which are frequently reviewed, include:</p> <ul style="list-style-type: none"> <li>• Code of ethics</li> <li>• Whistleblowing</li> <li>• Conflicts of interest</li> <li>• Fraud investigation</li> <li>• Fraud prevention</li> <li>• Fraud response</li> </ul>



Principle		Indicator	Comment
			<ul style="list-style-type: none"> <li>• Gifts and benefits from suppliers.</li> </ul> <p>We are confident that our robust policies and processes ensure full compliance with principle 10 of the United Nations Global compact on anti-corruption, OECD recommendations on corruption, and international legislation and best practice.</p> <p>Refer to the SE committee report for more information, especially on anti-bribery and corruption training and computer-based ethics training.</p>
2.6	<p>The board should ensure the company has an effective and independent audit committee</p> <p>Section 3.84(d) of the Listings Requirements</p>		<p>Shareholders elect members of the audit committee, which consists only of independent non-executive directors, annually.</p> <p>The committee operates under detailed terms of reference, reviewed and approved by the board annually.</p> <p>The committee meets at least four times a year and meets with internal and external auditors independently of management at the first and third meetings of the year, to align with the annual and interim financial statements review cycle.</p> <p>Refer the audit committee report and chapter 3 on audit committees for more information.</p>
2.7	The board should be responsible for the governance of risk		<p>Although the board has delegated responsibility for the enterprise risk management framework and executing risk management initiatives and interventions to the SRC committee and management respectively, it retains accountability for risk governance, as expressly indicated in the board charter.</p>



Principle		Indicator	Comment
			<p>The enterprise risk management framework, which considers the interrelationship between strategy, risk, performance and sustainability, guides the approach. This framework is frequently reviewed to incorporate new thinking and best practices.</p> <p>We were nominated for an award in 2016 by the International Institute of Risk Management for our innovation in risk management technology.</p> <p>Detailed risk reporting is presented to the SRC committee at least twice a year and the committee reports verbally and via its minutes to the board at each meeting. Risks are also discussed in detail in the annual board strategy session. Based on this information, as well as the annual internal audit review of the effectiveness of the risk management process, the board is comfortable with the efficacy of the enterprise risk management system and process.</p> <p>Refer chapter 4 on the governance of risk for more information.</p>
2.8	The board should be responsible for information technology (IT) governance		<p>An information management steering committee was established as a subcommittee of the audit committee in the latter part of 2013 to assist the audit committee in discharging its responsibilities on the effective and efficient management of IT resources and the integrity of information to achieve corporate objectives. In 2015, processes in this committee had matured significantly and Exxaro began to realise the benefits, including a better understanding of technology and systems in the organisation (and specifically utilisation and usefulness compared to associated costs). As part of the greater cost-saving drive in very challenging economic conditions, this committee also facilitated and enabled significant IT-related capital expenditure reductions.</p>





Principle		Indicator	Comment
			<p>The board-approved information and communications technology governance framework remains in force and reporting to the committee, inter alia, occurs against this framework.</p> <p>The independent external auditors, as part of their annual audit, provide assurance on the effectiveness of IT internal controls.</p> <p>Refer chapter 5 on the governance of IT for more information.</p>
2.9	The board should ensure the company complies with all applicable laws and considers adherence to non-binding rules, codes and standards		<p>The board has adopted a compliance policy that sets out our compliance framework, which is in line with the standards of the Compliance Institute of South Africa. The compliance process is fully integrated in the enterprise risk management process. This ensures compliance risks are addressed with the same rigour as other categories of risk.</p> <p>The SRC committee is charged, under its terms of reference, to review the compliance framework, process and all compliance risks as part of the enterprise risk management process.</p> <p>The risk impact matrix, adopted by the board, specifically refers to compliance impacts that would prevent Exxaro from achieving its strategic objectives. To ensure the best overall risk coverage, standardisation and discharging the accountability of risk owners, the implementation of all mitigation techniques is coordinated centrally.</p> <p>Our combined assurance process is risk-based and, in 2015, specific emphasis was placed on assurance activities covering our most important compliance controls relating to</p>



Principle		Indicator	Comment
			<p>'licence to operate'. The following compliance assurance activities have been concluded and findings reported:</p> <ul style="list-style-type: none"> <li>• Compliance to mining charter, issued in terms of the Mineral and Petroleum Resources Development Act 28 2002 (MPRDA)</li> <li>• BBBEE assurance</li> <li>• Validity and enforceability of the mining rights.</li> </ul> <p>Compliance KPIs now form part of our strategic performance dashboard. Specific tolerance levels have been set as part of the overall risk appetite. Compliance KPIs, and the overall efficacy of the process are reported to the SRC committee which, in turn, reports to the board verbally and by submitting minutes at each of its meetings.</p> <p>In addition to management training, the board receives legislative and best-practice updates at each meeting, and during the twice-yearly governance session – refer principle 2.20 for more information.</p> <p>Exxaro received no material fines or penalties for non-compliance in 2015. Refer chapter 6 for more information.</p>
2.10	The board should ensure there is an effective risk-based internal audit		<p>The internal audit function is outsourced to EY. Its responsibilities are set out in an internal audit charter approved by the audit committee and reviewed annually. The charter, inter alia, entrenches the risk-based audit approach, reporting lines to the chief audit executive, unrestricted access to the information and resources of the company, chairmen of the audit committee and board, as well as adherence to the standards for the professional practice of internal auditing and the code of ethics of the Institute of Internal</p>



Principle		Indicator	Comment
			<p>Auditors.</p> <p>EY liaises regularly with the general manager: risk, compliance and assurance, who is also the chief audit executive, and discusses the risk profile of the group and those of its business units to ensure a link between internal audit activities and risk profiles.</p> <p>Refer chapter 7 for more information. In 2015, EY again emphasised the marked improvement in the internal control environment since it started this assignment in 2013.</p>
2.11	The board should appreciate that stakeholders' perceptions affect the company's reputation		<p>The board keenly understands the link between stakeholder perceptions and Exxaro's reputation.</p> <p>Stakeholder engagement is therefore a critical part of our business as it influences both stakeholder perceptions and our reputation. Stakeholder relations can be affected by several of Exxaro's identified top risks.</p> <p>We have adopted the AccountAbility AA1000SES stakeholder engagement standard to guide the development of related capabilities and activities in Exxaro. This standard is a basis for a generally applicable, open-source framework for designing, implementing, assessing and communicating the quality of stakeholder engagement.</p> <p>The guiding principles of AA1000SES and the principles of the following documents shape our stakeholder engagement activities:</p> <ul style="list-style-type: none"> <li>• King III</li> <li>• Global Reporting Initiative guidelines</li> </ul>



Principle		Indicator	Comment
			<ul style="list-style-type: none"> <li>Companies Act 71 2008, amended</li> <li>IIRC reporting framework.</li> </ul> <p>Refer the section on stakeholders and chapter 8 for more information.</p>
2.12	The board should ensure the integrity of the company's integrated report		<p>Functional owners are accountable to ensure the integrity of data and general information in the integrated report under the guidance and coordination of an editorial committee.</p> <p>PricewaterhouseCoopers Incorporated (PwC) assures key performance indicators and audits the summarised financial information.</p> <p>The SRC committee approves material issues to be included in the integrated report, as well as the overall narrative. The board, however, reviews and finally approves the content of the integrated report prior to publication.</p> <p>Refer chapter 9 for more information.</p>
2.13	The board should report on the effectiveness of the company's system of internal controls		<p>As noted above, in 2015, EY again commented on the further notable improvement in the overall control environment and confirmed that the system of internal controls was satisfactory.</p> <p>On this basis, the audit committee confirmed and the board is satisfied with the effectiveness of the company's system of internal controls.</p>
2.14	The board and its directors should act in the best interests of the company		<p>The board strictly adheres to its fiduciary duties and duty of care and skill codified in the Companies Act. These are mirrored in the conflicts of interest policy, which also applies</p>





Principle		Indicator	Comment
			<p>to directors. Directors are authorised to obtain independent advice in connection with their duties and liabilities through the group company secretary.</p> <p>Conflicts are declared at each board meeting and conservatively interpreted: all conflicts (even those broader than the definition of personal financial interests) are treated in line with section 75 of the Companies Act.</p> <p>The securities dealing and information policy, which includes the process required for dealing in securities by directors, was again updated in 2015.</p>
2.15	The board should consider business rescue proceedings or other turnaround mechanisms as soon as the company is financially distressed as defined in the Act		<p>The audit committee reviews financial information in detail and recommends specific action to the board if required. The committee regularly reviews the solvency and liquidity of the group, as well as the going-concern statement.</p> <p>In addition, when considering and reviewing the provision of financial assistance to related and inter-related parties, as well as dividends payable, the board considers the solvency and liquidity of the group. During the year, the company met the solvency and liquidity test each time it was performed.</p>
2.16	The board should elect a chairman who is an independent non- executive director. The CEO should not also fulfil the role of chairman of the board		<p>The roles of the CEO and chairman are separate: Dr Len Konar is an independent non-executive director; the CEO was Sipho Nkosi until 31 March 2016 and now is Mxolisi Mgojo.</p> <p>Based on an evaluation of his performance and ability to add value, the chairman is re-elected by the board annually.</p>



Principle		Indicator	Comment
			The role and responsibilities of the chairman are articulated in the board charter and further entrenched in the division of responsibilities policy.
2.17	The board should appoint the chief executive officer and establish a framework for delegation of authority		<p>The board appointed Sipho as CEO on 1 September 2007, and Mxolisi succeeded him on 1 April 2016. The CEO's role and responsibilities are articulated in the board charter and further entrenched in the division of responsibilities policy.</p> <p>A detailed delegation of authority policy and framework, reviewed annually, indicate matters reserved for the board and those delegated to management.</p> <p>The remuneration committee (Remco) provides input on senior management succession planning.</p>
2.18	<p>The board should comprise a balance of power, with a majority of non-executive directors. The majority of non-executive directors should be independent</p> <p>Sections 3.84(b), (f) and (g) of Listings Requirements</p>		<p>The company has a unitary board structure, comprising executive, non-executive and independent non-executive directors (classified in accordance with the Listings Requirements and King III):</p> <ul style="list-style-type: none"> <li>• Eight independent non-executive directors until 14 March 2016 and now seven</li> <li>• Three non-executive directors</li> <li>• Three executive directors until 31 March 2016 and now two.</li> </ul> <p>As part of the annual board evaluation process, the independence of three directors who have served for nine years was specifically assessed and the results debated to establish their continued suitability for re-election.</p>



Principle		Indicator	Comment
			<p>To support Remco in its nomination process, the group company secretary maintains a board matrix to ensure breadth and depth of skills and experience that support and enable the company's vision and strategy: new board nominations are assessed against gaps identified in the matrix. Refer to the integrated report 2015 for a graphic on how the skills and experience have changed over the period.</p> <p>One third of non-executive directors retire by rotation annually.</p> <p>The memorandum of incorporation does not restrict the board's ability to remove a director without shareholder approval.</p>
2.19	<p>Directors should be appointed through a formal process.</p> <p>Sections 3.84(a) and (e) of Listings Requirements</p>		<p>In line with the board charter, Remco is responsible for vetting shareholder nominee directors and identifying suitable candidates to be proposed to the board for consideration and, on its support, to shareholders for election. In line with the memorandum of incorporation (Mol), one third of non-executive directors retire by rotation annually and their suitability for re-election is assessed by the board as a whole. Summarised résumés of directors standing for election and re-election are included in the integrated report 2015.</p> <p>New directors receive a detailed letter of appointment and undergo induction as discussed in 2.20.</p>
2.20	The induction and ongoing training and development of directors should be conducted through formal processes		The formal board induction programme is managed by the group company secretary: new directors are informed of their duties and responsibilities, they meet with fellow board members and key executive and senior management, and information on the company is



Principle	Indicator	Comment
		<p>provided through extensive induction material, discussions and visits to material business units. All have continued access to key management members for information on Exxaro's operations.</p> <p>The formal ongoing directors' development programme normally involves two full-day sessions during the year (in 2015, only one session was held due to cost-saving initiatives), visits to key business units, and the opportunity to attend outsourced training interventions as required.</p> <p>Topics for the 2015 full-day sessions included:</p> <ul style="list-style-type: none"> <li>• Mining industry research and trends</li> <li>• Mineral and Petroleum Resources Development Act developments, as well as administrative licensing and permitting-related reviews</li> <li>• Carbon emissions and tax</li> <li>• Competition law developments and cases</li> <li>• Directors' and officers' liability insurance</li> <li>• Listings requirements overview and corporate broking services</li> <li>• Business risks facing mining and metals companies in 2015/6.</li> </ul> <p>During the year, the SRC committee visited Leeuwpan and Matla mines, while the SE committee visited the Botleng housing/hydroponics project, multipurpose centre and TVET College.</p> <p>In addition to formal sessions, directors receive group and industry news articles daily, as</p>



Principle	Indicator	Comment
		well as regular analyst reports.
2.21		<p>The board should be assisted by a competent, suitably qualified and experienced company secretary</p> <p>Sections 3.84(i) and (j) of Listings Requirements</p> <p>The board selected and appointed the group company secretary, Carina Wessels, in July 2011 and recognises her pivotal role in entrenching good corporate governance. All directors have access to her advice and services. The board has an established procedure for directors to obtain independent professional advice at the group's cost. Carina assists directors, board committees and their members in obtaining this advice.</p> <p>As stipulated by the Listings Requirements, a detailed assessment was conducted by the board to consider and satisfy itself of her competence, qualifications and experience. This was performed by:</p> <ul style="list-style-type: none"> <li>• A review of her qualifications and experience: Carina holds LLB and LLM degrees, a certificate in advanced labour law, is an admitted advocate of the High Court of South Africa, has completed a programme for management development and is a fellow and past president of Chartered Secretaries Southern Africa (CSSA). In 2014 she was president of the Corporate Secretaries International Association, a global federation of membership bodies representing 100 000 members worldwide, and remains on their executive committee. She is a member of the Computershare issuer forum board, as well as the JSE company secretary forum. During the year, she delivered presentations at a number of local and international corporate governance conferences, published articles and exceeded her continuing professional development requirements stipulated by CSSA.</li> <li>• Completing a performance assessment detailing all the legislative and King III requirements by each director: This indicated that directors agreed that all expectations had been regularly exceeded). She does not serve as a director of the</li> </ul>



Principle		Indicator	Comment
			board and the assessment confirmed her independence and arm's-length relationship with the board based on displayed behaviours and her confirmation that she has not been restricted in any way or constrained in carrying out her obligations to act as the company's gatekeeper of good governance and that she has a direct channel of communication to the chairman and the other directors.
2.22	The evaluation of the board, its committees and the individual directors should be performed every year		<p>Board and committee performance is evaluated annually. The evaluations for 2015 differed substantially from prior years and focused much more on performance, detailed in the integrated report 2015.</p> <p>These evaluations form the basis of the board's assessment of directors' and committee members' suitability for election and re-election.</p>
2.23	<p>The board should delegate certain functions to well-structured committees but without abdicating its own responsibilities</p> <p>Section 3.84(d) of Listings Requirements</p>		<p>Board committees assist the board in executing its duties, powers and authorities. The board delegates to each committee the required authority to enable it to fulfil its respective functions through formal board-approved terms of reference, which are reviewed annually.</p> <p>Delegating authority to board committees or management does not mitigate or discharge the board and its directors of their duties and responsibilities.</p> <p>All committees comprise a majority of independent non-executive directors. The board has established the following committees:</p> <p><b>Audit committee</b></p> <p>Apart from the statutory duties of the audit committee set out in the Companies Act, the</p>





Principle	Indicator	Comment
		<p>provisions of the Listings Requirements and King III, the ambit of this committee has been expanded to include financial risk management, financial compliance and aspects of integrated reporting.</p> <p>The purpose of the committee is to:</p> <ul style="list-style-type: none"> <li>• Examine and review the group's financial statements and report on interim and final results, the accompanying message to stakeholders and any other announcements on the company's results or other financial information to be made public</li> <li>• Oversee cooperation between internal and external auditors, and serve as a link between the board and these functions</li> <li>• Oversee the external audit function and approve audit fees</li> <li>• Evaluate the qualification, appropriateness, eligibility and independence of the external auditor</li> <li>• Approve the appointment of the internal auditors, internal audit plan, charter and fees</li> <li>• Evaluate the scope and effectiveness of the internal audit function</li> <li>• Ensure effective internal financial controls are in place</li> <li>• Review the integrity of financial risk control systems and policies</li> <li>• Evaluate the competency of the finance director and finance function</li> <li>• Appoint the chief audit executive</li> <li>• Oversee the effectiveness of the combined assurance plan and outcome.</li> </ul> <p>More information appears in the audit committee report.</p>



Principle	Indicator	Comment
		<p><b>Remuneration and nomination committee (Remco)</b></p> <p>The purpose of this committee is to:</p> <ul style="list-style-type: none"> <li>• Make recommendations on remuneration policies and practices, including the company's employee share schemes, for executive directors, senior management and employees</li> <li>• Review compliance with all statutory and best-practice requirements on labour and industrial relations management in collaboration with the SRC committee.</li> </ul> <p>Although this is a combined committee, a process is in place to ensure the following responsibilities for the nomination element are carried out:</p> <ul style="list-style-type: none"> <li>• Provide recommendations on the composition of the board and board committees, and ensure the board comprises individuals equipped to fulfil their role as directors of the company, aligned with the policy detailing procedures for appointments to the board</li> <li>• Provide comments and suggestions on committee structures of the board, committee operations, member qualifications and member appointment.</li> </ul> <p>The board chairman chairs the meeting when discussing nomination matters. More information appears in the remuneration committee report.</p> <p><b>Sustainability, risk and compliance (SRC) committee</b></p> <p>The purpose of the committee is to:</p> <ul style="list-style-type: none"> <li>• Provide oversight on three important aspects influencing strategy and the long-term viability of the company, being sustainability, risk and compliance</li> </ul>



Principle	Indicator	Comment
		<ul style="list-style-type: none"> <li>• Oversee and coordinate all risk and compliance activities (although the audit committee remains accountable for financial risk and compliance)</li> <li>• Review significant SRC incidents, performance indicators and compliance</li> <li>• Ensure the company reports annually through an integrated report on relevant SRC issues. More information appears in the SRC committee report.</li> </ul> <p><b>Social and ethics committee</b></p> <p>The purpose of the committee is to monitor the group's activities, taking account of relevant legislation, other legal requirements or prevailing codes of best practice on:</p> <ul style="list-style-type: none"> <li>• Social and economic development</li> <li>• Good corporate citizenship</li> <li>• The environment, health and public safety, including the impact of the group's activities and its products or services</li> <li>• Consumer relationships, including the group's advertising, public relations and compliance with consumer protection laws</li> <li>• Labour and employment</li> <li>• The effective management of the group's ethics processes.</li> </ul> <p>More information appears in the social and ethics committee report.</p> <p>Apart from the SE committee, which meets biannually, all other board committees meet quarterly. The following key management committees support the board and CEO in the day-to-day management of the company.</p>



Principle	Indicator	Comment
		<p><b>Executive committee (Exco)</b></p> <p>Exco is constituted to assist the CEO in managing the group. It assists the CEO in guiding and controlling the overall direction of the company and acts as a medium of communication and coordination between business units, corporate office, subsidiary companies and the board. All Exco members are prescribed officers in terms of the Companies Act.</p> <p>The committee formally meets around nine times each year and, informally, each week.</p> <p><b>Information management (IM) steering committee</b></p> <p>The IM steering committee is constituted as a subcommittee of the audit committee to assist that committee in executing its responsibility for IT governance. The committee meets four times a year.</p> <p><b>Investment review committee</b></p> <p>This committee is constituted as a management committee to assist the CEO with the investment and capital expenditure management processes of the group.</p> <p>The committee meets around five times a year.</p> <p><b>Offshore review committee</b></p> <p>The offshore review committee is constituted as a management committee to assist the CEO and finance director in managing Exxaro's portfolio of offshore investments and interests.</p>



Principle		Indicator	Comment
			<p>The committee meets at least twice a year.</p> <p><b>Portfolio review committee</b></p> <p>The portfolio review committee is constituted as a strategy management committee to assist the CEO with portfolio management.</p> <p>The committee meets around nine times a year.</p>
2.24	A governance framework should be agreed between the group and its subsidiary boards		<p>All Exxaro subsidiaries adopt and comply with the detailed delegation of authority framework and policy, which stipulates the governance framework.</p> <p>In 2015, Exxaro acquired Total Coal South Africa Proprietary Limited (TCSA), now Exxaro Coal Central Proprietary Limited: ECC still largely operates under its previous governance framework, albeit with a number of changes to provide better group oversight.</p>
2.25	Companies should remunerate directors and executives fairly and responsibly		Refer the extensive remuneration committee report for full details.
2.26	Companies should disclose the remuneration of each individual director and		Refer the extensive remuneration committee report for full details.
2.27	Shareholders should approve the company's remuneration policy		At the 2015 annual general meeting, 74,23% of shareholders voted in favour of the remuneration policy by means of a non-binding advisory vote. This resolution has again been incorporated into the notice for the 2016 annual general meeting.
<b>Audit committees</b>			



Principle	Indicator	Comment
3.1	The board should ensure the company has an effective and independent audit	Refer principle 2.6 under boards and directors.
3.2	Audit committee members should be suitably skilled and experienced independent non- executive directors	<p>All three members are independent non-executive directors and the chairman of the board is not a committee member.</p> <p>The committee meets the academic qualifications and experience requirements stipulated in regulation 42 of the Companies Regulations, 2011. The chairman, Jeff van Rooyen, and Vuyisa Nkonyeni are chartered accountants.</p> <p>Changes in international financial reporting standards and related developments are submitted to the committee at each meeting.</p> <p>As with all directors, the committee is entitled to consult appropriate specialists as required.</p>
3.3	The audit committee should be chaired by an independent non- executive director	The chairman, Jeff van Rooyen, is an independent non-executive director and is elected by the board annually. He is always present at the annual general meeting of the company.
3.4	The audit committee should oversee integrated reporting	<p>The committee, as well as the SRC committee, reviews the report, including any summarised information, prior to submission to the board.</p> <p>The committee functions as a reporting oversight body in support of the SRC committee, which has a wider mandate to govern company performance on risk and sustainability in general.</p>



Principle		Indicator	Comment
			<p>PwC provides assurance over key performance indicators, disclosed in this report, and audits summarised financial information.</p> <p>The company issues reviewed interim financial statements.</p>
3.5	The audit committee should ensure a combined assurance model is applied to provide a coordinated approach to all assurance activities		<p>The combined assurance framework, with its underlying model, was approved in 2012.</p> <p>The combined assurance forum is operating effectively and consists of the chief audit executive, acting as chairman, general manager of SHEC, and finance manager of the coal business, relevant functional representatives, and invitees from major assurance service providers in the group. The forum ensures assurance activities address specific regulatory requirements or can be linked to a material risk exposure. A combined assurance map, linking assurance to risks, assists in this process.</p> <p>To ensure all findings are tracked, reported and closed out, Exxaro uses a single assurance tracking platform. This gives management a single point of entry to assurance findings, regardless of which service provider conducted the audit or review.</p> <p>Refer the section on combined assurance for more information.</p>
3.6	<p>The audit committee should satisfy itself of the expertise, resources and experience of the company's finance function.</p> <p>Section 3.84(h) of the Listings Requirements</p>		<p>As required by the Listings Requirements, the audit committee, through a formal process, has satisfied itself of the finance function's resources, experience and expertise and the appropriateness of the expertise and experience of the finance director.</p> <p>The group company secretary facilitated completion of a questionnaire in the finance department to enable the committee's review: the majority of responses were positive</p>





Principle		Indicator	Comment
			with respect to the function and the finance director and no serious concerns were raised.
3.7	The audit committee should be responsible for overseeing internal audit		The audit committee is responsible for appointing the chief audit executive and he has unfettered access to its chairman and the chairman of the board. The audit committee approves the risk-based internal audit plan annually. EY, as independent internal auditor, submits detailed reports to each meeting, the chairman meets independently with internal audit and the committee meets with the internal and external auditors independently of management at the first and third meetings of the year, to align with the review of annual and interim financial statements.
3.8	The audit committee should be an integral component of the risk management process		Although the coordination of enterprise risk management has been delegated to the SRC committee, the audit committee remains involved to express a view on the system of internal control and risk management, the assurance provided on material risks, and specifically retains accountability for financial and information technology risk.
3.9	The audit committee is responsible for recommending the appointment of the external auditor and overseeing the external audit process		<p>At the first committee meeting of each year, the committee assesses the suitability of the independent external auditor for reappointment, based on the criteria stipulated in the Companies Act and the Listings Requirements, and makes such recommendation to shareholders at the annual general meeting. The committee approves the terms of engagement and remuneration of the independent external auditor and also assesses the quality and effectiveness of the external audit process. The independent external auditor submits detailed reports to each meeting, including any reportable irregularities.</p> <p>As noted in the audit committee report, the company has an approved policy to regulate the use of non-audit services by the independent auditor. The policy differentiates between permitted and prohibited non-audit services and specifies a monetary threshold</p>



Principle		Indicator	Comment
			<p>at which the committee considers approvals.</p> <p>The chairman meets independently with external audit and the committee meets with internal and external auditors independently of management at the first and third meetings of the year, to align with the review of annual and interim financial statements.</p>
3.10	The audit committee should report to the board and shareholders on how it has discharged its duties		<p>As discussed under principle 2.23 under board and directors, all board committees report to the board through verbal feedback and submitting minutes at each board meeting.</p> <p>A summarised audit committee report is included in the integrated report 2015, with the full report in the group and company annual financial statements for the year ended 31 December 2015. The committee chairman is present at the annual general meeting to respond to any questions.</p>
<b>The governance of risk</b>			
4.1	The board should be responsible for the governance of risk.		Refer principle 2.7 under boards and directors.
4.2	The board should determine the levels of risk tolerance.		<p>In 2015, the board reviewed and approved the appropriate tolerance levels for each strategic key performance indicator.</p> <p>These tolerance levels have been incorporated in the strategic focus areas to ensure that neither too little nor too much risk is taken in pursuing Exxaro's strategy.</p> <p>The company's impact scale has also been aligned to the tolerance levels. This ensures historical information can be reported and an assessment made whether the company</p>



Principle		Indicator	Comment
			has been acting in line with the predetermined risk appetite and whether it will continue doing so, considering the risk information.
4.3	The risk committee or audit committee should assist the board in carrying out its risk responsibilities		The board has formally delegated the responsibility for risk management to the SRC committee, with assistance from the audit committee.
4.4	The board should delegate to management the responsibility to design, implement and monitor the risk management plan		<p>Execution of risk management has been delegated to the risk, compliance and assurance department.</p> <p>Refer principle 2.7 under boards and directors on the SRC process. The SRC committee consists of four independent non-executive directors. It meets four times per annum and its performance forms part of the annual board and committee evaluation.</p> <p>Risk champions at all business units and service functions oversee entrenchment of the process. This includes ensuring risk owners continuously identify, assess, mitigate and manage risks within the existing and ever-changing risk profile of their operating environment. In addition, risk champions coordinate risk management forums at business units and service functions which, in turn, escalate risks against defined parameters to similar forums at a consolidated commodity and group level.</p> <p>The risk and compliance manager is responsible for reporting to the SRC and audit committees on financial and information technology risks.</p> <p>Exxaro operates under a world-class information management system which ensures true transparency and accountability in managing risks and reporting on the effectiveness</p>



Principle		Indicator	Comment
			of mitigation techniques to ensure strategic objectives are achieved.
4.5	The board should ensure risk assessments are performed on a continual basis		Formal risk assessments are conducted at least quarterly at all business units and service functions, in line with the detailed enterprise risk management framework.
4.6	The board should ensure that frameworks and methodologies are implemented to increase the probability of anticipating unpredictable risks		<p>The enterprise risk management framework, as far as reasonably possible, includes processes to prompt the identification of unpredictable risks, including events with high impacts and low probability that would cause severe business disruptions.</p> <p>Exco and the board have access to risk reports compiled by thought leaders in the area of risk management and mining, and these are incorporated in the strategic risk register of the group. These risks are linked to specific strategic objectives and risk owners at executive level, coupled with relevant risk strategies to ensure flexibility of the strategy in the changing environment in which Exxaro operates.</p>
4.7	The board should ensure management considers and implements appropriate risk responses		Although the board has delegated the responsibility for risk management, it reviews the top enterprise risks, including risk responses, annually, which would include a review of responses to exploit potential upside risk.
4.8	The board should ensure continual risk monitoring by management.		<p>The risk profile of every business unit is discussed at its monthly meetings. Operational risks are reported quarterly to Exco for noting.</p> <p>Commodity and regional risk profiles are also compiled, taking into account the strategic objectives of the commodity and region.</p>
4.9	The board should receive assurance on the effectiveness of the risk management process.		The risk and compliance manager, through reporting to the SRC committee, assures the board that risk management is being entrenched in Exxaro's operational activities. In addition, EY provides assurance to the board on the effectiveness of the risk



Principle		Indicator	Comment
			management process annually.
4.10	The board should ensure there are processes in place enabling complete, timely, relevant, accurate and accessible risk disclosure to stakeholders		<p>Top enterprise risks are disclosed in the integrated report 2015. Significant issues are disclosed in media reports and on JSE Stock Exchange News Service (SENS) throughout the year, as deemed appropriate.</p> <p>EY has reported to the audit committee on the effectiveness of the risk management process and the committee, in turn, expressed a view on the process on behalf of the board.</p>
<b>Governance of information technology</b>			
5.1	The board should be responsible for information technology (IT) governance		Refer principle 2.8 under boards and directors.
5.2	IT should be aligned with the performance and sustainability objectives of the company		<p>The IT strategy's overarching objective is to align all underlying systems to truly enable the integration of strategy, governance, risk, compliance, performance and sustainability. The 2016-2020 IM strategy to achieve these objectives has been approved by the IM steering committee, which also monitors progress.</p>
5.3	The board should delegate to management the responsibility for implementation of an IT governance framework		<p>The implementation of the governance framework has been delegated to the information management department, with oversight by the IM steering committee.</p> <p>Ian Brown is the chief information officer and reports to the audit committee on IT matters in line with annual plans or as specifically required.</p>
5.4	The board should monitor and evaluate significant IT investments and expenditure		<p>Information and communication technology (ICT) acquisitions fall within the same capital-approval parameters as other projects and, based on value, are elevated to the board.</p> <p>The IM steering committee vets potential projects and initiatives prior to decisions being</p>



Principle		Indicator	Comment
			<p>taken or recommended to the investment review committee and subsequent levels, ie the board, in line with the capital expenditure parameters.</p> <p>The IM steering committee reviews the total IM portfolio annually and the execution of the portfolio twice per annum.</p>
5.5	IT should form an integral part of the company's risk management		<p>The enterprise risk management framework includes assessment and management of all ICT risks, and the risk impact matrix specifically refers to IT-related impacts, which form part of any risk assessment.</p> <p>Exxaro operates under a world-class IM system which ensures true transparency and accountability in managing risks and reporting on the effectiveness of mitigation techniques to ensure strategic objectives are achieved.</p> <p>A disaster recovery policy and procedures are in place and tests are performed monthly: all tests in 2015 were successful.</p> <p>The IM steering committee is responsible for monitoring and ensuring compliance with ICT-related legislation and best practice.</p>
5.6	The board should ensure information assets are managed effectively		<p>All electronic information assets are managed effectively. Employee access to relevant information is strictly controlled through an effective authorisation process. All electronic information is backed-up daily in accordance with a backup policy and procedures and stored off-site.</p> <p>The company has successfully set up the IT enterprise landscape to facilitate compliance</p>



Principle		Indicator	Comment
			to the impending commencement date of the Protection of Personal Information Act 4 of 2013 and the group company secretary has been appointed as the information officer in terms of this act.
5.7	A risk committee and audit committee should assist the board in carrying out its IT responsibilities		<p>The audit committee, through reporting by the IM steering committee, considers ICT risks and mitigating actions, which are managed in line with the overall enterprise risk management framework.</p> <p>A number of IT systems are used to improve audit efficiency, inter alia, as discussed in principle 3.5 under audit committees, Exxaro uses a single assurance tracking platform, ITM. This allows management a single point of entry to manage assurance findings, regardless of the service provider that conducted the audit or review.</p>
<b>Compliance with laws, rules, codes and standards</b>			
6.1	The board should ensure the company complies with applicable laws and considers adherence to non-binding rules, codes and standards		Refer principle 2.9 under boards and directors.
6.2	The board and each director should have a working understanding of the effect of applicable laws, rules, codes and standards on the company and its business		Information on laws, rules, codes and standards are shared with directors regularly through documentation and governance sessions – refer principle 2.20 under boards and directors.
6.3	Compliance risk should delegate to management the implementation of an effective compliance framework and		Refer principle 2.9 under boards and directors and 6.4 under compliance with laws, rules, codes and standards.





Principle	Indicator	Comment
	processes	
6.4	The board should delegate to management the implementation of an effective compliance framework and processes	<p>Implementation has been delegated to the risk, compliance and assurance department.</p> <p>All management teams at business units have received training on the enterprise risk management process, which includes compliance risk management. Compliance risks form part of the risk registers of all operations, including those of regional management, Exco and the board.</p> <p>Combined assurance mapping has also been completed on all material compliance risks at every business unit and results form part of their management action plans, as well as the risk-based internal audit plan.</p> <p>Compliance forms part of the ethics and related policies.</p> <p>Compliance key performance indicators are reported to the SRC committee quarterly.</p> <p>During the reporting period, there were no instances of material non-compliance by the company or its directors.</p> <p>The risk and compliance manager is Saret van Loggerenberg and her qualifications include a BLC, LLB and LLM (Eur). She is also a fellow of the Institute of Chartered Secretaries (FCIS). She is supported by risk specialist and reports to the general manager: risk, compliance and assurance who is a standing invitee on the Exco, SRC, audit and SE committees.</p>



Principle		Indicator	Comment
<b>Internal audit</b>			
7.1	The board should ensure there is an effective risk-based internal audit		Refer principle 2.10 under boards and directors.
7.2	Internal audit should follow a risk-based approach to its plan		Refer principle 2.10 under boards and directors.
7.3	Internal audit should provide a written assessment of the effectiveness of the company's system of internal control and risk management		Refer principle 2.13 under boards and directors.
7.4	The audit committee should be responsible for overseeing internal audit		Refer principle 3.7 under audit committees.
7.5	Internal audit should be strategically positioned to achieve its objectives		Internal audit reports to the chief audit executive, who is a standing invitee to the Exco, audit, SRC and social and ethics committees.
<b>Governing stakeholder relationships</b>			
8.1	The board should appreciate that stakeholders' perceptions affect a company's reputation		Refer principle 2.11 under boards and directors.
8.2	The board should delegate to management to proactively deal with stakeholder relationships		<p>The primary management of stakeholders has been delegated to the executive head: strategy and stakeholder engagement, with support from all executive committee members and management in general.</p> <p>To date the company has actively engaged with its range of stakeholders, and to bring</p>



Principle		Indicator	Comment
			<p>best practice and consistency to this arena, in 2014 it adopted the AccountAbility 1000SES stakeholder engagement standard which serves as a benchmark for good quality engagement. The standard uses the principles of inclusivity, materiality and responsiveness and guides the process of mapping stakeholders, linking material issues to relevant stakeholders, among other items.</p> <p>A stakeholder engagement framework is in place and supporting engagement plans are being incrementally drafted for all areas of the company.</p> <p>The group strives to engage openly and proactively with stakeholders, and issues and requests from stakeholders are responded to as part of ongoing engagement programmes.</p> <p>Further information is contained in the integrated report 2015.</p>
8.3	The board should strive to achieve the appropriate balance between its various stakeholder groupings, in the best interests of the company		<p>The group has identified its stakeholder groups and appropriate management from the various functions in the group are assigned to manage relationships with stakeholders. The intention is to promote two-way engagement so that the group and stakeholders understand one another, and a communication strategy provides support and offers opportunities in this regard.</p>
8.4	Companies should ensure equitable treatment of shareholders		<p>Exxaro fully complies with the Listings Requirements on disclosing information to shareholders. A detailed securities-dealing and information policy sets out very strict rules around material price-sensitive information and its disclosure and was again updated in 2015 to reflect the latest requirements. Any material price-sensitive information and other relevant information is published on SENS in accordance with the Listings Requirements.</p>



Principle		Indicator	Comment
			All queries from shareholders are either handled by the group company secretary or investor relations and only information available in the public domain is disclosed.
8.5	Transparent and effective communication with stakeholders is essential for building and maintaining their trust and confidence		The board supports the group's communications strategy, which is guided by principles that include being approachable, genuine and principled. The group strives for honest and clear communication and uses various communication channels such as media relations, advertising, integrated reporting and its website to reach stakeholders timeously and effectively.
8.6	The board should ensure disputes are resolved as effectively, efficiently and expeditiously as possible		<p>Dispute-resolution clauses are included in all Exxaro's general contract conditions and based on the principle of internal resolution between the parties as a first means of addressing disputes, after which arbitration would be used if the matter remains unresolved.</p> <p>The board considers serious disputes and considers the company's position and best legal recourse.</p>
Integrated reporting and disclosure			
9.1	The board should ensure the integrity of the company's integrated report		Refer principle 2.12 under boards and directors.
9.2	Sustainability reporting and disclosure should be integrated with the company's financial reporting		<p>Although the process of integrated reporting is still maturing, the company has integrated its thinking and reporting – in 2015 we used a new approach for our integrated report.</p> <p>Continuous efforts will be made to incorporate reporting best practice and improve the level of integration.</p>



Principle		Indicator	Comment
			The board has included commentary on the company's financial results and going-concern status in the annual financial statements.
9.3	Sustainability reporting and disclosure should be independently assured		Refer principle 3.4 under audit committees.



## Committee reports

### **Audit committee**

Refer to the annual financial statements.

### **Remuneration and nominations committee**

The remuneration and nomination committee (Remco) is a combined committee, overseeing remuneration matters for all controlled subsidiaries and nomination matters for Exxaro Resources Limited only (the executive committee or Exco) has been mandated to consider nomination matters for all subsidiaries and investments). It operates under approved terms of reference, as well as a detailed annual plan, which incorporates the principles of King III and duties assigned by the board.

#### **Objective and scope**

The committee's objectives are to:

- Make recommendations on remuneration policies and practices, including Exxaro's employee share schemes, for all controlled companies
- Ensure effective executive and board succession planning
- Review medical aid and retirement fund performance
- Review compliance with all statutory and best-practice requirements on labour and employee relations management in collaboration with the social, risk and compliance (SRC) committee.

As a combined committee, a process is in place to ensure the following responsibilities for the nomination element are carried out:

- Provide recommendations on the composition of the board and board committees, to ensure the board comprises individuals equipped to fulfil their role as directors of the company and aligned with the policy detailing procedures for appointments to the board
- Provide comments and suggestions on committee structures of the board, committee operations, member qualifications and member appointments.

#### **Membership**

The committee had a majority of independent non-executive directors for the review period. The board chairman is a member of the committee and chairs nomination matters.



Remco meetings 2015	25 Feb Special	2 Mar	30 Mar Special	26 May	14 Aug	18 Nov
RP Mohring (chairman)	P	P	P	P	T	P
CJ Fauconnier	P	P	P	P	P	P
D Konar	P (chairman)	P	P (chairman)	P	P	T/PA
NB Mbazima	P	P	P	A	A	R
VZ Mntambo	P	P	P	A	P	P

*P=Present / A=Apology / T=Telecon / PA=Partial attendance / R=resigned/retired*

Other attendees include the chief executive officer, finance director and executive head: human resources. The committee meets at least four times a year and carried out its duties and responsibilities as stipulated in the terms of reference and detailed annual plan during the review period.

### **Committee key performance indicators and evaluation**

In 2015 for the first time, the board and board committees developed specific key performance indicators (KPIs), in addition to the aspects dealt with in the annual plan. This was a first attempt at setting objective measures for directors for a particular year in assisting management to achieve Exxaro's strategic objectives. We recognise these are more qualitative in nature, but view this as a maturing process that will lead the board and its committees to more meaningful quantitative measures over time and ultimately give stakeholders a more in-depth sense of the performance of the board and its committees.

The committee set the following KPIs for 2015:

KPI	Objective	Measure
Assess executive capacity on board	Well-prepared, effective and efficient director as future CEO	Improved functioning of CEO-designate as director
		Determine whether additional executive directors are required
Enhanced board succession planning	Continuity and sustainability of the board and committees	Detailed board succession plan for next four years
		Detailed executive committee succession plan
Improved use of the strategic dashboard to manage and monitor the strategy	Involved and active members taking accountability for Remco-	Full use of Remco strategic dashboard as key success measure of strategy achievement: debate/ questions asked and remedial actions



KPI	Objective	Measure
	related strategic guidance and advice	requested to address below-appetite performance on KPIs
Sharing best practice	Improving the company's practices and standards	Individual directors actively sharing deemed appropriate and applicable best practice from other committees with committee/company

The committee and invitees concurred that these KPIs were achieved in 2015.

The board and committee evaluations for 2015 differed substantially from those in previous years and focused much more on performance than conformance; hence a comparison of year-on-year results would be misleading. The committee achieved an average score of 3,29 (meets expectations), although one item was identified as requiring attention: Remco mix and depth of capacity, skills and experience: undoubtedly affected by the decision not to appoint an additional committee member on the resignation of Mr NB Mbazima. As per the 2016 KPIs (below), board and committee succession, of which this item forms part, will receive significant attention in 2016.

KPIs 2016	Objective	Measure
Enhanced board succession planning	Continuity and sustainability of the board and committees	Detailed board succession plan for next four years
Support to new executive head: human resources	Optimal operation of human resources through support/ guidance from committee	Active support and guidance to ensure optimal functioning
Improved use of the strategic dashboard to manage and monitor the strategy	Involved and active members taking accountability for Remco-related strategic guidance and advice	Full use of Remco strategic dashboard as key success measure of strategy achievement: debate/ questions asked and remedial actions requested to address below-appetite performance on KPIs
Sharing best practice	Improving the company's practices and standards	Individual directors actively sharing deemed appropriate and applicable best practice from other committees with the committee/company

### **Key issues**

Key issues that received attention in the review year included:

- As noted in the 2014 integrated report, retrenchments due to mine closure (Inyanda, AlloyStream and Tshikondeni (279)) remained a feature. The company paid retrenchment packages to the





value of two weeks for every completed year to all retrenched employees, in addition to employee assistance services and other support. Retrenchment packages of two weeks per year, with similar additional support, were also paid to ECC employees early in 2016 following the optimisation process. As discussed elsewhere, the section 189 of the Labour Relations Act 66 of 1995 (as amended) (LRA) process at Arnot mine will continue in 2016 and the impact of closure on employees and the community will continue to receive the committee's focus.

- The cost of labour and need to reduce overhead costs received significant focus in 2015, resulting in a below-CPI increase to non-bargaining unit employees (as discussed below), and 464 employees (minimal numbers in the critical and scarce skills categories) accepting voluntary severance packages and leaving the company in 2015 and up to the end of March 2016.
- As flagged in the prior integrated report, 2015 was a bargaining unit wage-negotiation year (discussed below), and the risk of protracted negotiations, industrial action and unrest were extensively discussed: the Chamber of Mines wage-negotiation process, where Exxaro Coal Mpumalanga Proprietary Limited (ECM) participates, was concluded after a wage strike from 4-13 October 2015.
- The remuneration philosophy and principles have been reviewed and any changes will be considered for implementation in 2016.

### ***Remuneration report***

This report elaborates on Exxaro's remuneration policy for non-executive directors, executive directors, prescribed officers, senior management and all other employees. The way Exxaro remunerates employees reflects the dynamics of the market and the context in which we operate. It is aligned to the strategic direction and specific value drivers of the businesses within which we operate, supporting the philosophy of operational excellence, continuous improvement and innovation. Remuneration plays a critical role in attracting and retaining high-performing individuals and will reinforce, encourage and promote superior performance. Remuneration, however, is not a stand-alone process, but fully integrated into other management processes, such as performance management and group human resources policies.

The company's vision for rewards is to provide simple, integrated, holistic solutions, common messages and a package differentiated from the market for Exxaro to attract, retain and energise talented, high-performing people.

### **Remuneration philosophy statement**

We believe people are one of our key competitive sources of value and that the achievement of corporate goals and business objectives must be supported by the way we reward people for their contribution. We primarily remunerate people for the value they add to Exxaro, making remuneration a

vital part of the total employee value proposition.

### Remuneration practices:

- Support the business strategy of Exxaro
- Support the Exxaro people strategy
- Support the importance of skills, knowledge and experience applied in context
- Inspire superior performance of the organisation, teams and the individual
- Encourage the development of competencies required for future company needs
- Are based on the principle of sharing in the success of the company
- Target the attraction of the right talent to fit organisational needs
- Are designed to retain high-quality talent with the optimum mix of skills and competencies
- Aim to align employee engagement to organisational vision and mission through the total employee value proposition (both financial and non-financial rewards)
- Differentiate appropriately through various reward practices and processes on the basis of job outputs and contribution
- Comply with clauses prohibiting discrimination in the Constitution of the Republic of South Africa Act 108 1996 as amended (the constitution), and the Employment Equity Act 55 1996 as amended (EEA)
- Allow maximum flexibility in terms of the use and reward of the workforce
- Provide maximum choice for individuals in structuring their reward
- Establish accountability and ownership of the reward process with line management
- Ensure a balance between affordability and quality of life for employees.

### Reward framework and components

The reward strategy is aligned with the company strategy and the execution of that strategy, along with an emphasis on operational excellence. We believe this will in turn maximise Exxaro's performance and effectiveness, thus increasing shareholder returns. Each component of the Exxaro reward strategy is developed with a specific intent and purpose.

Reward component: What	Rationale: Why
Guaranteed remuneration and benefits	<ul style="list-style-type: none"> <li>• Remunerate for job-specific outputs and requirements – considering the principle of equal pay for work of equal value</li> <li>• Attract and retain high-performing individuals</li> <li>• Differentiate on basis of individual performance and contribution to Exxaro</li> <li>• Quality of life</li> </ul>



Reward component: What	Rationale: Why
Short-term incentives	<ul style="list-style-type: none"> <li>• Meeting stretched company or individual targets</li> <li>• Create a culture of superior performance</li> <li>• Enhance team performance</li> </ul>
Long-term incentives	<ul style="list-style-type: none"> <li>• Attract and retain high-performing talent</li> <li>• Align individual, team and organisational performance with shareholder expectations</li> <li>• Create a culture of sustainable performance</li> </ul>
Reward and recognition	<ul style="list-style-type: none"> <li>• Support and reinforce a culture of belonging, performance and acknowledgement</li> </ul>
Strategic separation	<ul style="list-style-type: none"> <li>• Retrenchment</li> <li>• Voluntary separation packages</li> <li>• Space creation</li> </ul>

### Remuneration mix

The remuneration mix reflects the relative proportions of pay represented by guaranteed, variable and share income pay and will be meaningfully linked to job type and the nature of expected outcomes.

- Guaranteed remuneration + short-term incentives + long-term incentives = total remuneration
- Guaranteed remuneration includes all guaranteed items such as basic salary, medical aid, pension fund, guaranteed allowances. This will be pitched at the market median (50th percentile) for full performance
- Variable remuneration includes cash incentive payouts, circumstantial remuneration and recognition rewards. The timeframe for paying variable remuneration is typically one year or less, except where some portion may be deferred into a later period. This will be pitched at the market median (50th percentile)
- Long-term incentives are paid as equity in the company, with specific performance conditions to be met at the end of a specific time, typically three years. This will be pitched at the upper quartile of the market (75<sup>th</sup> percentile).

The company will adopt, where appropriate, suitable levels of variable pay so that value-based achievement enhancements are encouraged and rewarded.

### Remuneration guiding principles

The principles discussed below apply to all remuneration policies and practices. Implementation differs due to the nature of the labour force and is split between employees who form part of collective bargaining and those who fall outside collective bargaining including executives, all management



levels and employees not part of any recognition agreement or sectoral determination.

Remunerating individuals who fall within the scope of collective bargaining is determined through wage negotiations as per the different recognition agreements and the LRA, and within Exxaro's employee relations strategy.

### ***Internal parity***

Exxaro supports the principle of fair and equitable remuneration, equal pay for work of equal value, as per chapter 2 of the EEA, its regulations on the criteria and methodology for assessing work for equal value in section 6(4) and the code of good practice on equal pay/remuneration for work of equal value.

Individuals are remunerated according to the outcome of a structured job-evaluation process determining the relative value of the job.

Remuneration differentiation may exist due to individual performance, measured by results they achieve against agreed objectives or any other justifying factors as indicated in the code of good practice. Remuneration differentiation is monitored and reported.

### ***Market competitiveness***

Exxaro manages remuneration to ensure market competitiveness in attracting and retaining individuals with the required knowledge, skills and experience.

Exxaro maintains national rates of remuneration, based on the appropriate market per job families applicable to the mining industry and specific business-related industries.

We accept the principle of skills demand and supply factors in the market and remuneration is flexible enough to attract and retain required knowledge, skills and experience throughout business, economic and commodity cycles. Where scarce competencies are identified, individuals are paid in line with the relevant specialist markets. In general, the aim is for total remuneration to be on the 50th percentile of the market for full performance.

Remuneration is analysed relative to market norms on the basis of job families and job types, at least once a year, and adjusted to ensure competitive remuneration.

### ***Remuneration ranges***

Role levels, job evaluation results and market medians form the basis of remuneration range structures (pay scales). Broad band remuneration ranges with minimum and maximum values are



used to allow for flexibility of remuneration based on market trends and performance.

Remuneration ranges are reviewed at least annually to ensure ongoing market competitiveness.

### ***Remuneration packages and benefits***

Exxaro manages remuneration on the basis of individual guaranteed total cost to company to determine market competitiveness.

Market remuneration trends inform the design of variable and circumstantial remuneration such as short- and long-term incentive schemes.

All employees are entitled to the same range of benefits appropriate to their role level and specific circumstances.

Non-bargaining employees have flexibility in structuring their remuneration within certain company and legislative limitations.

### ***Reward for performance***

Organisational and individual performance is the basis for all remuneration, supported by a robust performance-management process (only applicable to the management and specialist category of employees and corporate non-management and specialist category of employees).

Exxaro remunerates and rewards commitment to both organisational and individual performance. Employees are expected to deliver a performance proportionate with their reward.

### ***Remuneration-setting process***

The executive head: human resources obtains remuneration mandates from Exco and Remco on behalf of line management. Mandates consider the ethics of remuneration as outlined below.

### ***Company performance and affordability***

Exxaro's sustainability is key in determining remuneration levels and mandates. Exco and Remco assess the performance of the organisation, consequent affordability of mandates and impact of the total labour bill on the cost profile as well as Exxaro's sustainability.

Remco, at its sole discretion, may overrule any of the principles above if necessary for the sustainability of the organisation.



***Economics and ethics of remuneration***

Pay equity is an increasingly visible ethical and sustainability theme, with tightening rules on the gap between the workforce and executive pay and the principle of a living wage.

Exco and Remco will, from 2016, at least annually assess the wage gap between executives and lower bargaining-unit employees (C band and lower) and consider appropriate actions.

***Communicating remuneration issues***

Remuneration and performance expectations are communicated clearly and frequently to employees and broader stakeholder groups to set clear reward expectations.

## Exxaro remuneration: overview

Remuneration elements		Employee categories				
		Management and specialist category				Bargaining category
		Executive management F band	Senior management E band	Middle management DU and DM band	Junior management CU and DL band	A-CM band
Guaranteed remuneration	Notional cost of employment or basic salary	Annual adjustments based on: <ul style="list-style-type: none"> <li>• Performance</li> <li>• External market</li> <li>• Internal parity</li> <li>• Affordability</li> </ul>				Annual adjustments based on: <ul style="list-style-type: none"> <li>• Wage negotiations</li> <li>• Mandate on affordability</li> <li>• Industry benchmarking</li> </ul>
	Benefits	<ul style="list-style-type: none"> <li>• Retirement fund: employer and employee contributions</li> <li>• Medical aid: employer and employee contributions</li> <li>• Housing: company housing or allowances/subsidies applicable to specific business unit</li> </ul>				
	Circumstantial remuneration	<ul style="list-style-type: none"> <li>• Job-specific</li> <li>• Skills scarcity</li> <li>• Severance payments</li> </ul>				
Variable	Short-term incentives	Special performance:				Not applicable

Remuneration elements		Employee categories				
		Management and specialist category				Bargaining category
		Executive management F band	Senior management E band	Middle management DU and DM band	Junior management CU and DL band	A-CM band
remuneration		<ul style="list-style-type: none"> <li>Individual performance base:18-33%</li> <li>Strategic business targets: 67-82%</li> </ul>				
		<ul style="list-style-type: none"> <li>First tier on budgeted operational target achievement</li> <li>Second tier above target improvement incentives:</li> <li>Capped at 30% of Exxaro's above-budget improvement</li> </ul>				
	Long-term incentives	<ul style="list-style-type: none"> <li>Deferred bonus plan (EM and above)</li> <li>Share match</li> </ul>				Not applicable
		<ul style="list-style-type: none"> <li>Long-term incentive scheme (DM and above)</li> <li>Performance conditions</li> </ul>				Not applicable
		<ul style="list-style-type: none"> <li>Share appreciation right scheme (being phased out, no new allocations since 1 April 2012)</li> <li>Performance conditions</li> </ul>				Not applicable

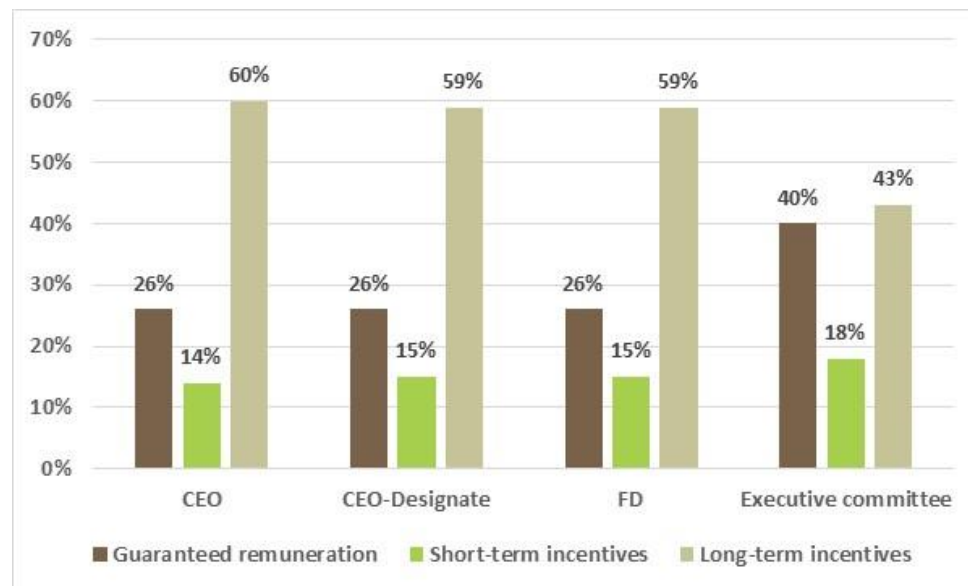


Remuneration elements		Employee categories				
		Management and specialist category				Bargaining category
		Executive management F band	Senior management E band	Middle management DU and DM band	Junior management CU and DL band	A-CM band
		On 22 May 2012, shareholders approved a new five-year employee share option scheme (Mpower 2012) effective from 1 July 2012 until 31 May 2017				Not applicable

## Remuneration policy application

### Executive remuneration mix

The graphs below indicate the potential remuneration mix for executives versus actual remuneration for Short-term, Long-term, the CEO-designate, and the Executive committee in 2015:



Notes: Short-term incentives: indicate potential earnings

Long-term incentives: indicate face value of offer

The guaranteed versus variable remuneration of the executive directors (CEO and FD) is roughly split at 60% variable and 40% guaranteed.

### Guaranteed remuneration

#### Management and specialist category

Employees in this category, including executives, are remunerated on a total-package approach.

Guaranteed remuneration adjustments to employees are aligned to fundamental principles:

- Remuneration is based on performance through individual performance contracting and assessment
- External competitiveness: the market median for performance per job family, per level is used to determine remuneration competitiveness
- Internal equity: same job - same performance - same pay (except circumstantial)
- Affordability: all salary account-related mandates are first included in the Exxaro financial forecasting model to determine affordability.

The tables overleaf indicate key performance areas for executives that inform annual guaranteed remuneration adjustments.

Chief executive officer (CEO): performance scorecard guaranteed pay				
Key performance areas	Weight	Performance		
		Target	Actual	Performance rating
<b>Operational excellence</b>	<b>25</b>			
Target setting	5	Top-down, bottom-up stretched targets for coal: budgeted net operating profit (NOP) increase with/cost reduction	% improvement	Full performance
R/tonne	15	Rand per tonne budgeted	7,5% above budget	Underperformance
Cash flow	5	Budgeted cash flow	ECC excluded, % improvement	Full performance
<b>Sustainability</b>	<b>10</b>			
Safety	5	LTIFR 0,15	0,17	Underperformance
Socially Responsible Investment index (SRI) and risk management	5	Exxaro between median and upper quartile of mining sector of global standard environmental, social and governance (ESG) rating	Exxaro rated 78%	Above full performance
<b>Portfolio improvement</b>	<b>10</b>			
HEPS improvement against peers	6	1 467 over 3 years 2013-2015	594 over 3 years	Underperformance
Alignment with strategy	4	Manage portfolio in line with strategy	Board assessment of execution in a changing market and political environment	Above full performance
Corporate governance	10	Comply with all compliance regulations: King	Best Ethical Boardroom magazine award,	Above full performance



Financial director (FD): performance scorecard guaranteed pay				
Key performance areas	Weight	Performance		Performance rating
		Target	Actual	
<b>Vision and strategy</b>	35			
Strategy development and implementation	15	Lead formulation, communication and implementation of strategy	Strong leadership in developing and executing strategy	Full performance
Funding strategy supports Exxaro strategy	20	Lead formulation and implementation of funding strategy	Funding strategy supports execution of Exxaro strategy	Full performance
<b>Sustainability</b>	20			
<b>Risk management</b>	20	Total business integrated risk management and assurance against all governance principles	Best-practice risk management and assurance implemented	Above full performance
<b>Portfolio improvement</b>	10			
Functional cost	6	Own functional cost on budget	Finance functional actual spend below budget	Full performance
Alignment with strategy	4	Services net present value (NPV) >3 times historical cost and 80% of resource allocation aligned with ranking	Services NPV >3 times historical cost and resource allocation aligned with ranking	Full performance
<b>Exxaro brand and reputation</b>	20			

Financial director (FD): performance scorecard guaranteed pay				
Key performance areas	Weight	Performance		Performance rating
		Target	Actual	
Exxaro brand	10	Positive contribution to Exxaro brand	Positive Exxaro brand	Full performance
Internal and external	10	Spokesperson for Exxaro Contribution to Exxaro image	Effective engagement with all stakeholders	Full performance
Operational excellence	10	Consolidated services quality on full performance and cost on budget	Service delivery achieved >90% of set targets	Full performance
Leadership and people	5	Ensure compliance with all diversity succession, with ready succession candidates	Comply with targets in employment equity plan except disability	Full performance
<b>Overall performance</b>	<b>100</b>			<b>Full performance</b>

## ***CEO-designate performance scorecard***

The CEO-designate had a detailed transition plan, under the guidance of the CEO and chairman of the board, which was completed at the end of March 2016.

## ***Management and specialist categories***

All executives received a 3,5% increase effective 1 April 2015.

On average, the salary increase effective April 2015 for DM and higher category employees was 3,5% and 5,5% for DL and lower categories (including corporate non-management and specialist), resulting in a year-on-year increase of 4,5%.

## ***Bargaining unit employees***

A two-year wage agreement from June 2015 to June 2017 was reached with all unions with collective bargaining rights. This resulted in a 7,8% increase in the salary bill for bargaining-unit employees in 2015/2016 and a further increase in 2016/2017 of CPI +1% or 7,5%, whichever is greater in 2016.

Over time, bargaining-unit employees have received increases of between 0,5% and 1,5% per annum higher than management and specialist category employees.

## ***Benefits***

Contributions to retirement funds and medical aid schemes are made by both employees and employers.

In terms of family-friendly benefits, Exxaro provides four month's paid maternity leave, and all employees qualify for group personal accident cover.

## ***Retirement funds***

Retirement fund contributions are made according to specific conditions of employment and fund rules for the different levels and categories of employees. Employer and employee contributions are reflected in the annual financial statements.



All employees belong to one of the following retirement funds:

	Employee % contribution range	Employer % contribution range	Total % contribution range
Sentinel Funds	7,50 – 13,20	12,50 – 20,52	20,00 – 28,02
Exxaro Pension and Provident Funds	7,00 – 8,00	10,00 – 15,00	17,00 – 23,00
Iscor Employees Umbrella Provident Fund	7,00 – 8,00	10,00 – 15,00	17,00 – 23,00
Mine Workers Provident Funds	8,00 – 10,70	12,50 – 15,00	20,50 – 24,65

*Exxaro-accredited retirement funds are defined-contribution funds.*

### **Medical benefit funds**

Employees may annually elect to belong to any of the following medical schemes:

Business unit	Exxaro Coal Mpumalanga	Exxaro Coal	Exxaro Resources Ltd (including management and specialist employees in subsidiary companies)	Exxaro (other non-management and specialist employees)
Fund names	Bonitas	Bonitas	Bonitas	Bonitas
	Discovery	Discovery	Discovery	
	Sizwe	Sizwe	Sizwe	Sizwe
	WCMAS (ring-fenced)*	Umvuzo	Umvuzo	Umvuzo
Employee contributions	50%	50%	40-50%	40%
Employee contributions	50%	50%	(included in package)	60% capped

*\* Exxaro Coal Mpumalanga gave notice to this fund in December 2015 that it will withdraw from 1 January 2017*

Exxaro does not provide any post-retirement medical benefits. The post-retirement benefit obligation disclosed in the annual financial statements merely recognises past practice (in Eyesizwe) that was discontinued with the creation of Exxaro in November 2006.

Contributions to medical funds, cost against income, are also reflected in the annual financial statements.





## ***Short-term incentives***

Exxaro strives to create a culture of powering possibilities, based on the belief that people can make the difference and are a major resource in delivering sterling business results. Incentive schemes are focused on the strategic objectives of the organisation.

The following schemes – based on individual, business unit, and commodity and group-level performance – are in place:

### ***The two-tier performance incentive (STI)***

The two-tier performance incentive was created to reinforce a performance culture and applies to all full-time employees. The basis for paying this incentive is on-target business unit performance and group improvement targets.

#### ***First tier***

The first tier is a line-of-sight incentive based on achieving the business unit's net operating profit target/ cost/production target. The payout is capped at 8,33% of annual gross remuneration for all full-time employees of every business unit, commodity, services and corporate office department. On average 7,15% of the potential 8,33% was paid in 2015 based on the specific business unit's target achievement. No other production bonuses exist within the company.

#### ***Second tier***

The second tier is based on exceeding the budgeted coal net operating profit (defined as revenue less cost of sales less selling and distribution costs and excludes income from Tronox, Mafube, Cennergi, Sishen and Black Mountain) target. The target for 2015 was an improvement up to 30% above budget and actual performance was 28%. 8,06% of the potential maximum of 10% of annual gross remuneration was paid to all employees in 2015.

### ***Individual performance reward (SPR)***

This scheme applies to employees in the middle, senior and executive management categories.

A short-term incentive scheme focused on the individual is used to augment the performance management process and retention strategy, and ensure market competitiveness on short-term variable remuneration. The threshold for this scheme is 90% achievement of the objective and it only pays out zero, 90% or 100%.

The basis for paying this incentive rests on achieving specific agreed individual measures and/or group targets. A group target for 50% of the potential percentage of notional cost of employment (NCOE) set for 2015 was an EBIT (coal) of R2 987bn, which was achieved. Individually agreed

measures for the CEO and FD are shown below:

FD SHORT-TERM INCENTIVES 2015					
SCHEME			PERFORMANCE		
SPECIAL PERFORMANCE REWARD	Weight (%)	Max % of NCOE	Target	Actual	Actual % of NCOE accrued
Individual target	33,44	18,50			18,50
Executive team transition			100% of plan	100%	
Group target					18,50
Group NOP	33,44	18,50			
90% threshold			R2 688m	R3 173m	
100% target			R2 987m		
TWO-TIER SHORT-TERM					
TIER 1 Coal NOP 70%; CSD 30%	15,06	8,33			8,02
90% threshold			R1 722m	R2 769m	
100% budget			R1 914m		
TIER 2 Coal consolidated NOP	18,06	10,00			
101% threshold above budget			R1 915m	R3 173m	
130% target			R2 805m		9,63
Total	100,00	55,33			54,65
Individual/company performance split	34/66				

CEO DESIGNATE SHORT-TERM INCENTIVES 2015					
SCHEME			PERFORMANCE		
SPECIAL PERFORMANCE REWARD	Weight (%)	Max % of NCOE	Target	Actual	Actual % of NCOE accrued
Individual target	33.44	18.50			18.50
Secure additional rail capacity from Waterberg			100%	100%	
Secure additional port capacity beyond 6,3mt			100%	100%	
Achieve electricity intensity targets			100%	100%	18.50
Group target					
Group NOP	33.44	18,50			18.50
90% threshold			R2 688bn	R3 173bn	
100% target			R2 987bn		
TWO-TIER SHORT-TERM					
TIER 1 Coal NOP 70%; CSD 30%	15,06	8,33			8,02
90% threshold			R1 722bn	R2 769bn	
100% budget			R1 914bn		
TIER 2 Coal consolidated NOP	18,06	10,00			
101% threshold above budget			R1 915bn	R3 173bn	
130% target			R2 805bn		9,63
Total	100,00	55,33			54,65
Individual/company performance split	34/66				



### **Long-term incentives**

Exxaro makes general share offers to participants once a year under the following approved schemes:

- Exxaro share appreciation right scheme (SAR) (this is being phased out and no new allocations have been made since 1 April 2012)
- Exxaro long-term incentive plan (LTIP)
- Deferred bonus plan (DBP).

The aggregate number of shares that may be allocated under all managerial share schemes may not exceed 30 000 000. The table summarises Exxaro's long-term incentives and details of awards granted and cancelled between 31 December 2014 and 31 December 2015. The grant price was based on the volume-weighted average price (VWAP) of the previous business day.

Plan	Qualification (employee Paterson band)	Date implemented	Rights/ shares on 31 Dec 2014	Maximum award per individual	Performance condition	Vesting period	Grants in 2015	Grants cancelled in 2015	Total grants from inception to 31 Dec 2015
Share appreciation rights	DM-FU*	01/03/2007	2 423 117	112 904	HEPS**	3 years	0	500 296	9 987 282
Long-term incentive plan	DM-FU*	01/03/2007	6 677 414	426 370	HEPS 50%** Retention 50%	3 years	4 325 295	1 528 327	14 072 395

Plan	Qualification (employee Paterson band)	Date implemented	Rights/ shares on 31 Dec 2014	Maximum award per individual	Performance condition	Vesting period	Grants in 2015	Grants cancelled in 2015	Total grants from inception to 31 Dec 2015
Deferred bonus plan	EM-FU*	31/08/2007	170 627	23 835	Achieving short-term incentive goal	3 years	113 265	3 030	423 945

\* Includes executive directors

\*\* Headline earnings per share

### **Share appreciation right scheme**

Participants are awarded a conditional right to receive shares equal to the value of the difference between the share price at the time the rights were granted and the share price when the rights are exercised (should the share appreciate in value). This scheme is being phased out and no new allocations have been made since 1 April 2012.

Grant limits	Employees on Paterson band DM-FU
Vesting period	Three years. If the performance condition is met, share appreciation rights vest and participants have to exercise their right within seven years from the date of offer
Performance conditions	Headline earnings per share (HEPS) set by Remco
Other	SARs not exercised within seven years lapse
Number of participants	206

The last awards made for the period 01/04/2011 to 31/03/2012 were tested, but no vesting took place and participants did not receive any benefit.

### **Long-term incentive plan (LTIP)**

The LTIP provides for conditional awards in shares after three years from the date of grant, provided certain conditions are met.

Grant limits	Employees on Paterson band DM-FU
Vesting period	Three years, subject to achieving performance conditions over a three-year performance period.
Performance conditions	Headline earnings per share (HEPS) set by Remco – 50% Retention – 50%
Number of participants	569

All long-term incentives awards, once vested, are settled from a market purchase of shares. The awards made for the period 01/04/2012 to 31/03/2013 were tested, and 59,02% of the 50% of the grant subject to a TSR (total shareholder return) performance condition vested, while 0% of the 50%



of the grant subject to a ROCE (return on capital employed) condition vested.

### ***Deferred bonus plan (DBP)***

On receipt of a short-term incentive and special performance reward payments, participants are able to use part of their after-tax incentive to acquire shares (pledged shares) in Exxaro with a matching award on the vesting date.

Grant limits	Employees on Paterson EM and above	
Vesting period	Three years	
Performance conditions	To qualify, employees must have achieved their short-term incentive goal of which a portion (50% for EM, 90% for EU and above can then be used towards this scheme.	
Retention conditions	Shares will be matched at the end of the three-year period. If pledged shares are held for the pledge period of three years and participants remain employed by Exxaro	
Other		Pledged shares are held in escrow until the vesting date, but participants receive full dividends and may dispose of the shares, thereby sacrificing the commensurate portion of future matching shares
Number of participants	59	

For detail on executive directors and prescribed officers' long-term incentives refer to the annexure of the 2015 integrated report.

### ***Mpower 2012 (Exxaro employee share option scheme)***

The Mpower 2012 scheme was implemented on 1 July 2012, and will run for a five-year period until 31 May 2017. Only employees on Paterson D lower and below qualify to participate. Employer companies in the Exxaro group made capital contributions of R75 000 for each qualifying employee to enable the share subscription. Each qualifying employee on 1 July 2012 received 387 shares. Employees who join later will receive a pro-rated number of shares. On 31 December 2015, there were 6 962 beneficiaries participating in the scheme.

In May and October 2015, Mpower 2012 paid a total of R5,9m in dividends to beneficiaries

### ***Way forward***

The following changes to the remuneration policy for implementation in 2016 have been approved by Remco:

- A special resolution to be tabled at the 2016 annual general meeting to reduce the aggregate number of shares that may be allocated under all management share schemes from 30 000 000 (10%) to 18 000 000 (6%)
- Annual remuneration adjustment for executive directors and senior management of 3,5% to be implemented effective 1 April 2016, and non-executive directors to be implemented 1 June 2016 respectively
- Change in performance conditions for 2016 LTIP grants to be:
  - 34% TSR against peer group
  - 33% HEPS
  - 33% retention with specific environmental, safety and governance (ESG) modifiers

### ***Remuneration of executive directors, non-executive directors and prescribed officers***

#### **Directors**

Information on the remuneration of executive directors and non-executive directors appears in the directors' and prescribed officers' remuneration report refer to the annexure of the 2015 integrated report.

#### **Prescribed officers**

Recommended practice, in line with King III (2.26.2), is to disclose the salaries of the six most highly paid employees who are not directors. In Exxaro, these individuals are also prescribed officers, as defined in the Companies Act 71 of 2008, as amended, and hence full disclosure of the remuneration of prescribed officers appears in the directors' report refer to the annexure of the 2015 integrated report.

Dr CJ Fauconnier

on behalf of

R Mohring (deceased)

Chairman: Remuneration and nomination committee



## ***Sustainability, risk and compliance committee report***

The sustainability, risk and compliance (SRC) committee is constituted as a committee of the board to oversee the Exxaro group's consideration of and performance on all material non-financial issues, including social, risk, compliance and environmental issues, and to ensure these are integrated into our strategy and economic performance.

The committee has an independent role in terms of which it operates and makes recommendations to the board within its remit and, in carrying out its duties, considers the code of governance principles in the King Report on Corporate Governance for South Africa 2009 (King III).

### ***Objective and scope***

The committee's objectives are to:

- Provide oversight on three important aspects influencing strategy and Exxaro's long-term viability – sustainability, risk and compliance
- Oversee and coordinate all risk and compliance activities (although the audit committee remains accountable for financial risk and compliance)
- Ensure the company reports annually through an integrated report on relevant sustainability, risk and compliance issues
- Provide oversight for the integrated report.

### ***Membership***

Members are appointed by the board, on recommendation from the remuneration and nomination committee, and in consultation with the chairman of the SRC committee. The committee comprised four independent non-executive directors in the review period:

	Attendance
Dr CJ Fauconnier (chairman)	4/4
S Dakile-Hlongwane	4/4
RP Mohring	3/4
D Zihlangu	3/4

The chairman of the board is invited to attend all committee meetings, while other technical and subject-matter experts are invited as required to assist in deliberations.

The committee meets at least four times a year and carried out its duties and responsibilities as stipulated in its terms of reference and detailed annual plan during the review period.





### ***Committee key performance indicators and evaluation***

In 2015, for the first time, the board and its committees developed specific key performance indicators (KPIs), in addition to aspects dealt with in the annual plan. This was a first attempt at setting objective measures for directors for a particular year in assisting management to achieve Exxaro's strategic objectives. We recognise these are more quantitative of nature, but view this as a maturing process that will lead the board and its committees to more meaningful qualitative measures in time to give stakeholders a more in-depth understanding of the performance of the board and its committees.

The committee set the following KPIs for 2015:

- Entrenching oversight of the risk framework
- Visibility, support and understanding of material issues
- Active stakeholder engagement by committee members
- Improved use of the strategic dashboard to manage and monitor the strategy
- Sharing best practice.

The committee and invitees concurred that these KPIs were achieved in 2015.

The board and committee evaluations for 2015 differed substantially from prior years, focusing more on performance than conformance; hence comparing year-on-year results would be misleading. Overall, the committee achieved an average score of 3,72 (close to exceeding expectations) with no aspect identified as requiring attention.

The committee approved fewer KPIs for 2016, mainly because the second KPI (visibility, support and understanding of material issues) was fully entrenched through numerous visits to business units in 2015 and has become a standard part of the annual plan. The third KPI (stakeholder engagement) was specifically elevated to the board for increased focus in 2016.

The other KPIs remain the same, although some measures were adjusted to redirect focus.

### ***Key issues***

Key issues receiving attention during the year included:

- The lost-time injury frequency rate (LTIFR) at year end was 0,17 against the target of 0,15. Although marginally above the target, this is a significant milestone – being the lowest rate in Exxaro's nine-year history. Three high-potential impact incidents were reported at Grooteegeluk, Matla and Arnot in the first quarter of 2015: these received detailed focus to ensure lessons were shared and implemented throughout the group as such incidents could easily have more



serious consequences if not effectively handled and addressed. We are pleased to advise that no fatalities occurred in 2015 – Exxaro’s second 12-month fatality-free period. We will continue to emphasise the objective of zero harm in 2016: safety always, all the way!

- Sustainability, risk and compliance KPIs are discussed at every meeting: these deal with material items in each of the capitals, including energy consumption, water withdrawal and discharge, air quality, occupational diseases and exposure, lost-time injuries, social and labour plan performance, preferential procurement and enterprise development, top risks and licence-to-operate legislative compliance.

Specialist and business unit reports are presented to the committee by rotation. In the reporting period, the following matters were discussed in detail:

- Matla mine 1 cessation of operations. The committee had received numerous presentations and had debated this item extensively: after much deliberation, the committee approved the cessation of operations at Matla mine 1, because of safety concerns, in the first quarter of 2015. Mine 1 will remain closed until the required capital for shaft development and safety improvement initiatives is obtained from Eskom
- Matla water treatment plant (see page 160)
- Matla, followed by a visit to the rock engineering training centre
- Leeuwpan, followed by a mine visit.
- Arnot: including planned closure activities and social impacts which remain a focus for the committee and board. These bodies specifically debated whether to publically respond to allegations made in the press and decided not to engage in such a manner. However, when publishing results on 3 March 2016, a detailed position paper was posted on our website and stakeholders are encouraged to refer to this for full information [[www.exxaro.com](http://www.exxaro.com)].
- Mine-closure strategies generally, but specifically plans for Inyanda’s scheduled closure.
- A summary of ECC’s top 50 risks in preparing for transaction closure in August 2015.
- An overview of Exxaro’s water-liability estimation model: regarded as a first for the industry and a significant step in quantifying water liabilities (previously excluded from closure rehabilitation provisions) and appropriately accounting for this.
- BBBEE performance.
- Carbon disclosure performance and commitments. In preparation for the Paris United Nations Framework Convention on Climate Change Congress of Parties (COP21), Exxaro acknowledged the view that human activity, (including burning fossil fuels, deforestation and degradation, population growth and rapid urbanisation) contributes to increasing concentrations of greenhouse gases/emissions in the atmosphere. This in turn contributes to climate change that affects social and economic well-being and the ecological balance in different ways across the world. In light of these risks, climate change is an issue that requires urgent global attention

and collective action by governments, business and civil society. Accordingly, the board supported an international agreement between governments on climate change, seeking to limit global temperature rise to below 2°C from pre-industrial levels. Exxaro also supports the activities of South Africa's National Business Initiative (NBI), Business Unity South Africa and industry task team on climate change.

The committee embraces its role to guide the company in its sustainability, risk and compliance endeavours and to ensure Exxaro remains a responsible corporate citizen. Equally, the committee views its role as an imperative delegated by the board, and an opportunity to make a meaningful contribution to South Africa by helping to secure the future for every one of our stakeholders.

Dr CJ Fauconnier  
Chairman  
Pretoria  
15 April 2016



## ***Social and ethics committee report***

The social and ethics committee is constituted as a statutory committee under section 72(4) of the Companies Act (read with regulation 43 of the Companies Regulations 2011), and as a board committee for any specific functions delegated by the board. It also fulfils the role of a group committee and therefore no other Exxaro subsidiaries have established social and ethics committees. It operates under approved terms of reference, as well as a detailed annual plan that includes both its statutory duties and those assigned by the board. It acts as an oversight committee for areas where the remuneration and nomination (Remco) and sustainability, risk and compliance (SRC) committees have accountability, and is accountable for certain areas that do not fall within the mandate of another committee. The chairmen of Remco and SRC are required to report matters within their mandates to this committee.

### ***Membership***

Shareholders elect members of the social and ethics committee annually. The committee comprised two independent non-executive directors and one non-executive director during the review period:

	Attendance
Dr MF Randera (chairman)	2/2
Dr CJ Fauconnier	2/2
RP Mohring	2/2

Other attendees include subject-matter experts on disciplines falling within the committee's mandate, as specified in regulation 43(5) of the Companies Act. The committee meets twice a year and carried out its duties and responsibilities as stipulated in the regulations and terms of reference.

### ***Objective and scope***

The purpose of the committee is to monitor the group's activities, taking account of relevant legislation, other legal requirements or prevailing codes of best practice on:

- Social and economic development
- Good corporate citizenship
- The environment, health and public safety, including the impact of Exxaro's activities and its products or services
- Consumer relationships, including our advertising, public relations and compliance with consumer protection laws
- Labour and employment
- Anti-bribery and corruption.



The committee adds value to the group by interrogating and providing independent oversight of the Remco and SRC committees' ambit (ie discussing the moral imperative associated with certain operational issues dealt with by these committees), as well as by discussing and taking action in areas where the committee itself is accountable. It has now been operating for four years and has matured significantly in its deliberations, with members willing to discuss seemingly difficult or sensitive matters, as reflected in the key matters below.

### ***Committee key performance indicators and evaluation***

In 2015, for the first time, the board and its committees developed specific key performance indicators (KPIs), in addition to aspects dealt with in the annual plan. This was a first attempt at setting objective measures for directors for a particular year in assisting management to achieve Exxaro's strategic objectives. We recognise these are more quantitative in nature, but view this as a maturing process that will lead the board and its committees to more meaningful qualitative measures in time to give stakeholders a more in-depth understanding of the performance of the board and its committees.

The committee set the following KPIs for 2015:

- Evaluating the impact of Exxaro's activities on public safety specifically, in addition to detailed mine health and safety discussions by the SRC committee
- Evaluating the impact of Exxaro's activities on contractors, treatment of contractors and contractor philosophy
- Increased understanding of the impact of the company's social and labour plans and projects, specifically through visits to projects
- Sharing best practice
- Evaluating and approving 2016 and medium-term anti-bribery and fraud risk maturity initiatives.

The committee and invitees concurred that these KPIs had been achieved in 2015.

The board and committee evaluations for 2015 differed substantially from prior years, focusing more on performance than conformance; hence a comparison of year-on-year results is misleading. The committee achieved an average score of 3,04 (meeting expectations) with no aspect identified as requiring attention.

After a thorough review of the medium-term anti-bribery and fraud risk maturity initiatives, the committee agreed that the achieved level of maturity did not warrant a specific KPI for 2016, but would continue to receive focus as part of the standard annual plan.



The other KPIs remained the same, although some measures were adjusted to redirect focus.

### **Key issues**

Key issues receiving attention during the year included:

- As in prior years, safety aspects received significant attention: especially the efficacy of proactive processes and systems used to safeguard employees.
- The committee specifically discussed risks to which female employees are exposed underground, including unacceptable sexual practices that have seemingly become standard in many underground areas. In 2016, the committee will investigate this issue and consider appropriate remedial actions.
- In respect of environmental matters, the committee was especially concerned about lengthy delays in receiving regulatory approvals, as well as constraints in captive business units where full regulatory compliance depended on and was influenced by Eskom (also refer to SRC committee report on cessation of Matla mine 1).
- Similar to discussions at the SRC committee, this committee deliberated on the decision by Eskom to terminate the Arnot coal-supply agreement and the negative impact this would have on employees and the surrounding community.
- In relation to the company's carbon disclosure programme and increased pressure from various stakeholders on decreasing carbon emissions, the committee specifically considered the impact these aspects should have on Exxaro's long-term strategy and sustainability. These aspects will continue to be considered by the board as a whole.
- The committee noted with concern a dramatic increase in cable theft, primarily at our underground mines, and will deliberate on further preventative measures in 2016 taking due cognisance of the dangers of confronting heavily armed and well-organised perpetrators.
- Over R56 million was spent in 2015 on community development, corporate commitments and projects. To better understand the impact and benefits of these projects, the committee visited the Botleng housing/hydroponics project, multipurpose centre and TVET College. Such visits provide further comfort to the committee on the effectiveness and sustainability of these projects, in addition to the social return on investment toolkit evaluation, now proactively used to predict the future sustainability of projects.

As always, matters of ethics received significant focus, as detailed below.

### **Incidents of unethical behaviour**

At Exxaro, reports of alleged unethical behaviour are received through the anonymous reporting hotline and other mechanisms. All reports are periodically reviewed by the ethics committee and referred either for forensic investigation or to functional heads to be investigated. The ethics

committee comprises executives, senior management and the chief audit executive. Chaired by the chief audit executive, it meets either monthly or as required to consider issues of non-compliance to the group code of ethics or conflicts-of-interest policy, as well as matters reported on the ethics hotline or to management.

In 2015, 457 cases of alleged unethical behaviour (2014: 448) were reported for investigation. In total, 201 people were subjected to disciplinary hearings, with 175 arrests made by the South African Police Service (SAPS) for criminal prosecution based on the results of referred investigations (2014: 164). The direct monetary value of cases reported and investigated was R18,5 million (2014: R16,7 million), with R11,0 million (2014: R10,5 million) recovered/saved.

As noted, copper cable theft has increased dramatically and affected Exxaro's loss-recovery rate, despite successes in concluding investigations and disciplinary actions.

**Copper theft statistics:**

	2015	2014
Number of cases	68	55
Value	R9 171 997	R4 692 479
Recovered	R2 721 239	R1 076 598

Dr MF Randera  
Social and ethics committee chairman  
Pretoria  
15 April 2016



## Assurance

### **Independent Assurance Report to the Directors of Exxaro Resources Limited**

We have been engaged by the directors of Exxaro Resources Limited (“Exxaro” or the “Company”) to perform an independent assurance engagement in respect of Selected Sustainability Information reported in Exxaro’s Integrated Report (Supplementary Report) for the year ending 31 December 2015 (the “Report”). This report is produced in accordance with the terms of our contract with the Company dated 14 October 2015.

### **Independence, Quality Control and Expertise**

We have complied with the independence and other requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board for Auditors (IRBA), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies International Standard on Quality Control 1 and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our engagement was conducted by a multi-disciplinary team of health, safety, environmental and assurance specialists with extensive experience in sustainability reporting.

### **Scope and Subject Matter**

The subject matter of our engagement and the related levels of assurance that we are required to provide are as follows:

#### *Reasonable assurance*

The following Selected Sustainability Information in the Report (page 89 – 92) was selected for an expression of reasonable assurance:

- a) Fatality frequency rate (FFR) - Employees and Contractors
- b) Lost Time Injury Frequency Rate (LTIFR) - Employees and Contractors
- c) Total Electricity Efficiency (kWh/total tonnes mined (TTM))
- d) Indirect CO<sub>2</sub> emissions from electricity (scope 2) – CO<sub>2</sub> tonnes

#### *Limited assurance*

The following Selected Sustainability Information in the Report (page 89 – 92) was selected for an





expression of limited assurance:

- a) Occupational Health Incident Frequency Rate (OHIFR) - Employees and Contractors
- b) Direct CO<sub>2</sub> emissions from own operations (scope 1) – CO<sub>2</sub> tonnes
- c) Other indirect emissions (scope 3) – CO<sub>2</sub> tonnes
- d) Number of Level 2 and 3 Environmental Incidents
- e) Hazardous waste to landfill (tonnes)
- f) Total potable water (municipal and Eskom) and metered potable water (Grooteegeluk only) (m<sup>3</sup>)

We refer to this information as the “Selected Sustainability Information for Reasonable Assurance” and / or “Selected Sustainability Information for Limited Assurance”, respectively, and collectively as the “Selected Sustainability Information”.

We have carried out work on the data reported for 31 December 2015 only and have not performed any procedures with respect to earlier periods, except where specifically indicated, or any other elements included in the 2015 Integrated Report (Supplementary Report) and, therefore, do not express any conclusion thereon. We have not performed work in respect of future projections and targets.

#### **Respective responsibilities of the Directors and PricewaterhouseCoopers Inc.**

The directors are responsible for selection, preparation and presentation of the Selected Sustainability Information in accordance with the criteria set out in the glossary on page 180 of the Report, referred to as the “Reporting Criteria”. The directors are also responsible for designing, implementing and maintaining of internal controls as the directors determine is necessary to enable the preparation of the Selected Sustainability Information that are free from material misstatements, whether due to fraud or error.

Our responsibility is to form an independent conclusion, based on our reasonable assurance procedures, on whether the Selected Sustainability Information for Reasonable Assurance has been prepared, in all material respects, in accordance with the Reporting Criteria.

We further have a responsibility to form an independent conclusion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the Selected Sustainability Information for Limited Assurance has not been prepared, in all material respects, in accordance with the Reporting Criteria.



This report, including the conclusions, has been prepared solely for the directors of the Company as a body, to assist the directors in reporting on the Company's sustainable development performance and activities. We permit the disclosure of this report within the Report for the year ended 31 December 2015, to enable the directors to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the Report. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the directors as a body and the Company for our work or this report save where terms are expressly agreed and with our prior consent in writing.

### **Assurance work performed**

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised): Assurance Engagements other than Audits and Reviews of Historical Financial Information (ISAE 3000 (Revised)), and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410: Assurance Engagements on Greenhouse Gas Statements (ISAE 3410), issued by the International Auditing and Assurance Standards Board. These standards require that we comply with ethical requirements and that we plan and perform the assurance engagement to obtain assurance on the Selected Sustainability Information as per the terms of our engagement.

Our work included examination, on a test basis, of evidence relevant to the Selected Sustainability Information. It also included an assessment of the significant estimates and judgements made by the directors in the preparation of the Selected Sustainability Information. We planned and performed our work so as to obtain all the information and explanations that we considered necessary in order to provide us with sufficient evidence on which to base our conclusion in respect of the Selected Sustainability Information.

Our work, in respect of the Selected Sustainability Information for Reasonable Assurance, included the following procedures:

- reviewing the processes that Exxaro have in place for determining the Selected Sustainability Information included in the Report;
- obtaining an understanding of the systems used to generate, aggregate and report the Selected Sustainability Information;
- conducting interviews with management at corporate head office and sampled operations;
- evaluating the data generation and reporting processes against the Reporting Criteria;
- performing key controls testing and testing the accuracy of data reported on a sample basis; and
- reviewing the consistency between the Selected Sustainability Information and related statements in Exxaro's Report.



Our procedures relating to the Selected Sustainability Information for Limited Assurance primarily comprised:

- reviewing the processes that Exxaro have in place for determining the Selected Sustainability Information included in the Report;
- obtaining an understanding of the systems used to generate, aggregate and report the Selected Sustainability Information;
- conducting interviews with management at corporate head office and sampled operations;
- evaluating the data generation and reporting processes against the Reporting Criteria;
- performing key controls testing and testing the accuracy of data reported on a sample basis; and
- reviewing the consistency between the Selected Sustainability Information and related statements in Exxaro's Report.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement under ISAE 3000 (Revised). Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement, and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

The procedures selected depend on our judgement, including the assessment of the risk of material misstatement of the Selected Sustainability Information, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation of the Selected Sustainability Information in order to design procedures that are appropriate in the circumstances.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

#### **Inherent limitations**

Non-financial performance information is subject to more inherent limitations than financial information, given the characteristics of the subject matter and the methods used for determining, calculating, sampling and estimating such information. The absence of a significant body of established practice on which to draw allows for the selection of different but acceptable measurement techniques which can result in materially different measurements and can impact comparability. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgements. The precision of different measurement techniques may also vary. Furthermore, the nature and methods used to determine such information, as well as the



measurement criteria and the precision thereof, may change over time. It is important to read the Report in the context of the Reporting Criteria.

In particular, where the information relies on factors derived by independent third parties, our assurance work has not included examination of the derivation of those factors and other third party information.

#### **Reasonable assurance**

Based on the results of our reasonable assurance procedures, in our opinion, the Selected Sustainability Information for the year ended 31 December 2015, has been prepared, in all material respects, in accordance with the Reporting Criteria.

#### **Limited assurance**

Based on the results of our limited assurance procedures nothing has come to our attention that causes us to believe that the Selected Sustainability Information for the year ended 31 December 2015, has not been prepared, in all material respects, in accordance with the Reporting Criteria.

#### **Other Matters**

The maintenance and integrity of Exxaro's Website is the responsibility of Exxaro's management. Our procedures did not involve consideration of these matters and, accordingly we accept no responsibility for any changes to either the information in the Report or our independent assurance report that may have occurred since the initial date of presentation on Exxaro's website.



PricewaterhouseCoopers Inc.

Registered Auditor

Director: Jayne Mammatt

Johannesburg

22 April 2016



KPIs assured by PwC

Key performance indicator	2015	Level of assurance	2014	2013	2012
Mining charter					
Procurement from BEE entities (R value and % of total procurement)	#	Reasonable			
Capital			1 545 247 148 57%	1 937 107 893 49%	7 944 881 112
Services			2 641 029 589 71%	2 620 387 614 58%	
Consumable goods			3 091 454 498 75%	2 654 651 605 62%	
Employment equity	#	Reasonable			
Top management			67%	60%	60%
Senior management			42%	53%	34%
Middle management			57%	55%	54%
Junior management			73%	65%	64%
Core and critical skills			98%		
Safety					

Key performance indicator	2015	Level of assurance	2014	2013	2012
Fatalities	#	Reasonable	1	0	2
Fatality frequency rate (FFR) – employees and contractors	0	Reasonable			
Lost-time injuries (LTIs) – employees and contractors	#	Reasonable	36	41	66
Lost-time injury frequency rate (LTIFR) – employees and contractors	0,17	Reasonable	0,19	0,19	0,29
Occupational health					
Occupational health incident frequency rate (OHIFR) – Reported cases – employees and contractors	0,36	Limited			
Total people participating in HIV/Aids voluntary counselling and testing (VCT)	#	Limited	1 642	5 853	3 616
Number of reported (and accepted) cases of pneumoconiosis	#	Limited	Reported = 12 Accepted = 2	37 3	24
Number of reported (and accepted) cases of occupational tuberculosis	#	Limited	Reported = 20 Accepted = 5	40 9	66
Number of reported (and accepted) cases of noise-induced hearing loss	#	Limited	Reported = 16 Accepted = 2	8 0	12

Key performance indicator	2015	Level of assurance	2014	2013	2012
Energy					
Total diesel used (GJ)	#	Reasonable	2 103 148	2 128 665	2 520 233
Total electricity used (GJ)	#	Reasonable	2 135 581	2 011 719	4 279 399
Electricity efficiency (kWh/total tonnes mined)	3,72	Reasonable	4,2	4,4	
Greenhouse gases (t CO <sub>2</sub> e)					
Direct CO <sub>2</sub> emissions from own operations (scope 1)	235 179	Limited	229 762	235 506	345 781
Indirect CO <sub>2</sub> emissions from electricity (scope 2)	521 905	Reasonable	557 624	525 282	1 117 409
Other indirect emissions (scope 3)	73 846 816	Limited	74 768 143	69 736 911	70 644 554
Total year-on-year change in scope 1 and scope 2 emissions	#	Limited	26 597 (3,4%)		
Environmental compliance					
Number of integrated water use licences applications approved	#	Reasonable	18	16	21
Number of integrated water use licences applications pending	#	Reasonable	12	10	3
Number of level 2 and 3 environmental incidents	Level 2 = 18	Limited	Level 2 = 3	7	11

*Exxaro 2015 supplementary report*



Key performance indicator	2015	Level of assurance	2014	2013	2012
	Level 3 = 0		Level 3 = 0	0	0
Water					
Total potable water (municipal and Eskom) and metered potable water (Grootegeeluk only) (m³)	2 194 398	Limited	2 304 686	2 504 390	12 209 689
Waste					
Hazardous waste to landfill (tonnes)	1 814	Limited	1 542	1 349	1 484
Skills					
Number of bursars	#	Limited	88		
Number of professionals-in-training	#	Limited	86		

# These indicators have not been assured by PwC for the 2015 year

These indicators have been prepared in line with Exxaro's internally defined criteria. Refer to the glossary on page 180 for criteria.



## Mining charter

Element	Metric	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014*	Actual 2015**
Ownership	Black ownership	● 52,10%	● 52,14%	● 52,14%	● 52,09%	● 52,09%	● 52,09%
Beneficiation	Domestic use	● Yes	● Yes	● Yes	● Yes	● Yes	● Yes
Procurement and enterprise development	Capital goods	● 43%	● 45%	● 59%	● 49%	● 34%	● 53%
	Services	● 24%	● 42%	● 37%	● 58%	● 69%	● 82%
	Consumables	● 25%	● 43%	● 47%	● 62%	● 71%	● 79%
Employment equity	Top management	● 50%	● 60%	● None	● 60%	● 67%	● 79%
	Senior management	● 30%	● 34%	● 44%	● 53%	● 42%	● 34%
	Middle management	● 51%	● 54%	● 54%	● 55%	● 57%	● 56%
	Junior management	● 63%	● 64%	● 69%	● 65%	● 73%	● 75%
	Core and critical skills	● 25%	● Not reported	● 98%	● 96%	● 98%	● 96%
Human resources development	Percentage of payroll (excl levies)	● 5,1%	● 5,5%	● 6,6%	● 5,3%	● 9,95%	● 7,9%
Community development	% of net profit after tax or LED project completion	● 2,5%	● 1,8%	● 4,7%	● 0,9%	● 1,8%	● 62%
Housing and living	Hostel conversion Occupancy rate Home ownership	1,15% of employees	22%	● No employees sharing rooms	● Number of people sharing – 0	● 100%	● 100%
Sustainable development	Environment	● Programmes in place to achieve target by 2014	Implementation of approved EMPs	Rehabilitation and closure plans drafted for all mines	● Implementation of approved EMPs	● 91%	● 93%
	Health and safety	Developmental plans for 70% of actions for safety and health	Health: 100% of mandatory reports submitted	MOSH leading practices and MHSC research findings investigated and implemented	● Leadership strategies (programmes implemented)	● 98%	● 90%
	Research and development	● 100%	Samples predominantly analysed in South Africa	● 100%	● 100%	● 100%	● 100%
Reporting	Annual reporting to DMR	● Yes	● Yes	● Yes	● Yes	● Yes	● Yes

- Missed target
- Missed target by <5%
- Met/exceeded target

\*The 2014 scorecard reflects the average across the eight operational mining right sites only

\*\* The 2015 scorecard reflects the average across the seven operational mining right sites only and excludes the ECC mines



## Executive management's focus

### **Macro-economic review**

The review period started with some positive sentiment towards the world economy. However, the divergence in global economic growth became even more pronounced in the second half of 2015 as uncertainty in global financial and commodity markets continued. As a result, the emerging world is significantly affected while growth in developed economies continues to show some signs of strength, albeit still modest. Since 2012, world real GDP growth has been range-bound between 2.5% and 2.7%, and unlikely to change in 2016. Growth in advanced economies has accelerated gradually, while economic activity in emerging markets has decelerated dramatically.

Despite a rocky start to 2016, as China again rattled financial markets, the global real GDP growth outlook is expected to be mainly supported by the United States and Europe. The plunge in prices of oil and other industrial materials is amplifying patterns that emerged in 2015.

**China's** economic growth is expected to slow further in 2016, but no 'hard landing' is expected. In 2015, real GDP expanded 6,9%, down from 7,3% in 2014. Apart from industrial-sector excess capacity, a glut of housing inventory and a debt bubble, China's economic slowdown is also due to the structural transition from heavy manufacturing and resource industries to an economy more orientated to the service and technology sectors.

In 2016, the expectation is for **US** economic growth to remain supportive to the world economic growth outlook, albeit with signs of potential weakness in the world's largest economy. However, solid gains in employment and real disposable income will support real consumer spending. In mid-December 2015, the Federal Reserve raised its target federal funds rate by 25 basis points, to a range of 0.25-0.50%. The move reflected confidence that the economic recovery is on track and labour markets are strengthening. Headwinds from the inventory cycle and energy-sector capital spending are expected to diminish by mid-2016.

The **Indian** economy, lifted by prospects of structural reforms, remains on a path of modest acceleration, with growth projected to continue outpacing China in 2016 and beyond. India's real GDP growth outlook for 2016 is 7,5% compared to China's 6,3%.

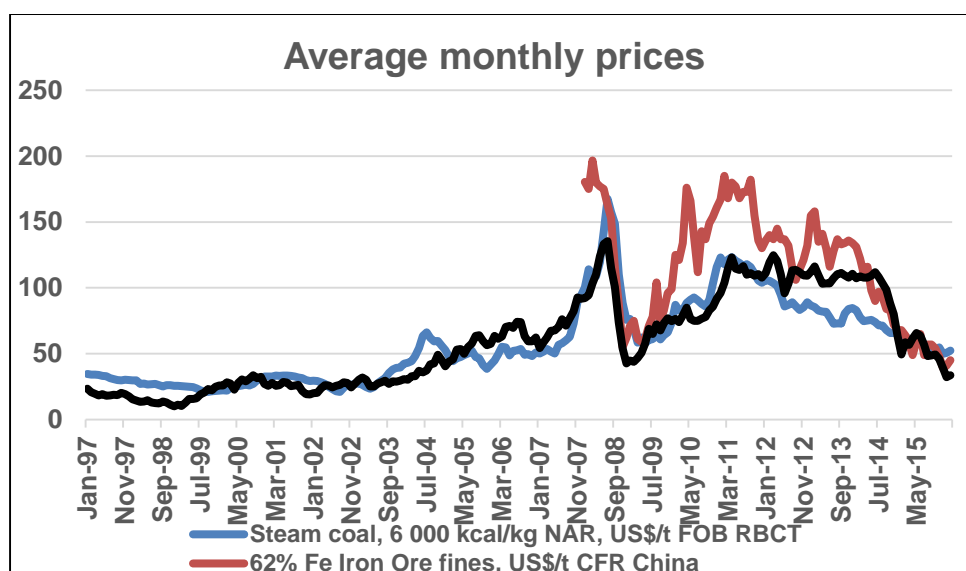
**South Africa's** economic growth outlook for 2016 remains subject to a number of headwinds – the impact of drought conditions, policy uncertainty, the low-growth trajectory and falling business confidence. The key risk for 2016 remains the slowing of economic growth to 0,6% from 1,3% in 2015, weakening national finances which could pave the way for another credit-rating downgrade. The rand



exchange rate is expected to remain vulnerable in 2016.

## Commodity review

Mineral commodity markets remained lacklustre in 2015, with weak demand/supply growth recorded in most markets, and US\$ cost reductions for a net result of most mining companies trading deep into their cost curves.

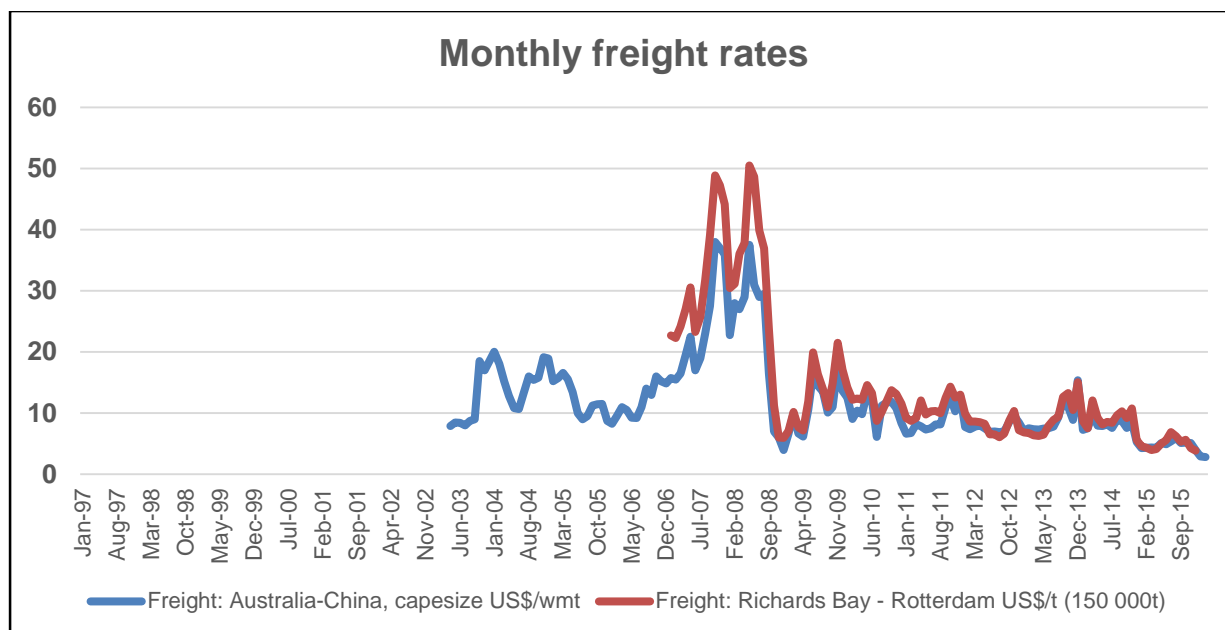


### Coal

It was another turbulent year for global coal markets. The period started with additional restrictions on importing coal into China and ended with the first global agreement to control global temperature increases at the 21<sup>st</sup> Conference of Parties (COP) in Paris. Global seaborne demand for both thermal and metallurgical coal fell in 2015, the first simultaneous fall since the global financial crisis in 2008. At the heart of this is China, however, increasing Indian seaborne demand offered some support in 2015. South African domestic steam coal demand remains a source of stability for local producers.

The year ahead is unlikely to offer a major turnaround as factors weighted on global demand and prices in 2015 are expected to continue. As a result, in 2016, the metallurgical coal spot price is expected to average US\$75/t free on board (FOB) Australia and spot steam coal (6 000kcal/kg net as received (NAR) at around US\$50/t FOB Richards Bay.





### **Iron ore**

Global iron ore markets remain oversupplied, with impressive cost reductions shifting the cost curve lower. For 2016, lower iron ore demand is expected for both China and the world. The outlook for Chinese crude steel production is also softer for 2016, mainly driven by the weaker outlook for Chinese long-products consumption (around two-thirds of the country's total steel demand and heavily reliant on the construction sector).

The global iron ore industry has been very responsive to lower prices (albeit with a lag), with ongoing production displacements fundamentally supporting the expected rebalancing in the medium to long term. For most of 2016, the anticipated iron ore fines spot price will be range-bound between US\$40/t and \$50/t (cost and freight (CFR) China) as idled capacity caps potential price increases in the current global iron ore market environment.

### **Mineral sands and TiO<sub>2</sub> pigment**

It looks set to be another challenging year for the feedstock and TiO<sub>2</sub> pigment markets. Pricing weakness is expected to continue throughout 2016 with the slowdown in the Chinese construction industry weighing heavily on the titanium value chain. Demand remains weak in emerging economies and the market oversupplied, with high inventory levels.



## Operational review

### **Stakeholder engagement**

#### ***Philosophy and policy***

Building long-term relationships with our stakeholders establishes the context within which we can operate successfully and create value for all parties with a direct and indirect stake in our business through sustainable development programmes.

Specific goals shape our interactions in building mutually beneficial relationships with our stakeholders:

- Obtain support for operational and strategic plans, and the performance of the business
- Proactively manage the risk, opportunities and reputation of the company
- Understand stakeholder expectations, and create and deliver relevant, beneficial value
- Build mutual trust and respect
- Promote the well-being of society.

Stakeholder engagement is a cornerstone of our business philosophy (refer integrated report) while a formal stakeholder engagement framework is incorporated into our corporate governance approach. Equally, stakeholder relationship management and communication are strategic activities in achieving our development and growth objectives and play a critical role in risk management and identifying opportunities.

We embrace the universal principles of engagement, namely:

- Transparency – open agenda and information exchange
- Accountability – emphasis on governance
- Legitimacy – recognise that stakeholders have valid needs and expectations
- Mutual respect – engage with dignity.

We follow the AccountAbility AA1000SES stakeholder engagement standard to guide the development of related capabilities and activities in Exxaro. This standard is a basis for a generally applicable, open-source framework for designing, implementing, assessing and communicating the quality of stakeholder engagement.

In addition to the principles of AA1000SES, our stakeholder engagement activities are guided by:

- King report on governance for South Africa 2009 (King III)
- Global Reporting Initiative guidelines
- Companies Act 71 2008, amended
- International Integrated Reporting Committee (IIRC) reporting framework.

Salient features of our stakeholder engagement activities in 2015 are disclosed in the integrated report, and detailed overleaf.



### Stakeholder engagement in 2015

Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
Community stakeholders (including all authorities, affected and interested parties such as NGOs)	<ul style="list-style-type: none"> <li>Community development forums</li> <li>Engaging with provincial authorities and forums formed by government</li> <li>Bilateral engagement with Limpopo premier</li> </ul>	<ul style="list-style-type: none"> <li>Identify material issues affecting local government and communities</li> <li>Hand over completed projects, eg Belfast RDP housing, Grootegeeluk agricultural corridor, North Block Complex education programme</li> <li>Information about procurement and job opportunities</li> <li>Determine and monitor progress on implementing social and labour plans</li> <li>Develop local economic development projects collaboratively</li> </ul>	<ul style="list-style-type: none"> <li>Community engagement forums: quarterly</li> <li>Government engagement and forums: ad hoc</li> <li>Premier engagement: ad hoc</li> </ul>	<ul style="list-style-type: none"> <li>Increasing demand for an equity stake in Exxaro</li> <li>Requests for additional investments in community development</li> <li>In 2014, we conducted a baseline study of community stakeholder issues at each business unit – local economic development projects and our social and labour plans are focused on these areas</li> </ul>
Customers	<ul style="list-style-type: none"> <li>Marketing</li> <li>Contracting</li> </ul>	<ul style="list-style-type: none"> <li>Cost cutting</li> <li>Cost efficiency</li> <li>Enable Exxaro to understand</li> </ul>	<ul style="list-style-type: none"> <li>As required by each commodity business' marketing department</li> </ul>	<ul style="list-style-type: none"> <li>Changing economic market conditions</li> <li>Product quantities and qualities</li> </ul>

Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
		and meet customer specifications		<ul style="list-style-type: none"> <li>Logistical issues</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Road shows</li> <li>Group newsletter</li> <li>Electronic communication</li> <li>Information briefs</li> <li>Caucus groups</li> <li>One-on-one meetings</li> </ul>	<ul style="list-style-type: none"> <li>Keep employees informed on relevant issues and developments, such as implications of changing economic and market conditions</li> </ul>	<ul style="list-style-type: none"> <li>Regularly throughout the year as milestones are reached</li> </ul>	<ul style="list-style-type: none"> <li>Project Turnkey – restructuring and the need to cut costs</li> <li>Voluntary severance packages – no forced retrenchments</li> <li>Progress with unions</li> <li>Provide opportunity for employees to communicate directly with CEO and senior management</li> </ul>
Labour unions	<ul style="list-style-type: none"> <li>Scheduled management and union meetings</li> </ul>	<ul style="list-style-type: none"> <li>Engaging with unions recognised for collective bargaining rights on issues affecting the employer/ employee relationship</li> </ul>	<ul style="list-style-type: none"> <li>Monthly</li> </ul>	<ul style="list-style-type: none"> <li>Business-specific procedural, operational and workplace issues</li> </ul>
	<ul style="list-style-type: none"> <li>Communication/ participative forums</li> </ul>	<ul style="list-style-type: none"> <li>Information disclosure and interaction</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly at business unit and corporate centre</li> </ul>	<ul style="list-style-type: none"> <li>Information disclosure on financial results, prospects, concerns, outlook, strategic planning and report back</li> </ul>
	<ul style="list-style-type: none"> <li>Collective bargaining forums</li> </ul>	<ul style="list-style-type: none"> <li>Collective bargaining on substantive issues with unions</li> </ul>	<ul style="list-style-type: none"> <li>Annually unless otherwise agreed</li> </ul>	<ul style="list-style-type: none"> <li>Changes to wages and conditions of employment of bargaining unit</li> </ul>

Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
		recognised for collective bargaining rights		employees
	• Consultative forums	• Consultative forums on employment equity and workplace skills	• Biannually at business units unless otherwise agreed	• Employment equity plans/reports, workplace skills plans and annual training report
	• Task teams	• Task teams to deal with specific matters	• As needed/agreed	• Agreed issues that may affect the employer/employee relationship
	• Future forums at mines	• Promote ongoing discussions between worker representatives and mine management about the future of the mine, implement strategies on downscaling and retrenchment when required, feedback on progress against social and labour plan commitments	• Biannually unless otherwise agreed	• Mine closure issues • Skills development • Local economic development
	• One-on-one meetings	• Align government and Exxaro outlook on present and future plans • Update on group strategy and	• At least once a year	• Support for government initiatives • Report progress against legislated targets, build partnerships with government



Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
		developments		
Government	<ul style="list-style-type: none"> <li>Interested and affected parties' authorisation process</li> </ul>	<ul style="list-style-type: none"> <li>Comply with environmental impact assessment (EIA) authorisations' requirements</li> </ul>	<ul style="list-style-type: none"> <li>As required by EIA authorisation process</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with legislation</li> <li>Pollution</li> <li>Transparent communication</li> </ul>
	<ul style="list-style-type: none"> <li>DMR</li> </ul>	<ul style="list-style-type: none"> <li>Engaging on acquisition of the TCSA business</li> <li>MIGDETT</li> </ul>	<ul style="list-style-type: none"> <li>As required</li> </ul>	<ul style="list-style-type: none"> <li>Exxaro's plans with TCSA business</li> <li>10-year anniversary of mining charter</li> </ul>
Investors	<ul style="list-style-type: none"> <li>Road shows</li> <li>Briefings and meetings</li> <li>Securities Exchange News Service (SENS)</li> <li>Financial reporting</li> <li>Site visits</li> </ul>	<ul style="list-style-type: none"> <li>Ensure investors are informed of group strategy, performance and developments</li> <li>Provide relevant, accurate information to enable fair evaluation of Exxaro's market value</li> </ul>	<ul style="list-style-type: none"> <li>Two to four times a year</li> </ul>	<ul style="list-style-type: none"> <li>Group strategy and implementation</li> <li>Capital allocation</li> <li>Dividend policy</li> <li>BEE shareholding structure</li> <li>Actual financial and operational results</li> <li>Mayoko project, TCSA acquisition, additional information</li> </ul>
Media and general public	<ul style="list-style-type: none"> <li>Site visits</li> <li>Interviews</li> <li>News releases</li> <li>Website</li> </ul>	<ul style="list-style-type: none"> <li>Provide information for media to inform public and other stakeholders</li> <li>Update on group strategy and</li> </ul>	<ul style="list-style-type: none"> <li>Formal engagements at least three times a year</li> </ul>	<ul style="list-style-type: none"> <li>Legislative compliance</li> <li>Group strategy and implementation</li> <li>Corporate activity</li> </ul>

Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
	<ul style="list-style-type: none"> <li>Advertising</li> </ul>	developments		<ul style="list-style-type: none"> <li>Role in energy provision and use</li> <li>Socio-economic development</li> <li>Environmental impact of mining operations, eg impact on wetlands in Mpumalanga</li> </ul>
State-owned enterprises – Eskom	<ul style="list-style-type: none"> <li>Formal meetings</li> </ul>	<ul style="list-style-type: none"> <li>Develop coal supply contracts, eg addendum 9 for supply to Medupi power station</li> <li>Obtain sufficient electricity supply</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Contracts to provide mutual benefit to parties</li> </ul>
– Transnet Freight Rail	<ul style="list-style-type: none"> <li>Formal meetings</li> </ul>	<ul style="list-style-type: none"> <li>Logistics to transport coal from mines to RBCT</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Number and frequency of trains scheduled</li> </ul>
NGOs – Escarpment Environmental Protection Group	<ul style="list-style-type: none"> <li>On-site engagement</li> </ul>	<ul style="list-style-type: none"> <li>Keep mine stakeholders informed on operational affairs</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly</li> </ul>	<ul style="list-style-type: none"> <li>Corporate citizenship</li> <li>Exxaro's response to impact of mining on environment</li> <li>Appeals to Exxaro's authorisations, permits and licences</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Green procurement</li> </ul>	<ul style="list-style-type: none"> <li>Maximise supply-chain efficiency by buying environmentally friendly</li> </ul>	<ul style="list-style-type: none"> <li>As opportunities for green initiatives occur and as initiatives are</li> </ul>	<ul style="list-style-type: none"> <li>Detailed green criteria provided to suppliers</li> </ul>

Stakeholder	Engagement method	Purpose	Frequency	Issues/responses
		products and services, and setting sustainability requirements in supplier agreements	identified by the green procurement working group	
	<ul style="list-style-type: none"> <li>Sustainable supplier engagement</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with suppliers in addressing supply chain sustainability issues and enhance their capabilities to meet sustainability standards</li> <li>Supplier sustainability assessments (audits)</li> <li>Supplier sustainability development</li> <li>Supplier innovations</li> </ul>	<ul style="list-style-type: none"> <li>As required by supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>Part of working group led by Chamber of Mines in developing responsible sourcing principles for the mining industry</li> </ul>
	<ul style="list-style-type: none"> <li>Meetings, forums</li> </ul>	<ul style="list-style-type: none"> <li>To ensure Exxaro meets preferential procurement goals by purchasing goods and services from suppliers that meet BEE compliance requirements</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing requirement on request-for-quotation or tender enquiry documents</li> <li>Specified as a requirement for evaluating tenders</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing legislative compliance</li> </ul>

### ***External economic, environmental and social standards***

In constantly aiming to benchmark itself against global best practice, Exxaro endorses a number of voluntary external standards, charters and principles, including:

- United Nations Global Compact (signatory)
- Millennium Development Goals
- Carbon and water disclosure projects (CDP).

### ***Broader industry participation***

As a stakeholder in the mining industry, Exxaro actively participates in shaping appropriate policies in South Africa through many channels, including:

- The Chamber of Mines of South Africa
- JSE Limited and Computershare forums
- National Energy Regulator of South Africa (NERSA)
- Energy intensive users group (EIUG)
- National electricity response team (NERT)
- Energy efficiency accord through the technical committee facilitated by the National Business Institute (NBI)
- Industry energy policy-influence workshops
- World Wildlife Fund (WWF) round table event
- South African Chamber of Commerce and Industry's (SACCI) electricity dialogue
- SANBI (South Africa National Biodiversity Institute)
- National Business Initiative for a coordinated response to issues such as climate change and water, and related national priorities.

Exxaro is also involved in the initiatives of:

- South African Independent Power Producers Association (SAIPPA)
- Coaltech 2020
- Fossil Fuel Foundation
- Peace Parks Foundation (donated over R12 million to date)
- SA Centre for Carbon Capture and Storage with international and local partners
- Clinton Foundation
- Mpumalanga Coal Producers Community Development Forum.

### ***Developing the body of knowledge***

We are particularly committed to developing the body of knowledge at tertiary level by funding chairs in selected disciplines. In 2015, Exxaro funded four university chairs:

- **Unisa:** Exxaro chair in business and climate change – promotes and advances related

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research, teaching and advocacy-orientated community engagements, especially in developing economies. Key research themes include business response to climate change in key industry sectors in South Africa (mining, finance and insurance, retail, agriculture and automotive), and green economies and green jobs.

- **Wits:** Exxaro chair in global change and sustainability – provides a research platform of global significance and local impact, fostering informed and innovative actions for adaptation and mitigation strategies for sustainability in the rapidly changing southern African region. Key research themes include sustainable urbanisation, healthy and productive ecosystems, and sustainable communities post mining (post-mining ecology and economy).
- **Pretoria:** Exxaro chair in business and biodiversity leadership – focuses on thought leadership in the interface between business and biodiversity. Key research themes include implementation of voluntary ecosystem valuation, identifying and evaluating business responses to biodiversity in Exxaro and other industries, land rehabilitation, and linking biodiversity with environmental management and issues such as climate change and water, particularly wetlands.
- **Pretoria:** Exxaro chair in energy efficiency – participates at the forefront of research activities in energy efficiency to deliver world-class research and educational outputs. Key research themes include mining system components, design efficiency in capital projects, mine engineering for energy efficiency, cogeneration (using waste heat to produce electricity for the same or related processes in those operations, smelter technology and efficiency, clean development mechanism (CDM) and carbon trading (carbon footprint and carbon-neutral study), as well as the low-carbon economy, and energy efficiency measurement, verification, baseline determination and evaluation.

### **Co-sponsorships**

- **Pretoria:** chair in the centre of excellence for maintenance engineering – equips engineering students to address maintenance challenges in industry, and ensure outstanding quality in maintenance-related science and engineering.
- **Pretoria:** Exxaro/Kumba chair in geology enhances undergraduate, honours and post-graduate training of geoscientists, as well as research activities.
- **South African Minerals to Metals Research Institute (SAMMRI)**, a collaboration between mining industry members and the Department of Science and Technology to develop high-level technical skills for the extractive industry by sponsoring research projects at tertiary institutions aimed at industry needs.
- **The Mineral Education Trust Fund** was founded by the Chamber of Mines to attract, retain and develop undergraduate teaching staff, create academic centres of excellence, focus on departments that deliver in terms of quality and foster collaboration. It focuses on metallurgy, chemical mining engineering and geology. Exxaro contributes annually to the fund.



## Safety and health

The safety of our people is fundamental to our business, and we will not rest until we consistently achieve our safety goals through collective responsibility, commitment and ongoing focus. As part of this focus, all operational business units, including ECC mines, have international health and safety accreditation (OHSAS 18001).

Our ultimate target remains zero injuries and fatalities. To reach this goal, we review our LTIFR target annually based on prior performance, and apply stringent management protocols, programmes and systems. Every lost-time injury is investigated by the business unit manager, while all fatalities and high-potential incidents are investigated by a committee with the appropriate skills, headed by an independent chairperson. Findings are reported to the executive committee and the sustainability, risk and compliance committee and escalated to the board if required. Each business unit tracks its adherence to standards and legislation through a programme of self-assessments and corporate audits.

In risk-specific terms, the leading cause of injury remains lifting, materials handling and vehicle safety. While key risks differ by operation, our major challenges are vehicle incidents, energy and machinery isolation, and risk awareness and discipline at all levels. Because skills shortages exacerbate these challenges, we concentrate on continuous on-the-job training to ensure sufficient trained people are in place in our work areas.

All operations falling under the Mine Health and Safety Act have elected representatives from senior and middle management as well as shop-floor level serving on safety and health committees. Health topics included in formal agreements with trade unions cover HIV/Aids and occupational tuberculosis (TB), noise-induced hearing loss and dust.

Our vision for health and hygiene is to create a workplace with no adverse effects on our employees and surrounding communities. We understand the health risks posed by the mining industry, and the importance of programmes to reduce new cases of occupational diseases and ensure a healthy workforce:

- A healthy workforce enables Exxaro to achieve its strategic goals. Employees are able to access healthcare services through their medical aid schemes, occupational health services, HIV/Aids and TB programmes
- Workplace risks that affect the health of employees are identified, detected early, prioritised and prevention programmes implemented
- Our medical surveillance processes are continually strengthened to ensure our employees remain healthy and productive.



## Safety

### Highlights

- No work-related fatalities in 2015 and 18 months without a fatality by 31 December 2015
- Having proved we can reach our target of zero, this is a powerful incentive to all our teams to maintain this outstanding performance
- 11% improvement in lost-time injury frequency rate (LTIFR) to 0,17 from 0,19 in 2014
- 6 of 14 operations worked a calendar year without a lost-time injury (LTI), and 6 business units achieved the LTIFR target of 0,15 (2014:15)
- Focused programme rolled out to empower safety, health and environmental representatives with the knowledge to identify risks better and contribute more effectively to reducing safety risks in the workplace
- Internal section 54 inspectorate programme rolled out at all business units, authorising appointed employees to stop unsafe activities and, in time, prevent accidents

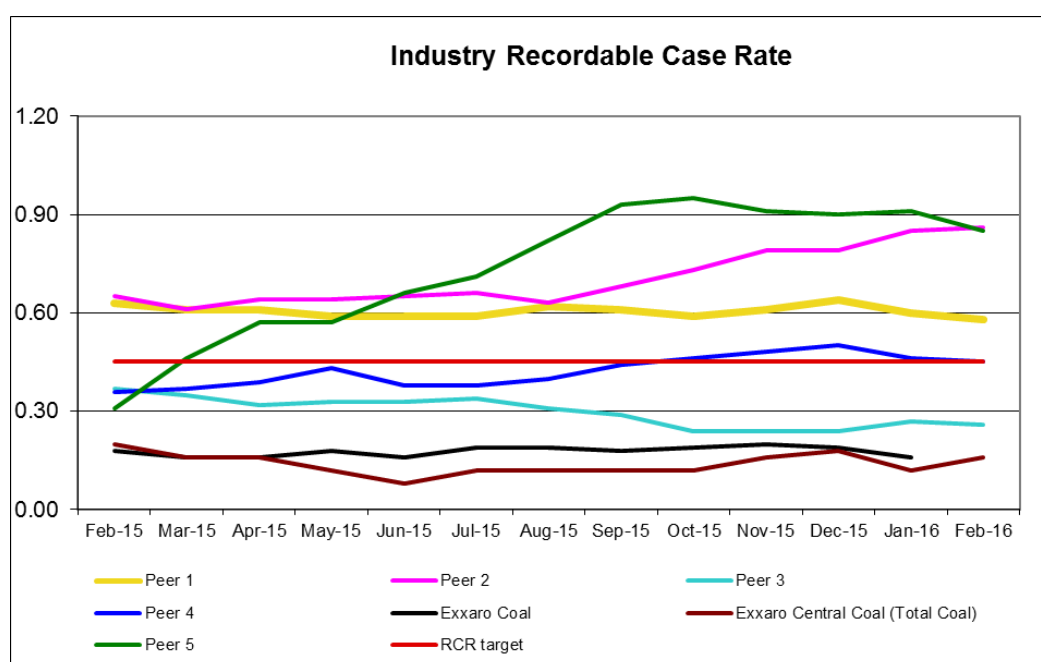
### Lowlights

- Exxaro missed its LTIFR target of 0,15, recording 0,17 at year end.

### Safety performance

Exxaro's target was zero fatalities and an LTIFR (per 200 000 hours worked) of 0,15 for 2015.

Disappointingly, actual LTIFR performance was below our target but better year on year at 0,17 vs 0,19 in 2014. Interestingly, both our target of 0,15 and actual performance of 0,17 are considerably better than the coal industry average of 0,26.



To the end of December 2015, the group again recorded an outstanding performance by operating for 18 months without a fatality. This followed our first fatality-free year in 2013, a rolling 12-month fatality-free period in 2014, and a rolling 18 months fatality-free period by 31 December 2015, proof that our target of zero fatalities is attainable. Our target remains zero, as no death is acceptable.

Mr Johan Swanepoel died in a vehicle accident at New Clydesdale in July 2015 while driving from the mine to Emalahleni. Although not a reportable fatality in terms of DMR regulations, this is treated as a reportable internal fatality. We again extend our sincere condolences to his family, colleagues and friends.

Notable safety achievements by our mines included ECC Tumelo winning the MineSAFE underground category for 2014/2015, as well as most-improved mine.

Programmes to improve our safety performance include:

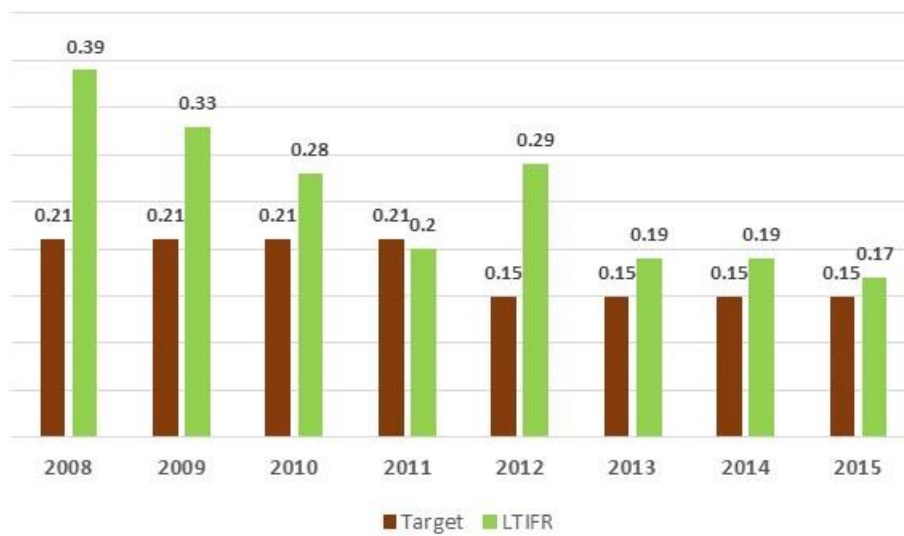
- After completing the Global Minerals Industry Risk Management (GMIRM) course for top and senior management in 2014, we are implementing the safety improvement plans derived from this course
- In 2015 we rolled out the GMIRM supervisory and operator-level course
- The use of visible felt leadership (VFL) is a tool to increase management's visibility in the workplace and communication to employees has improved as a result
- We continue to empower SHE representatives with relevant skills through a focused training programme.

With the support of government, the Chamber of Mines and Exxaro's recognised unions, this focus is producing tangible results. By year end, six operating units had worked for 12 months without a lost-time injury.

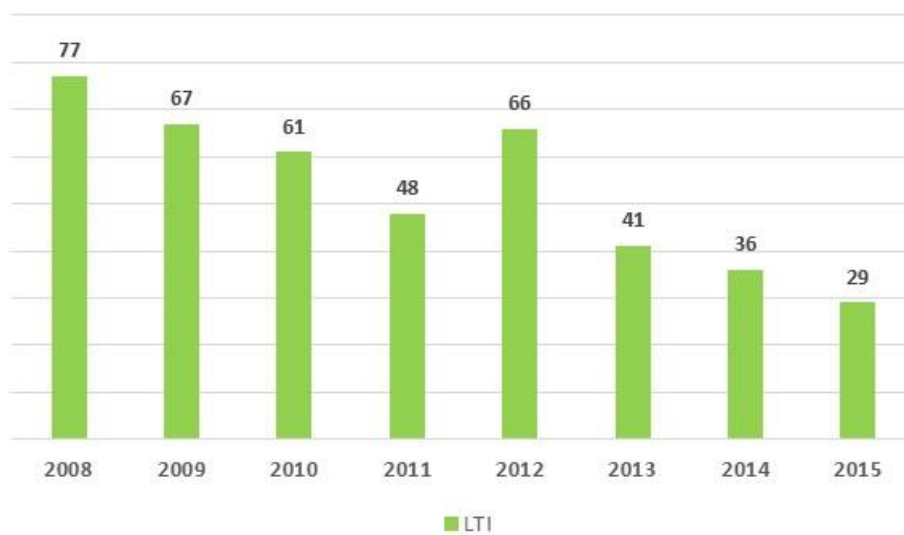
In 2015, the group was served with two section 54 notices, both amicably resolved as quickly as possible.



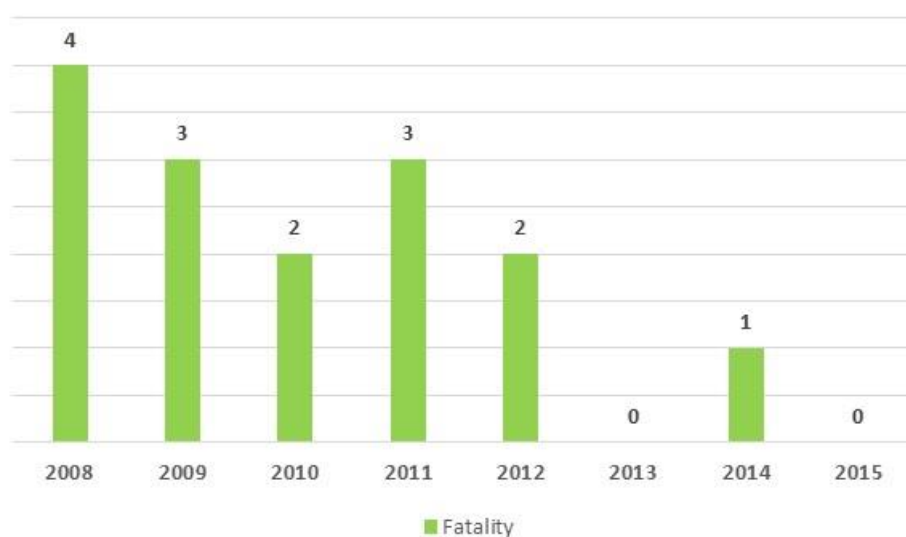
### LTIFR performance versus target 2007-2015



### LTI trend 2008 – 2015



### Fatalities trend 2008 – 2015



## Occupational health and hygiene

### Highlights

- 4% reduction in reported occupational diseases
- Progress on chronic diseases of lifestyle

### Challenges

- Potential impact of chronic diseases of lifestyle on people's health and safety in the workplace.

Key health and hygiene indicators are reported to the executive committee monthly, quarterly and annually. Regular reporting enables management to monitor the risk identification and assessment process, comply with legislation and reporting requirements, and track the implementation of programmes against set targets.

In 2015, we made further progress on several major health-related projects, including:

- We implemented our revised guideline for detecting, investigating and following up on health and hygiene incidents. This followed the 2013 review of our health and hygiene programme that identified factors influencing the prevalence of occupational diseases
- Review of occupational disease management by occupational medical practitioners across the group, aiming to introduce integrated wellness programmes for employees
- Designed a community-oriented programme on HIV/Aids and TB which will be managed by community-based peer educators
- Started introducing personal protective equipment (PPE) for women in mining to comply with

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guidelines promulgated in September 2015

- Risk assessment conducted at Grootegeluk
- We continued designing system requirements to support health processes
- Follow-up and monitoring by our health practitioners of individuals identified as at-risk for chronic diseases of lifestyle after the 2013 survey at some operations which established prevalence and contributing social factors
- After reviewing the current implementation of our TB programme at all sites to ensure early detection and compliance to treatment, in 2014, we implemented corrective actions and shared best practices across the group.

## **Occupational diseases**

### **Reported occupational diseases**

Reported cases are those newly diagnosed and submitted to the authorities to confirm whether they are work-related and eligible for compensation under related legislation.

In 2015, Exxaro reported 60 cases of occupational diseases (2014: 52): **40%** were cases of TB, **15%** noise-induced hearing loss or NIHL, **30%** pneumoconiosis and chronic obstructive airways diseases (COAD). This year-on-year improvement reflects our focus on occupational risk exposure profiles to further reduce the incidence of occupational diseases.

### **Exxaro – reported occupational diseases (cumulative)**

	2015	2014	2013	2012	2011	2010	2009
NIHL	15	16	8	22	47	12	11
Pneumoconiosis	15	12	37	24	31	23	2
Silicosis	0	-	-	7	-	-	-
COAD	1	4	2	-	2	-	1
Occupational TB	18	20	40	65	53	52	6
Dermatitis	-	-	-	-	2	2	-
Asbestosis	1	-	-	-	1	-	-
Work-related upper limb disorders	-	-	-	-	-	1	-
<b>Total</b>	<b>60</b>	<b>52</b>	<b>87</b>	<b>118</b>	<b>137</b>	<b>90</b>	<b>20</b>



## Accepted occupational diseases

These are cases where the condition is demonstrably work-related and accepted for compensation. In 2015, Exxaro had 11 occupational disease cases accepted for compensation: ten for TB, and one for silicosis.

## Mining sector targets on noise and silicosis

In 2003, the mining sector set targets to eliminate silicosis and noise-induced hearing loss:

Noise	Silicosis	Current status
<ul style="list-style-type: none"><li>• Reduce NIHL to less than 10% per individual by 2008</li><li>• Reduce noise from equipment to under 110dB(A) by 2013</li></ul>	<ul style="list-style-type: none"><li>• By December 2008, 95% of all exposure measurement results &lt;0,1mg/m<sup>3</sup> for respirable crystalline silica</li><li>• Eliminate silicosis by 2013</li></ul>	<p>In 2015, Exxaro had:</p> <ul style="list-style-type: none"><li>• 1 case of silicosis accepted</li><li>• 15 cases of employees with hearing loss.</li></ul>

Although there was a decrease in the number of reported occupational diseases, we continue to implement hearing conservation and dust-control programmes to further reduce the number of new occupational diseases.

## Chronic diseases of lifestyle

Chronic diseases of lifestyle – the so-called lifestyle diseases – have rapidly overtaken occupational diseases as the primary global health risk for companies. In South Africa, a recent Human Sciences Research Council (HSRC) study noted alarming data for people living with chronic diseases of lifestyle who do not change that lifestyle:

- Roughly two of every five deaths are attributable to these diseases
- Some 40% of related deaths among men occur before age 60
- More than seven in ten women above 35 are overweight
- Among children, obesity and being overweight were highest in the two- to five-year group, where 19% of girls were overweight and 5% were obese, while 17% of boys were overweight and 4% obese
- A contributing factor is spiralling consumption of packaged foods high in calories, saturated fats, animal proteins, sugars and salt
- Physical activity levels are low – lack of exercise in adults is another contributory factor.

Apart from HIV, chronic diseases are fast becoming the primary cause of death. In a survey covering the Exxaro group, the following conditions were identified:

- Diabetes
- Hypertension
- Heart disease.



Based on the survey information, we integrated the prevention and control of chronic diseases into our workplace health programmes. This is supported by case management and monitoring the progress of individuals with chronic diseases. Awareness programmes on healthy living are ongoing.

For the review period, medical surveillance identified 78 new diabetes cases and 274 hypertensive employees and contractors.

### ***HIV/Aids and TB***

The prevalence of HIV/Aids across Exxaro is currently estimated at 6%, well below the industry and national average. With appropriate education, counselling and support, **92%** of our workforce (excluding contractors) voluntarily tested between 2010 and 2015, and more are seeking treatment.

We recorded an **8%** improvement in the number of employees and contractors enrolled on the HIV/Aids programme to 733 in 2015 (2014: 675), with 2 240 employees and contractors on anti-retroviral treatment (ART).

We are also making headway in slowing the spread of HIV/Aids. Between January 2009 and December 2015:

### ***HIV/Aids awareness***

Year	Attended information session	Tested	% tested	Employees testing positive	Enrolled at Dec (cumulative)	On ARVs
2009	7 156	6 684	93	358	299	161
2010	3 443	2 888	84	434	448	323
2011	1 712	874	51	71	307	311
2012	3 800	3 616	95	474	454	327
2013	5 853	3 756	64	314	545	521
2014	5 732	2 804	49	261	675	481
2015*	11 759	4 158	35	252	453	452
<b>Total</b>	<b>37 743</b>	<b>24 780</b>		<b>2 164</b>	<b>3181</b>	<b>2 576</b>

\* Includes contractors



## ***Tuberculosis***

TB is more prevalent among miners in southern Africa than any other working population: with an incidence rate of 2 500 to 3 000 per 100 000, individuals are three times more at risk of contracting TB than the general population. The TB rate among mineworkers is ten times higher than the level of a health emergency as defined by WHO.

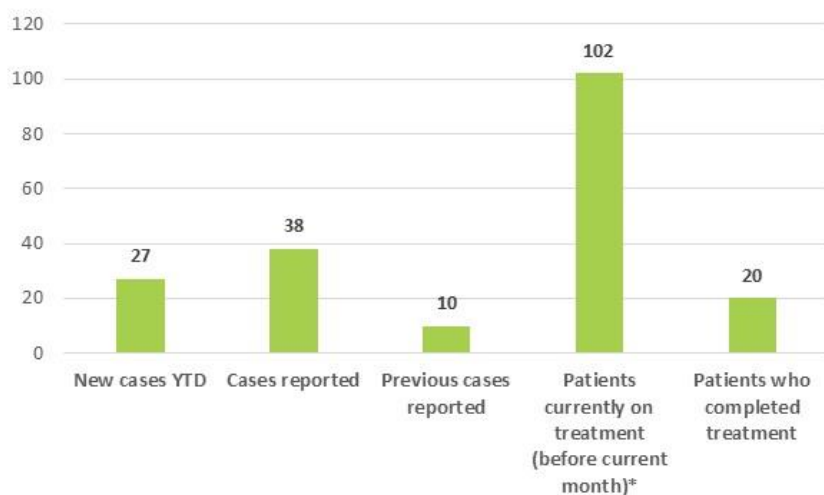
According to the Department of Health, there are over 41 000 cases of active TB in South African mines every year. This is the highest incidence in any working population in the world, as it affects 500 000 mineworkers, their 230 000 partners, and 700 000 children.

Regular migration across the continent and rural areas of South Africa makes it difficult to provide effective and consistent treatment of TB among mineworkers.

It is widely recognised that the HIV/Aids and TB epidemic will affect every workplace, with the potential for prolonged staff illness, absenteeism and death affecting productivity, employee benefits, occupational health and safety, production costs and workplace morale. Early diagnosis and proper treatment are therefore key to managing this disease.

Exxaro's TB rates (per 100 000) are similar to the general population, and shown below. As part of improving our TB programme, a revised integrated TB and HIV/Aids policy was rolled out in 2015.

### ***TB cases January-December 2015***



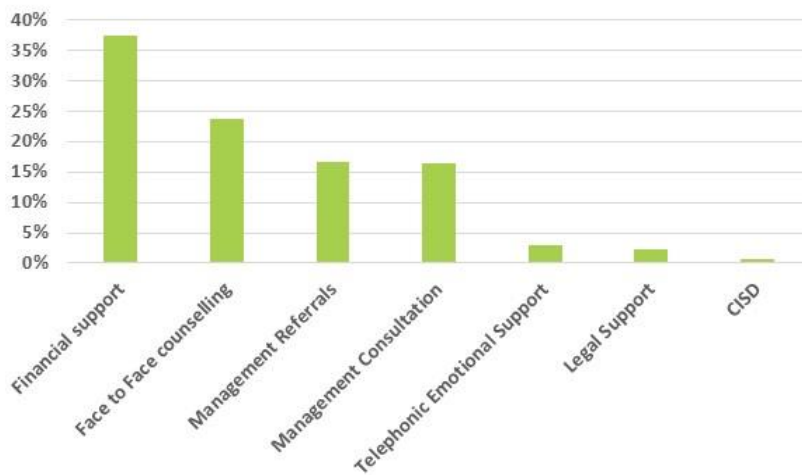
## **Employee wellness**

Exxaro's employee assistance programme ensures that any of our people facing difficulties have access to an external counselling service. This is a preventive measure that helps employees manage personal concerns, and assists management in minimising productivity issues.

During the year, an increasing number of our people used this service for:

- Financial issues
- Personal and emotional difficulties
- Family matters
- Work-related challenges
- Dependency on substances.

### **Employee wellness support offered during 2015**



## People

Our people are our greatest source of value and Exxaro's regular inclusion in various top employer rankings illustrates the depth of our commitment to enriching their lives.

A comprehensive suite of policies covers employment, labour relations, occupational health and safety, training and education, diversity and equal opportunity. Our aim is to provide working conditions that are safe and healthy, opportunities that are enriching and an environment conducive to performance.

Supported by the leading practices developed in recent years, Exxaro concentrates on exceeding compliance targets in South Africa by training and development to optimise individual potential, maximise equality and safety in the workplace, meet our employment equity targets and improve living standards in our stakeholder communities. Collectively, our initiatives contribute to reducing the shortage of skills in our industry.

The shortage of specific skills in South Africa remains a particular challenge. A mining sector-specific and a national plan are in place to address critical or scarce competencies. As such, attracting, developing and retaining these skills is a priority for Exxaro as a mining company, and a competitive advantage. This is the driving force behind Exxaro's feeder schemes, currently benefiting over 750 people.

Specific strategies ensure the accelerated learning and development of black people, women and people with disabilities, including:

- Fast-tracking those with leadership and management potential
- Occupation-based skills programmes
- Formal study assistance
- Adult education
- People and self-management skills
- Learnerships
- Bursaries and internships.





## Highlights

- Exxaro's talent pipeline and feeder schemes enabled over 750 jobless youth to obtain occupational qualifications, in-service training and employment
- Skills audit completed at Arnot mine and started at Matla. Six business units now completed
- Employees in the operations enrolled in over 1 000 formal Mining Qualifications Authority (MQA) skills programmes, with close to a 100% pass rate.

## Lowlights

- More than 460 people left the group through voluntary severance packages

## Skills development

- Given the importance of skills in our industry, we endeavour to invest an appropriate amount of total salaries and wages each year on developing our people. In 2015, we spent R184 million on training, or 6% of payroll (2014: 6,8% or R221 million):
- R70 million (58% of total or 2,3% of payroll) was for job-related operational and technical training at business units, including operator training and mobile equipment licences. This amounts to 160 000 training events using our e-learning platform, classroom and practical on-the-job training to satisfy mainly core training needs directly linked to operations, as well as the requirements of the Mine Health and Safety Act (MHSA). This includes training contractors as required by the MHSA, as well as section 101 of the Mineral and Petroleum Resources Development Act (MPRDA)
- R70 million (2,3% of payroll) was spent on various feeder schemes comprising bursaries, internships, learnerships and skills programmes based on Exxaro's need for core and key skills. Taking it from the perspective of outcomes, Exxaro looks at key areas across the skills value chain to determine which actions will ensure the availability of the right skills at the right time. R31 million of this amount is spent on artisans/miners per year
- R35 million (1,13%) is spent on the talent pipeline that delivers, on average, 27 qualified and registered engineers as well as other professionals per annum
- R8,5 million (0,27% of payroll) was spent on developing targeted employees in management development programmes, leadership development, postgraduate studies and non-core development.

We encourage our people to be jointly responsible for managing their career growth. We provide financial assistance to permanent employees with potential to further their education through part-time studies of recognised, approved courses. When we nominate people to attend programmes, these are fully sponsored (tuition, examinations, travel, accommodation and study leave).



### ***Skills and human resources development***

Rm	2015	2014	2013	2012	2011
Total training	184	221	200	177	225
HDSA training	152	180	161	134	172
HDSA training as % of total payroll	5,0	6,8	6,5	5,5	-

### ***Current and future skills requirements***

To meet our current and future skills requirements, we invest in our existing employees, future employees, and in the communities that provide our labour. At present, 99% of Exxaro's labour is sourced in South Africa and, at any operation, over 70% is sourced from host communities. Our education, bursar and skills development initiatives are geared to empower local communities to compete for positions in the company.

### ***Graduate programme***

Our three-year professionals-in-training programme blends academic theory with the work environment. Each graduate has a mentor who supervises exposure to various operational, leadership and management on-the-job training. Mentors also assist with fulfilling registration requirements for relevant governing bodies and professional associations. In 2015, there were 64 professionals in training (2014: 86) throughout Exxaro in a R29 million programme. Of these interns, 33% are women and 76% are black, and over 90% were placed throughout Exxaro.

### ***Bursary programme***

There are currently 84 bursars studying at South African institutions at a cost of R6,2 million per annum. Over two-thirds are historically disadvantaged South Africans and 27% are women.

As part of the Exxaro people development initiative, we granted ten bursaries in 2015 to school-leavers interested in technical disciplines such as engineering (metallurgical, chemical, mechanical, electrical, industrial, mining or civil), mine surveying and geology. Candidates must be grade 12 students from Exxaro communities who want to study for a technical degree or diploma. The total annual cost of this programme is R1,3 million.

### ***Training***

Training and development initiatives across the group are based on a comprehensive needs analysis, incorporating business strategy, identified skills gaps, succession-planning, employee career progression and employment equity plans.

In 2015, we continued our skills audits, completing the process at Arnot mine and starting it at Matla



mine. By year end, this was 50% complete. The skills audit identifies current job and competency requirements, comparing these with what is needed currently and, more importantly, what will be needed in future to achieve our goals and objectives.

We offer sponsored engineering learnerships at our acclaimed Grovos training centre in Lephalale. We also sponsor engineering and mining learnerships at Colliery Training College (CTC at Emalahleni, where Exxaro is a shareholder) in eMalahleni, Mpumalanga. As part of our feeder schemes, we also provide sponsored formal and practical training in core skills programmes including plant operators, maintenance operators and mobile equipment operators.

Our Grooteegeluk and Matla mines are MQA-accredited training providers in selective mining and engineering disciplines. This enables our people to be trained, declared competent and obtain their MQA certification in-house.

### ***Literacy and numeracy***

Functional literacy is an important issue in an industry where communication on safety is often written. All employees with qualifications below NQF level 1 are given the opportunity to become functionally literate. Candidates are screened and counselled to ensure informed decisions, and where employees complete training in their own time, there is an incentive scheme for each level completed.

Exxaro pays for voluntary adult education and training (AET) programmes at all operations, investing R1,5 million in 2015 (2014: R4,5 million). We have accredited AET training centres at Grooteegeluk (partnership with external provider) and Matla, while accredited external providers are used by other business units.

In 2015, 48 employees and 158 non-employees or people from our communities enrolled in AET programmes, while 22 employees and 75 non-employees completed various AET levels. Over 1 200 employees have passed one or more AET levels since the inception of this programme.

As 89% of Exxaro's total workforce now holds a qualification of NQF 1 and above, communication is more effective, particularly on safety issues.

### ***Scholarships***

In 2015, three scholarships were awarded to medical students from our communities. These scholarship students are expected to practise in communities where Exxaro operates at the end of their academic programme for a specific period.

## ***Talent management***

To achieve our strategic objectives, we need to ensure we have a healthy internal pipeline of specialist and leadership talent to meet organisational needs. We follow an integrated succession-planning process to ensure rigour and quality in applying talent management principles from business-unit to functional and executive levels. One of the key success indicators of talent management in 2015 was the internal appointment of three executives and the CEO. In the bargaining-unit category, scientific and fair processes are being explored to manage talent fairly at lower levels, with a pilot project under way at our flagship mine, Grootegeluk. This will be tested further at other mines.

## ***Leadership development***

Exxaro advocates a constructive work environment in which employees are fully committed to predetermined organisational outcomes. A consistent process of leadership and climate development underpins this endeavour.

In 2015, Exxaro benchmarked itself globally on the Corporate Executive Board's engagement, alignment and agility survey. Optimal performance is defined as:

- Employees are engaged and direct their efforts towards the organisation's goals
- The workforce is able to sense, lead and adapt to change
- The organisation's culture supports its top business priorities.

According to the global benchmark, against these indicators of a workforce's ability to respond to the strategy and performance requirements of the organisation:

- Exxaro outperformed the global average by between 8% and 26% on most indicators (engagement, discretionary effort, intent to stay and alignment to business goals)
- Exxaro performed in line with other organisations globally on dimensions of agility and innovation.

Employee engagement remains a priority through the active drive of leadership excellence. Exxaro offers a wide selection of management and leadership development opportunities, and integrates these into a comprehensive framework aligned to business goals and reflected through our strategy. This ensures that our employees remain committed and capable of responding to our performance needs.

## ***Attracting and retaining a skilled workforce***

In pursuit of Exxaro's vision, we have been building a culture that reflects Exxaro's values and philosophy by engaging our people to unlock value for the company and all its stakeholders. Our aim is to develop a high-performance, enabling culture at every level using integrated and benchmarked practices aligned with our strategy and focused on meeting and exceeding business targets.

Exxaro has an active retention programme to maintain scarce skills that accounts for up to 5% of total payroll. Equally, we are focused on building a sustainable talent pipeline in critical or scarce skills. To preserve our technical and engineering competence, aggressive retention and succession-planning strategies are supported by comprehensive training and growth opportunities that continually rotate and expose talented individuals to multidisciplinary teams.

Exxaro progressively measures itself as an employer of choice against several other organisations, nationally and internationally, on the key drivers of culture, talent and engagement. For example, specific strategic responses are identified from results in the prestigious Deloitte Best Company to Work for survey in which we participate regularly. The next measurement will be in 2016. Our aim is to steadily improve our rating, reflecting the group-wide emphasis on performance in a healthy employee climate that proactively attracts and retains talent.

By benchmarking ourselves in this way, we continually address gaps in the way we work, understanding that continual improvement is the only way to ensure we remain an employer of choice.

### ***Employee/management relations***

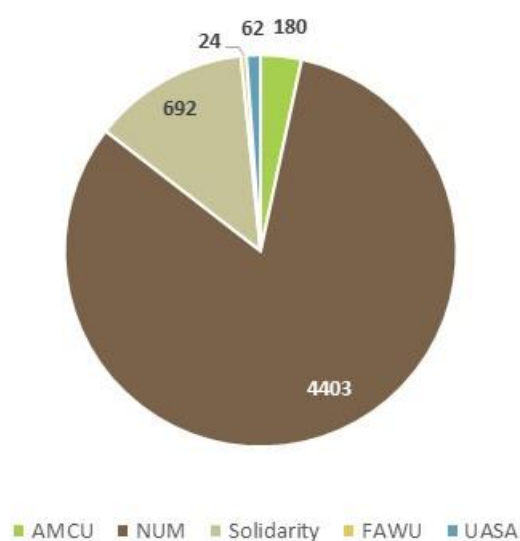
Throughout the group, our approach to the employment relationship is based on the principles of constructive engagement or regulated cooperation. Accordingly, our engagement structures at all levels continue to function constructively in line with our employee relations strategy

Labour legislation is the broad framework under which related policies, systems and procedures are developed, and employees are managed (individually and collectively) in Exxaro.

Some 76% of our employees are represented by affiliated unions recognised by Exxaro subsidiaries: primarily National Union of Mineworkers (NUM), Solidarity, Association of Mineworkers and Construction Union (AMCU) and, most recently, Food and Allied Workers Union (FAWU) after concluding a recognition agreement at Ferroland.



## Recognised unions



We concentrate on maintaining sound relations with employees in bargaining units by engaging with their representatives. Negotiations for wages and conditions of employment are conducted through in-house forums and the Chamber of Mines. In 2015, we embarked on negotiations in both forums, with the in-house process concluded in November 2015 without any labour incidents. The Chamber of Mines process was also concluded in 2015 and, despite a related week-long strike that affected the entire coal industry, we engaged positively with our union stakeholders to arrive at an amicable settlement.

Exxaro's disciplinary codes are based on the principle of fairness as required by labour law, and our supervisors have the skill to implement the codes. Diversity training is ongoing throughout Exxaro. Confirming the commitment from all parties to build solid relationships, **no** grievances about labour practices were filed in the reporting period.

In consultation with our labour stakeholders, we concluded a number of section 189 closure processes in 2015 at Inyanda, New Clydesdale and AlloyStream as well as finalising the Tshikondeni closure. Although these processes are challenging, our relationships with stakeholders are a key factor in determining their outcome.

## Share ownership

Mpower 2012, our employee share ownership plan, was implemented three years ago with 7 290 participants each receiving 387 units worth R75 000, regardless of remuneration level or years of service. As employer companies in the group contributed cash to the trust to purchase shares, there is no loan to repay, so Mpower 2012 participants enjoy potential growth and profit from the outset. This



plan runs until May 2017 and new qualifying employees receive a pro-rated number of units.

Under Mpower 2012, over 6 900 participants received dividends totalling R5,3 million for the review period (2014: R14 million), and R23 million was paid as distributions to good leavers (2014: R9 million).

## ***Employment equity***

Almost ten years into our journey as one of the largest black-owned mining companies in South Africa, we continue our commitment to our people to ensure their progress and build their skills to fulfil our vision. Employment equity is just one way to realise this commitment, supported by continuous diversity programmes at our business units.

Our employment equity strategy is founded on detailed plans developed by each business unit in consultation with its employees and unions. These are updated annually and progress reported to the appropriate board committees (sustainability, risk and compliance; social and ethics) and government. In line with sound governance principles, we have reviewed our employment equity policy against recent legislative amendments.

By following these plans, each unit ensures that recruitment and skills development are managed responsibly, advancing transformation without affecting existing positions. Each business unit has a dedicated senior manager for employment equity, and an employment equity forum that ensures appropriate plans are developed, executed, monitored and communicated to employees.

Exxaro's staff complement was 7 610 at 31 December 2015 (2014: 7 841), split into employees in bargaining units (80,4%) and the management and specialist category (19,6%).

The breakdown of our annual employment equity reports, as submitted to the Department of Labour, is shown below. As these cover 1 August 2014 to 31 July 2015, totals differ from year-end numbers elsewhere in this report.

### ***Exxaro workforce by category and region***

Region	Bargaining unit					Management and specialist					
	Male	% of total workforce	Female	% of total workforce	Total	Male	% of total workforce	Female	% of total workforce	Total	Total
Gauteng	66	0,87	14	0,18	80	374	4,91	315	4,14	689	769
KZN	37	0,49	17	0,22	54	2	0,03	1	0,01	3	57
Limpopo	2 019	26,53	384	5,05	2 403	366	4,81	84	1,10	450	2 853



Region	Bargaining unit					Management and specialist					
	Male	% of total workforce	Female	% of total workforce	Total	Male	% of total workforce	Female	% of total workforce	Total	Total
Mpumalanga	2836	37,27	578	7,60	3 414	266	3,50	74	0,97	340	3 754
Foreigners	39	0,51	1	0,01	40	7	0,09	3	0,04	10	50
Expatriates	10	0,13	1	0,01	11		0,00		0,00		11
Local nationals	100	1,31	16	0,21	116		0,00		0,00		116
Total	5 107	67,11	1 011	13,29	6 118	1 015	13,34	477	6,27	1 492	7 610

\*Table reflects figures as submitted to the Department of Labour on 31 December 2015

For 2015, Exxaro's average employee turnover rate was 4,7% (2014: 6,8%), due to death, resignation, dismissal, VSP/section 189s and disability. The turnover rate by employee group is shown below:

#### **Breakdown of turnover – level**

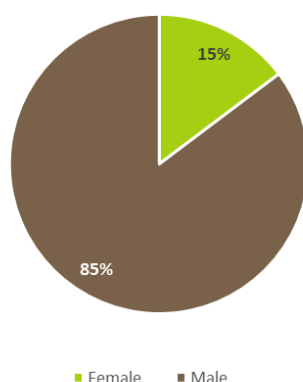
	Terminations Jan-Dec 2015	
	% workforce	Number
Top management	0,01	1
Senior management	0,17	13
Middle management	1,20	91
Junior management/skilled	3,47	264
Semi-skilled	4,19	319
Unskilled	0,88	67
Total	9,92	755

Note: Highest turnover in the junior management/skilled category specifically due to high turnover of artisans and miners.

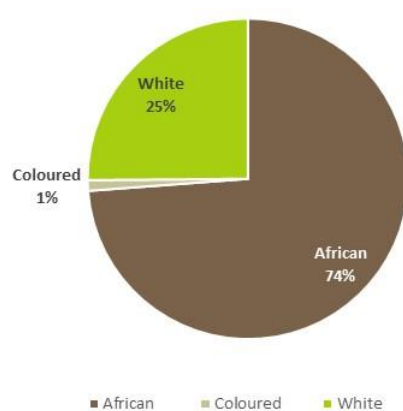




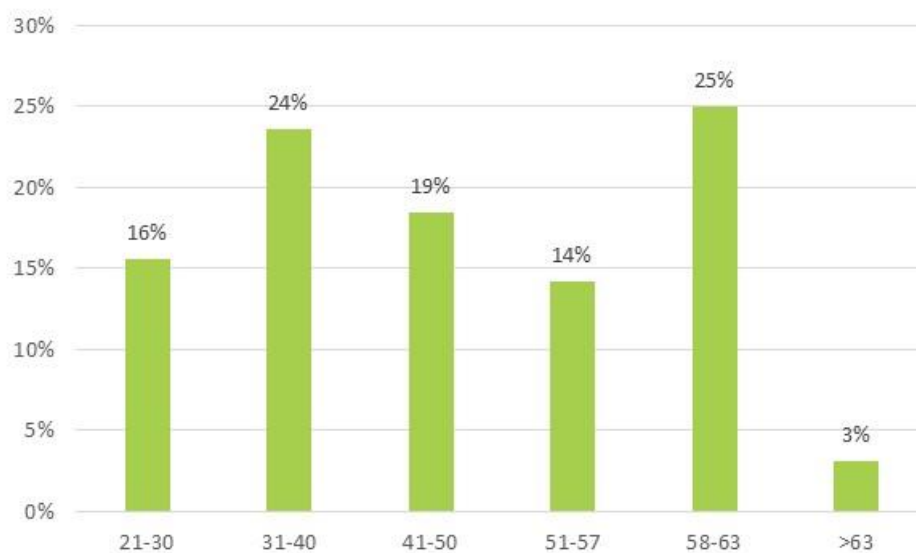
### **Breakdown of turnover by gender**



### **Breakdown of turnover by race**



### **Turnover per age group**



### **Remuneration**

Our remuneration policy (integrated report, page 50) includes guaranteed and variable components.

*Exxaro 2015 supplementary report*



These are critical to attract, motivate and retain the high-performing and talented individuals required to build a sustainable business.

There is no discrimination between the salaries of men and women in the bargaining unit category as collective agreements determine specific guaranteed minimum salaries. In the management and specialist category, individual salaries are strictly based on contracted performance.

### ***Eliminating discrimination and resolving grievances***

As an employer, Exxaro is firmly committed to the concept and practice of equal opportunity, irrespective of race, religion, gender, health status, sexual preference or nationality.

Our corporate values guide the way we do business, and discrimination on any grounds is not acceptable. Managers and supervisors are continuously trained on the appropriate application of disciplinary measures should the need arise.

### ***Human rights policy***

Exxaro complies with labour legislation in South Africa and International Labour Organization guidelines. As a signatory to the United Nations Global Compact, we encourage freedom of association and collective bargaining, ensure child labour is not tolerated and that forced or compulsory labour is not practised.

The group's compliance with legislation and international conventions was audited by our internal auditors and confirmed in the prior period.

Our induction programmes educate employees about human rights. Policies on discrimination, harassment and racism are in place, as are structures to protect employees' human rights in the workplace. Security personnel are fully trained on human rights aspects relevant to each operation. Refresher courses also cover human rights issues.

### ***Women in mining***

In Exxaro, women make up 19% of the workforce, and we focus on attracting women through our talent pipelines. Although this is a challenge, women comprise 33% of young professionals-in-training, 27% of our full-time bursars in engineering and mining at universities and 29% of the intake to learnerships and skills programmes.

### ***Housing***

To comply with both the mining charter and our own business needs, we have focused on homeownership, under a long-term housing strategy.

Since introducing a mortgage repayment subsidy for first-time homebuyers who are permanent employees in 2009 – a period marked by the unprecedented scarcity of bank mortgage finance – 312 employees have benefited.

In addition, a housing assistance scheme was piloted at Arnot in 2013 with a capital amount of R75 000 after tax. This was extended to all business units in 2014 and the capital amount increased to R125 000 after tax. This will assist first-time homeowners on specific salary grades to become home owners. To date, 182 employees have benefited from this initiative.

Both schemes focus on making homeownership more affordable, especially for employees on lower income levels.

To comply with the mining charter, over the past five years Exxaro has converted all its hostels into single-quarter accommodation or family units, improving the quality of life for over 930 employees.

While our housing policy focuses on homeownership, bargaining unit employees receive a housing or living-out allowance. The housing allowance is paid to employees with a registered bond (2015: 977 employees) and the living-out allowance to those renting accommodation (2015: 2 084). The value of these allowances in 2015 was over R63million.

## ***Community education***

In 2015, 267 community members were enrolled for ABET programmes through Exxaro initiatives.

Learner development and teacher development programmes are in place at Grootegeeluk, North Block Complex, Inyanda and Leeuwpan. These are conducted by volunteers/teachers to support learners and teachers in mathematics, physical science, English and career guidance:

- Grootegeeluk: Over 600 learners from 16 schools benefited from the first phase of the holiday school programme in Lephalale and surrounding villages. This is part of a broader education initiative that includes Saturday and holiday classes in key subjects and career guidance, as well as teacher and principal development programmes. A number of other programmes have been implemented: a whole school development initiative at Mabalane Seleka Technical School (including infrastructure upgrades, resourcing, and staffing assistance); funding to improve literacy among hearing-impaired learners at Sedibeng School for the Deaf.
- Inyanda: As part of its social and labour plan, Inyanda launched a similar programme with extra classes for grade 10, 11 and 12 learners from Pine Ridge Combined School in the Klarinet community on Saturdays and school holidays to improve pass rates. The project was initiated with the consent of the Department of Basic Education, and will provide a steady flow of local learners suitable for our bursary and artisan programmes. The school's pass rate in matric



improved from 76% in 2013 to 92% in 2015.

- Leeuwpans: Over 1 500 grade 10 to 12 learners from five local schools received extra tuition in mathematics, physical science, life sciences, accounting, geography and economics.
- North Block Complex: Over 300 grade 12 learners from eight schools in the Emakhazeni circuit benefited from a Saturday and holiday school programme; training was conducted for grade 9 teachers to improve annual pass rates in mathematics and English; and science practicals were conducted for grade 11 learners. As a result, the pass rate improved from 71% in 2013 to 87% in 2015.



## Communities

*Refer to the online 2015 annual report of Exxaro Chairman's Fund and Exxaro Foundation*

### **Message from the chairman of Exxaro Chairman's Fund and Exxaro Foundation**

Despite the many successes Exxaro and the industry have recorded to date, socio-economic development (SED) challenges in South Africa have only increased over the last year. We can blame the global economic downturn and depressed commodity prices to some extent. We can also attribute this to ongoing local governance and service delivery challenges. Whatever the reason, the outcomes are the same – job losses and more hardship for more people – and even greater expectations from communities for business to provide a solution.

As an industry, we are trying. However, the gap between what is delivered and what is required continues to widen. This trend has crystallised the thinking and actions of the trustees of the Exxaro Chairman's Fund and Exxaro Foundation as well as our community development management team.

Over the last year, our approach has expanded to accommodate not just mining industry requirements, but also those included, for example, in the broad-based black economic empowerment (BBBEE) codes. Enterprise and supplier development is becoming a major focus for us, and a challenge. In the past, we built houses and donated them to the community. Now we start by creating or using existing business incubators, identify potential suppliers or beneficiaries, mentor them about entrepreneurship and business development to become registered suppliers and contractors to Exxaro and end by encouraging them to build or buy houses for themselves.

The need to find sustainable solutions is critical in the journey towards strategic, integrated, impactful development. Our activities over the last year will help us achieve this objective:

- We approved a defined and measurable community development strategy that aligns related priorities with business objectives and competencies
- We consolidated our thinking into an outcomes-based approach that emphasises the quality of socio-economic impacts over inputs and outputs
- We captured our SED projects onto Exxaro's enterprise-wide project management system. Using our engineering and project management skills, we can more closely monitor project implementation on timing, cost and quality.

The implementation of social return on investment (SROI) measures in 2015 has taken community development practice to the next level. We can now use 'expected SROI' as a determinant for investment, ie we can more accurately predict a project's chances of success, which in turn enables us to target our funds more scientifically.

We can also see the effectiveness of our initiatives. There is ample proof in the performance metrics of our education initiatives in particular. Given the success of the whole school, principal, teacher and learner development programmes, we will continue to emphasise (and budget for) such projects.

We regard Exxaro as a tenant of its host communities, not the landlord, and a successful relationship with communities is therefore fundamental to our business success and growth. Given the growing societal needs, our engagement with communities, local authorities and government must continue to improve.

Due to its holistic nature, SED requires a broad knowledge of local conditions and stakeholders, and of finance, project management, human resource management, business acumen, negotiation and, most of all, listening skills – in short, it needs highly skilled individuals. In addition, we constantly need to recalibrate our community development initiatives against changing local, provincial and national needs. Sourcing these skills, and creating this flexibility and adaptability, will be a challenge that we will need to address going forward.

Another focus in 2016 will be to further link and direct our SED investments to our sustainability dashboard where we measure a number of metrics according to our sustainability framework in a model centred on managing our ‘capitals (natural, human, social, intellectual, manufactured and financial capital). Balancing the impact of our activities with the outcomes of other activities is the objective of the six capitals management model.

## **Rian Strydom**

Chairman

Exxaro Chairman's Fund and Exxaro Foundation

*Note: These are registered public-benefit organisations (section 30 of the Income Tax Act) to channel resources for the group's socio-economic development programme. They are managed by a board of trustees comprising Exxaro employees (appointed for three years), and an external person per trust appointed on expertise. Trustees meet quarterly to consider proposals from teams at business units and all appointments are made by the Exxaro executive committee. Trustees oversee adherence to:*

- *Aligning the trust's activities with Exxaro's integrated socio-economic development strategy and policies*
- *Ensuring projects being considered pass the test of financial sustainability and good governance*
- *Monitoring progress of approved projects and evaluate impact.*

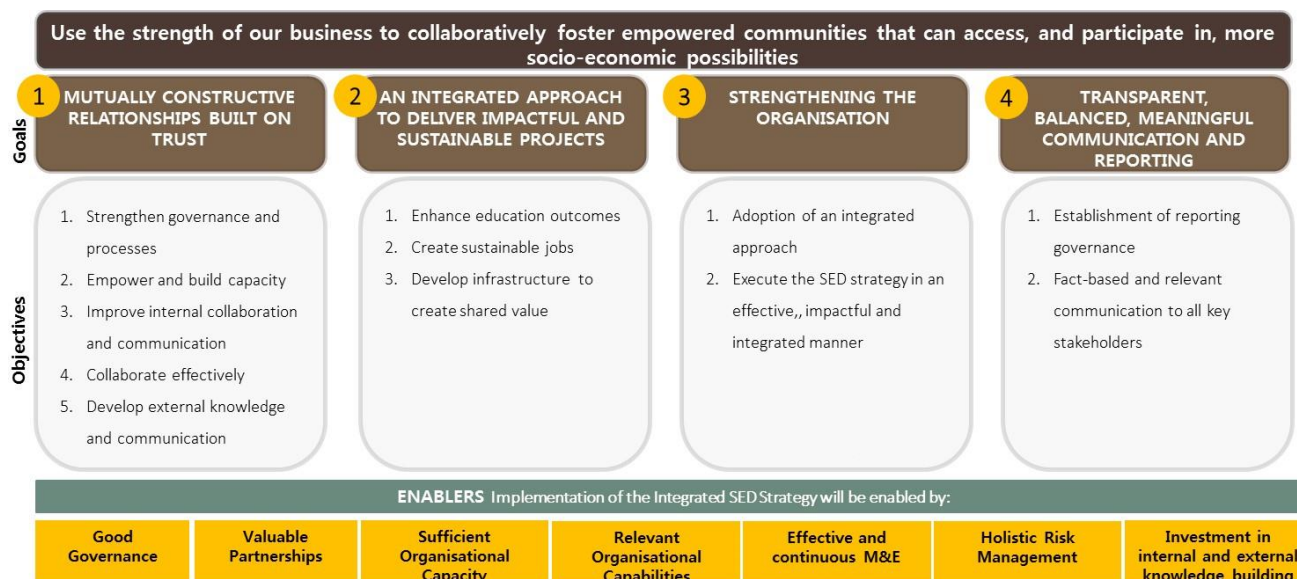
## **Highlights**

- Development of the social return on investment model, with implementation beginning in 2015
- Public-private partnership participation

We believe socio-economic development is about more than building roads, schools or bakeries. It is about building the capacity of a community to become self-reliant and resilient. This belief was the cornerstone of our socio-economic development (SED) strategy.

*Exxaro 2015 supplementary report*





## Community development

In 2014, we aligned our reporting with the guidelines of the Global Reporting Initiative (GRI) and framework of the International Integrated Reporting Committee (IIRC) by detailing the rationale, policy and procedures that determine our community development activities. In this report, we detail our progress against our current and future drivers for community development to:

- Meet compliance obligations
- Maintain social licence to operate
- Manage reputational and stakeholder-related risks
- Create shared value for business and the community.

### Supporting the entire value chain

All Exxaro's community development activities, including SLP/LED projects and donations, are focused on supporting the whole value chain – starting with education and skills training and ending with enterprise development and infrastructure. These areas are also relevant and strategic to South Africa's socio-economic development, and reviewed periodically to ensure their materiality and relevance:

- **Education:** We believe this is the bedrock of a strong community and we invest a significant portion of our budget in ensuring schools in the area produce educated individuals. Currently, we run Saturday and holiday schools at all operations, where the focus is on increasing learner performance in key subjects and developing the skills of teachers. In addition, selected schools are earmarked for the whole school development programme to improve and support their academic, management, infrastructure, social and security environment.
- **Infrastructure development:** Without proper infrastructure such as housing, community



centres and roads, no rural community can hope to start building the rudiments of a sustainable society.

- **Enterprise and supplier development:** The goal is to help establish and grow small and medium enterprises (through business incubators, financial support and other initiatives) so that money can circulate within the community.
- **Skills development:** Providing post-matric skills (learnerships, artisans, graduates) that will enhance community members' employability. We also offer bursaries and bridging school programmes to community members close to our operations.
- **Agriculture:** Since this sector is the biggest creator of rural jobs and helps alleviate poverty and hunger directly, operations are encouraged to embark on such programmes.
- **Community health:** While not a major focus area, we have embarked on several health-related projects, such as peer educator programmes to tackle HIV in communities, and establishing community clinics. A formal community health project for chronic diseases is being implemented.

To comply with legislative requirements, and our sustainable development strategies and policy, we focus on identifying and evaluating activities or projects where at least 75% of beneficiaries are black South Africans. By extension, this means that at least 75% of the value of all contributions to the Exxaro Foundation or Chairman's Fund directly benefits black South Africans in communities around our operations.

To further the body of knowledge on sustainable development, Exxaro also supports initiatives at tertiary level by funding research chairs: In 2015 Exxaro supported the global change and sustainability chair at the University of the Witwatersrand (Wits) which focuses on water, sustainability and social interventions. At the University of South Africa, the chair in business and climate change addresses climate change as one of the major challenges of the 21st century. A chair in energy efficiency, established with the University of Pretoria (UP), focuses on energy efficiency research, service and development. Regrettably, due to the current global commodities crisis, Exxaro will continue to support only the Wits and UP chairs for the foreseeable future.

**Mineral Education Trust Fund:** Through its ongoing commitment to this fund, Exxaro and other mining houses supplement the salaries of academics in engineering fields to retain them in academia and ensure their knowledge is transferred across the pipeline of graduates to deliver quality talent for the industry.

**Welfare organisations:** Exxaro continues to donate to a number of organisations, including the Beeld Children's Fund, Headway, Cotlands and Pretoria School for Children Living with Disabilities.



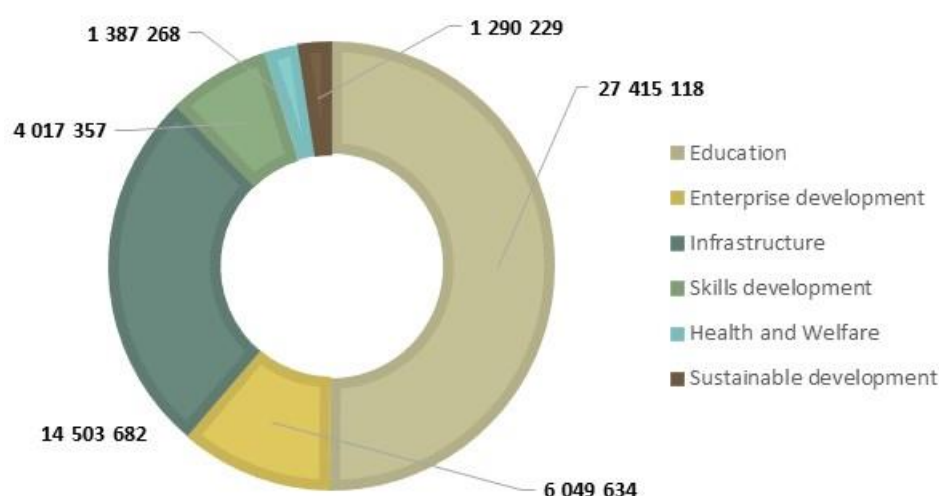
## Maintain social licence to operate

Exxaro's budget for social and labour plan/local economic development (SLP/LED) projects is determined over a five-year period and based on net operating profit after tax after considering the needs and focus areas of each community and the DMR. The budget is approved by the trustees of the Exxaro Chairman's Fund and Exxaro Foundation and executive committee.

In consultation with the DMR as part of our SLPs, the approved budget for SLP/LED projects for 2013-2017 is R300m. Discretionary and other donations (such as donations in kind) form part of our operational budgets.

In 2015, an estimated 397 jobs were created and 2783 people in our communities benefited indirectly from our total investment via the Exxaro Chairman's Fund and Exxaro Foundation of R56,3 million on approved SLPs (2014: R65,5 million), mainly on education (teacher and learner development) and infrastructure (building roads and houses). In 2015, the proportion spent on community development initiatives was almost 2% of net profit after tax.

### Investment per focus area 2015 – total R54,6 million



### Exxaro's current social and labour plan/LED projects

Project	Investment	Progress	Beneficiaries
Belfast tissue-making project	Budget: R600 000 Expenditure: R1,64m	Project completed but not sustainable in current format. Phase 2 launched to resuscitate project	4 remaining
Belfast brick-making	Budget: R1,5m	Project completed but not sustainable in	1 remaining

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Project	Investment	Progress	Beneficiaries
project	Expenditure: R1,68m	current format. Phase 2 launched to resuscitate project. Funding for phase 2 secured	
Belfast bakery project	Budget: R1,3m Expenditure: R2,4m	Project completed. Bakery breaking even with small profit	15
Belfast RDP housing	Budget: R1,57m Expenditure: R1,27m	Houses completed. Phase 2 to supply water and sewer systems in progress	Houses handed over to municipality, but no houses handed over to beneficiaries
New Clydesdale bakery	Budget: R4,04m Expenditure: R1,1m	Structure completed. Bakery equipment being procured.	None yet
Grootegeluk agriculture corridor	Budget: R6,0m Expenditure: R1,8m	Established phase 2, one successful business within first year	Phase 2: 6
Grootegeluk building roads	Budget: R71,2m Expenditure: R1,5m	Two roads totalling 48km being constructed	18 000 residents. 200 direct beneficiaries in construction phase
Grootegeluk education programme	Budget: R27,7m Expenditure: R7,8m	Phase 1 completed: teacher development programme, learner development programme, resourcing technical school (science lab, computer equipment), school staffing support (6 teachers, 8 students)	1 112 learners, 80 teachers
Grootegeluk enterprise development	Budget: R8,5m Expenditure: R1,0m	Enterprise and supplier development centre operational since April. Three entrepreneurs in full incubation, five entrepreneurs in pre-incubation	8 entrepreneurs 214 indirect beneficiaries (employees)
Grootegeluk Re Ka Kong poultry	Budget: R1,1m Expenditure: None	Scope is 90% finalised, to be followed by tender process for implementation	6 and a possible 2 contractors during construction
Grootegeluk community hall upgrade	Exxaro Budget: R1,5m Municipality budget: R1,3m Expenditure: R2,1m	Renovation of the community hall is 80% complete. Construction of the gym is 70% complete.	13 from the community during construction. Local SMME contractor with 6 full-time employees
Grootegeluk Thusanang bakery	Budget: R2,5m Expenditure: R0,3m	Construction is 80% complete. Request for tenders on training, mentoring and supply of bakery equipment	12 identified
Inyanda education programme	Budget: R7,5m Expenditure: R3,2m	Phase 1 completed. Whole school development Pine Ridge Combined School. Learner development, teacher development.	196 learners, 22 teachers

*Exxaro 2015 supplementary report*



Project	Investment	Progress	Beneficiaries
Inyanda Klarinet library	Budget: R5m Expenditure: R0,2m	Project only approved at end 2014	In construction phase 20 beneficiaries will be contracted
Inyanda Klarinet sport field	Budget: R12m Expenditure: R1,4m	Construction under way on: <ul style="list-style-type: none"> <li>- Soccer field</li> <li>- 2 netball courts</li> <li>- Pavilion with change rooms</li> <li>- Medical room</li> <li>- Caretaker's office and quarters</li> <li>- Conference room</li> <li>- Portable pavilion</li> </ul>	Some 60 construction workers from community contracted Learners from 5 schools
Inyanda Butterfield bakery	Budget: R3,97m Expenditure: R3,59m	Project completed but not sustainable in current format. Funding secured for phase 2 to resuscitate project	12
Inyanda artisan development programme	Budget: R1,6m Expenditure: R0	Skills survey under way	None yet
Leeuwpans education programme	Budget: R11,17m Expenditure: R465 000	Phase 1 completed. Learner development programme for grade 12s	512 grade 12 learners
Leeuwpans TVET (tertiary vocational education and training) college	Budget: R6,6m Expenditure: R4,3m	Construction is 70% complete. Crèche to be built before current crèche converted to offices	5 SMME contractors
Leeuwpans crèche	Budget: R0,8m Expenditure: None	To start with detail design	Once in construction, the contractor will be SMME from community and some 5 construction workers will be appointed
Leeuwpans multi-purpose centre	Budget: R2,0m Expenditure: R2,3m	Construction 95% complete, minor issues to be addressed	3 SMME contractors
Matla refuse truck	Budget: R2,0m Expenditure: None	Second truck purchased, with 3-year maintenance plan.	6 once truck is operating
Mogol Academy	Budget: R4,9m Expenditure: R0,8m	Classes for ABET and civil skills training have already started.	2015 enrolment for ABET and civil skills of 95, with 17 staff
North Block Complex education programme	Budget: R5,7m Expenditure: R2,2m	Phase 1 completed. Learner development for grade 12s, teacher development programme, 8 schools	321 learners, 40 teachers

*Exxaro 2015 supplementary report*



Project	Investment	Progress	Beneficiaries
Tshikondeni Mukomawabani community hall	Budget: R2,3m Expenditure: None	Project funds approved, detail design phase under way	Some 25 construction workers from community will be contracted. Community SMMEs will supply building materials
Tshikondeni RDP houses	Budget: R10,7m Expenditure: None	Project funds approved, detail design phase to begin	Some 50 construction workers from community will be contracted while local SMMEs will supply building materials
ECC	Budget: R3,3m	Upgrade of 1,2km stormwater channel at eMbalenhle (near Secunda)	Local community near Forzando operation

### ***Manage reputational and stakeholder-related risks***

A harmonious working relationship with communities that host our mining operations is fundamental to managing the inherent risks of our business. Our integrated approach aims to:

- Give credence to Exxaro's stated strategic objective of being a caring, responsive and responsible organisation that contributes to the sustainability of communities it operates in
- Ensure social cohesion in areas where we operate
- Strive for collaborative and consultative community stakeholder engagement
- Manage negative impacts and tensions created by our mining activities
- Position Exxaro as a champion of community development
- Forge partnerships with community stakeholders with the same vision and approach to community development
- Provide business unit managers with objective data and comprehensive information on the material conditions and perceptions of host communities to develop and implement suitable plans.

### ***Create shared value for business and the community***

To ensure Exxaro creates social value in its community projects, we conducted social return on investment (SROI) assessments in 2013. This is a framework for measuring value created based on the perspective of each stakeholder who experiences or contributes to the change. SROI tells the story of how change is being created by measuring social, environmental and economic outcomes, and valuing these in monetary terms. This enables outcomes to be expressed as a ratio of benefits to costs for each project, ie the social, economic and environmental return for every R1 invested in a project.

*Exxaro 2015 supplementary report*



Exxaro will support social projects with an SROI of at least 2.

To support our operations, we developed a handbook and generic toolkit on implementing and evaluating projects against SROI principles, and all our community specialists and practitioners were trained. The toolkit provides simple, practical guidance on strategically developing our communities, tools to assist with governance structures for community development and progressing a project from start to end, supported by theory, best practice and Exxaro-specific examples.

### ***Employee volunteerism***

We believe every employee plays a role in community development, which is also in line with our business philosophy of creating socially-conscious employees.

The Exxaro staff volunteerism programme forms part of our integrated socio-economic development strategy and is intended to strengthen our employees' strong social conscience and instil an unrelenting commitment to make a difference in the communities in which we operate.

### ***Sustainable procurement***

To ensure the sustainability of our supply chain, we aim to procure goods and services from suppliers that demonstrate commitment to sustainable business practices and support our compliance to the mining charter. We also consider future alignment of the charter with the Amended Codes of Good Practice (Department of Trade and Industry).

Exxaro has identified green procurement, HDSA procurement (with increased focus on local procurement) and sustainable supplier engagement as key elements of sustainable procurement. Our enterprise resource planning system codes, tracks and monitors 'green' purchased items.

In terms of sustainable supplier engagement, we communicate a supplier code of conduct on our website, spanning purchase orders and request-for-quotation processes. The timeframe for the web-based supplier audit and engagement capability, expected to be operational by the end of 2015, is being re-evaluated in terms of platform integration.

### ***Supply chain management***

Our commitment to procuring from BEE entities (including black-owned, -empowered, woman-owned) is reflected in increased procurement from these companies, from 71% in 2014 to 78% in 2015 in the services category.

Measured against mining charter definitions, Exxaro spent R7 billion in 2015 with qualifying BEE entities, exceeding procurement targets for capital, services and consumables. Exxaro therefore complies with preferential procurement criteria set out in the DMR scorecard at enterprise level.

*Exxaro 2015 supplementary report*



### ***Preferential procurement from BEE entities as per mining charter targets (DMR) for 2015***



### ***Contractor management***

Exxaro focuses on its core activities and subcontracts specialist tasks. At any point, hundreds of contractors are moving through our sites, presenting specific health, safety and environmental risks. Contractors must adhere to group standards as part of our legal compliance process. As such, managing contractors is now a key compliance indicator in its own right.

With all contractor employee data captured on Exxaro's HR database, we are able to monitor, control and enforce compliance. The system also provides accurate and timely business information, and effective forecasts of people-related statistics (from medical surveillance to e-learning).



## Our environment

Natural resources like water, air, biodiversity and land are central to our business. We focus on responsible use by conserving natural resources and reducing the burden of pollutants on the environment through:

- Ensuring all activities are properly authorised
- Complying with all statutory environmental requirements as a minimum
- Using energy and water as efficiently as possible
- Conducting activities responsibly from the twin perspectives of compliance and natural resource use
- Actively participating in voluntary benchmarks, such as the global carbon and water disclosure projects
- Developing innovative policies and programmes to address environmental impacts and use of natural resources.

Comprehensive group standards have enhanced the implementation of legal requirements and sustainable use of natural resources. These include management standards for air quality, water, energy, rehabilitation and mine closure, and environmental incident management and reporting.

All Exxaro's business units have ISO 14001 accreditation, reflecting the global industry standards in place to minimise environmental impacts.

All our South African operations have environmental management programmes (EMPs) as required under the Mineral and Petroleum Resources Development Act (MPRDA) and National Environmental Management Act (NEMA). These are key indicators in ensuring Exxaro remains a sustainable business. We also adopt the precautionary principle entrenched in NEMA in evaluating the environmental impacts of business opportunities.

Many of our operations have now been granted integrated water use licences (most Exxaro business units need more than one licence). In outstanding areas, Exxaro's water use is permitted under the Water Act 54 1956.



## Highlights

- Six integrated water use licences (IWULs) granted
- Five environmental authorisations granted
- Environmental management plan approved for Grooteegeluk infrastructure projects.

## Lowlights

- Delays in obtaining environmental licences for new projects such as Glisa water treatment plant
- Delays in finalising appeals lodged against some projects such as Thabametsi and Belfast.

## Exxaro's green timeline

2015	<ul style="list-style-type: none"><li>• Exxaro won a Global Green Award 2014 for its environmental and world-class sustainable practices</li></ul>
2014	<ul style="list-style-type: none"><li>• Cennergi: construction of two wind farms under way</li></ul>
2013	<ul style="list-style-type: none"><li>• Cennergi: construction begins on Amakhala Emoyeni and Tsitsikamma wind farms</li><li>• Agreement with GDF SUEZ on independent power production for energy security</li><li>• Agreement with Linc Energy on underground coal gasification focuses on cleaner energy</li></ul>
2012	<ul style="list-style-type: none"><li>• Carbon footprint significantly reduced</li><li>• Cennergi preferred bidder on two wind energy projects totalling 234MW</li></ul>
2011	<ul style="list-style-type: none"><li>• Launched biodiversity, waste and air programme</li><li>• Formed stand-alone energy company, Cennergi, with international energy partner</li><li>• R107 million spent on developing cleaner energy initiatives – cogeneration, carbon credit trading, renewable energy, biodiesel, coal-bed methane development and coal base-load projects</li></ul>
2010	<ul style="list-style-type: none"><li>• Major water management programme introduced</li><li>• Developing renewable energy projects</li></ul>
2009	<ul style="list-style-type: none"><li>• Comprehensive response developed to energy, carbon and climate change management</li></ul>
2008	<ul style="list-style-type: none"><li>• Energy efficiency task team established, with voluntary champions at each business unit</li><li>• Sponsors Unisa chair in business and climate change for three years</li></ul>
2007	<ul style="list-style-type: none"><li>• Carbon emissions reported for the first time (19 million tonnes of CO<sub>2</sub>e)</li></ul>
2006	<ul style="list-style-type: none"><li>• Exxaro adopts Energy Efficiency Accord</li></ul>





## ***Focus areas***

After a strategic review of key environmental risks from Exxaro's operations, the following challenges were identified (dealt with in specific sections of this report):

- Air quality management
- Water quality management, security of supply
- Hazardous waste management
- Biodiversity management
- Ongoing rehabilitation
- Cost of, and provision for, environmental liabilities
- Lead time for securing environmental authorisations
- Improving compliance to granted environmental licences
- Increasing statutory and non-statutory environmental requirements.

## ***Legal compliance***

South African mining companies are heavily regulated, with compliance centred on receiving, converting and retaining all mining rights. To ensure we continue to meet legal requirements as a minimum, compliance across Exxaro is monitored by two board-mandated entities: the sustainability, risk and compliance committee as well as the social and ethics committee.

Running all our operations with approved EMPs is fundamental to our sustainability and legal compliance. Some EMPs are being updated to align to the MPRDA and to include new developments. As applications for various projects are at different stages of regulatory assessment, we continuously engage with the relevant authorities, agencies and other stakeholders to expedite these licences.

In 2015, five environmental authorisations (under NEMA) were granted for FerroAlloys expansion, Thabametsi, Belfast Rietkuil siding, Matla mine new shaft and Leeuwpan block OI, and the environmental management plan (MPRDA) approved for Grootegeeluk's infrastructure projects.

Exxaro received no environmental stoppage directives during the review period. A fine was issued to ECC Tumelo Coal, which has been paid and an environmental authorisation is awaited from the authorities.

### ***Status of integrated water use licences***

Water use for most Exxaro operations is authorised under the old Water Act (1956). In recent years, after all operations submitted their integrated water use licence (IWUL) applications, we have steadily migrated these authorisations to the National Water Act (1998). By January 2016, 12 IWULs were approved (not shown here) and **four** pending.



Business unit	Status
Grootegeeluk cyclic ponds	Pending
Char plant II	Pending
Coke and co-generation	Withdrawn
Grootegeeluk infrastructure projects	Pending
Arnot consolidated	Pending
Arnot Mooifontein portion 5	Pending
Arnot Mooifontein portion 1, 7 & rem	Pending
Inyanda siding	Pending
NBC Strathrae	Pending

### **Incident reporting**

Using a standardised reporting system, all business units manage incidents effectively, resulting in a safer and more sustainable work environment. In 2015, 18 level 2 incidents occurred and were reported to the relevant authorities. Corrective actions to remedy the incidents and prevent recurrence were approved by authorities prior to implementation. There were no significant (level 3) incidents in 2015.

### **Environmental incidents – group**

Business unit	Level 1		Level 2		Level 3	
	2015	2014	2015	2014	2015	2014
Arnot	48	-	7	-	-	-
Char plant	-	14	-	2	-	-
Durnacol	-	-	-	-	-	-
Grootegeeluk	24	14	1	1	-	-
Hlobane	-	-	-	-	-	-
Inyanda	-	3	-	-	-	-
Leeuwpán	19	92	-	-	-	-
Matla	46	25	10	-	-	-
New Clydesdale Colliery	-	-	-	-	-	-
North Block Complex	-	3	-	-	-	-
Tshikondeni	-	1	-	-	-	-
<b>Total</b>	<b>137</b>	<b>152</b>	<b>18</b>	<b>3</b>	<b>0</b>	<b>0</b>

Level 1: Minor impact and/or non-compliance

Level 2: Intermediate impact and/or non-compliance

Level 3: Major impact and/or non-compliance



### ***Environmental incidents – level 2***

Business unit	Description	Receiving environment	Response
Grootegeluk	Bulk diesel spill	Possible soil/groundwater pollution	Diesel was contained by the bund areas and emergency plan initiated
Matla	Erosion along river bank	Possible soil pollution	Contractor appointed to conduct biomonitoring at river diversion and suggest engineering solutions to manage erosion and alien vegetation
Matla	Alien vegetation	Indigenous plant species	As above
Matla	Sewage treatment works malfunctioning	Surface water (Rietspruit)	Following an assessment in May 2015, immediate remedial enhancements completed with longer-term plans to improve effluent quality to comply with the Rietspruit resource quality objectives
Matla	Potholing on portions of the shaft area route and surrounding surface area allowing water to pond	Possible soil/groundwater pollution	Phased repair of potholes under way
Matla	Water ponding in broken concrete area	Possible groundwater pollution	Phased repair of potholes under way
Matla	Mine 2 sewage treatment works' effluent does not comply with the Rietspruit resource quality objectives	Surface water (Rietspruit)	Improvements were identified in May 2015 that needed to be done on the sewage works in order for it to operate efficiently. Some of the proposed actions from the assessment report have been implemented already and longer term actions have been planned for implementation in order to get the sewage treatment works effluent quality to comply with the RQO.
Matla	Potholing at workshop area	Possible soil/groundwater pollution	Phased repair of potholes under way
Matla	Oil spillage from contractor truck	Possible soil/groundwater pollution	Spillage cleaned up

*Exxaro 2015 supplementary report*



Business unit	Description	Receiving environment	Response
Matla	Leak in oil store at mechanical workshop	Possible soil/groundwater pollution	Leak cleaned up and source removed
Matla	Cracked bund wall	Possible soil/groundwater pollution	Project registered to upgrade fuel depot at mine 2, which will include upgrading the bund wall
Arnot	Oil spillage at 8 shaft	Possible soil/groundwater pollution	Sawdust applied to contain the spillage and external specialist appointed to conduct final clean-up to avoid further soil contamination
Arnot	Overflow from pollution control dam 1 (PCD) at 8 shaft	Possible soil/groundwater pollution	Pump installed to pump additional water from PCD 1 into PCD 2, which has more storage capacity
Arnot	Mine pan (dirty water pan) overflowing into neighbouring environment	Surface/groundwater pollution	Water diverted to avoid further overflow, and a water sample sent for analysis
Arnot	Water from Mooifontein pit flowing into neighbouring farmer's land	Surface/groundwater pollution	Water sample sent for analysis. Additional pump line installed to transfer water into another pit
Arnot	Oil spillage next to mechanical workshop, at 8 shaft	Possible soil pollution	Internal section 55 issued to the shaft, and uplifted once area had been cleaned to the satisfaction of the environmental department
Arnot	Pipe burst on a truck carrying oil	Possible soil pollution	Area cleaned and cleared of contaminated soil
Arnot	Surface transformer exploded, spilling oil onto bare soil	Possible soil pollution	Contaminated soil cleared and area cleaned

## Air quality

As a mining group, air quality is a risk to Exxaro on several levels, particularly dust and other pollutants (eg PM<sub>10</sub> and PM<sub>2.5</sub>) from opencast operations. Accordingly, we focus on:

- Minimising impact on the receiving environment
- Full legislative compliance
- Air quality management planning
- Risk management
- Monitoring, measurement and reporting.

### Air quality management initiatives

Objectives	Critical success factors	What	When	Progress
Compliant, sustainable air quality management system, managed and controlled by trained specialists at business units	Integrated air quality management planning in core operational processes	Baseline assessments Impact assessments Optimise monitoring programme	Third quarter 2015 Third quarter 2015	Baseline assessments and impact assessments completed in some business units and under way in others as part of the group-wide air quality management initiative
Ensure Exxaro's air quality framework enables sustainable business growth		Develop air quality management plans Performance review	Third quarter 2015 Third quarter 2015	Air quality management plans developed for most business units. Work under way to complete the balance

### Long- and short-term goals for air quality management

Goals	Target	Progress 2015
Initiating smaller particulate matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) monitoring at business units close to sensitive receptor areas	2016	Particulate monitoring initiated in some business units
Redesigning dust fallout and PM <sub>10</sub> monitoring networks in our business units, in line with mining schedules. This will ensure fair representation and accuracy of monitored data	2016	Dust fallout networks redesigned in most business units
Meteorological monitoring to ensure availability of surface data for temperature, wind direction, wind speed, and	2017	Meteorological stations purchased by some business units, with a



Goals	Target	Progress 2015
more. This data will be used for dispersion modelling, baseline characterisation, dust fallout monitoring and reporting, etc		commitment to purchase more
Ensuring compliance to air quality standards and guidelines in the country	2016	Most business units currently monitor dust fallout and results are assessed for compliance to national dust regulations.

### ***Emissions from mining operations***

Daily measures ensure we address the challenges of Exxaro's dust-generating activities (blasting, drilling, crushing and screening, vehicle entrainment, materials handling and wind erosion of exposed operational areas). These include applying dust-suppressant agents on haul roads, watering secondary unpaved operational roads, vegetating topsoil stockpiles and overburden material.

All mining operations monitor daily dust fallout rates and results are assessed against national regulations. Although our operations are classified under the non-residential limit, some are close to residential areas. As such, we track our compliance against the more stringent residential limit (600mg/m<sup>2</sup>/day) instead of the non-residential limit (1 200mg/m<sup>2</sup>/day) to minimise the impact on residents.

We continue to concentrate on improving our mitigation measures for operational activities that contribute significantly to dust. This will ensure fallout dust is reduced to the residential limit.

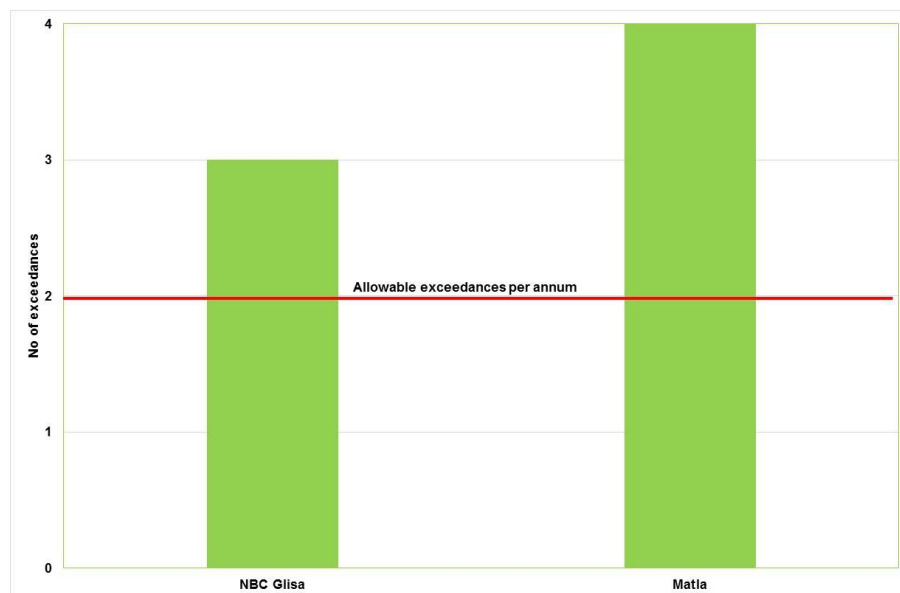
Comparing Exxaro's dust-fallout rate against the regulated non-residential limit (1 200mg/m<sup>2</sup>/day), no operation exceeded the two allowable annual limits in 2015.



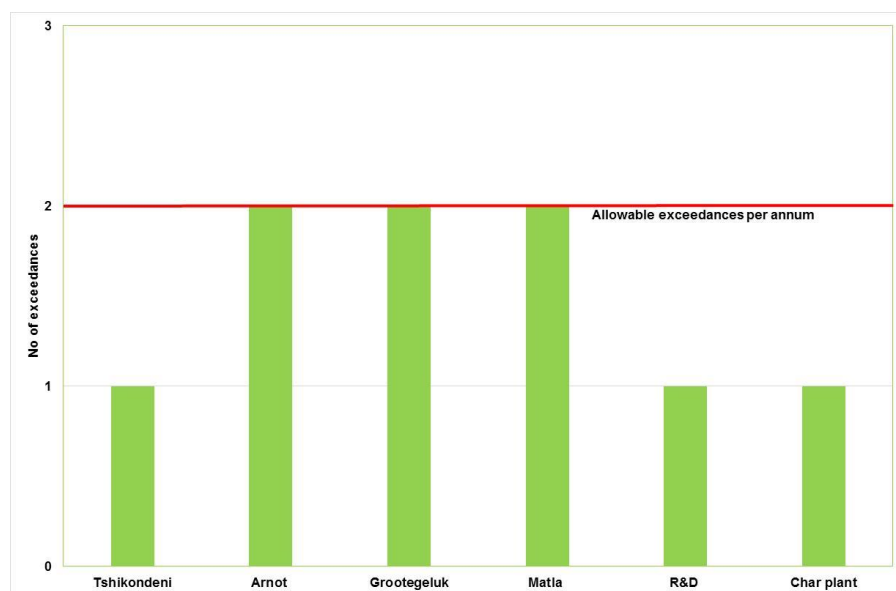
### Dust fallout – 2015

Target	2015	2014	2013	2012
Coal: 300mg/m <sup>2</sup> /day	173	335	351	480

### Residential limit (600mg/m<sup>2</sup>/day) – January-December 2015



### Non-residential limit (1 200mg/m<sup>2</sup>/day) – January-December 2015



## ***Climate change and carbon footprint***

### **Definitions and context**

**Scope 1:** Direct greenhouse gas (GHG) emissions, measured in tons of carbon dioxide equivalent (tCO<sub>2</sub>e) from sources owned or controlled by Exxaro, eg emissions from diesel, petrol, gas and anthracite combusted in day-to-day mining operations

**Scope 2:** GHG emissions from electricity generation by Eskom, purchased by Exxaro

**Scope 3:** Emissions outside our control but emanating from our products or activities, eg a customer burning coal sold by Exxaro.

The scope 1, 2 and 3 emission protocol provides a common measurement platform to compare firms, aggregate data to national level and compare countries. South Africa has set arguably the most aggressive carbon abatement targets of any developing country: to reduce emissions by 34% below business-as-usual by 2020, and 42% by 2025.

### ***Carbon footprint***

Operational activities are guided by our climate change response strategy. A dedicated steering committee oversees related improvement projects and activities, and ensures these are aligned with Exxaro's climate change position statement.

This supports a clear understanding of the risks and opportunities presented by energy and emissions in the broader sense, and enables operations to focus on managing energy, emissions and other climate change-related issues.

Our energy and carbon measurement, data management, accounting and reporting is maturing. Exxaro reports carbon emissions through CDP South Africa (the local arm of the international benchmark carbon and water disclosure projects), where we remain among the leading companies by reporting on scope 1, 2 and 3 emissions.

We base our accounting and reporting for GHG emissions on the Greenhouse Gas Protocol [www.exxaro.com], and have elected to use the operating control accounting approach for emissions.





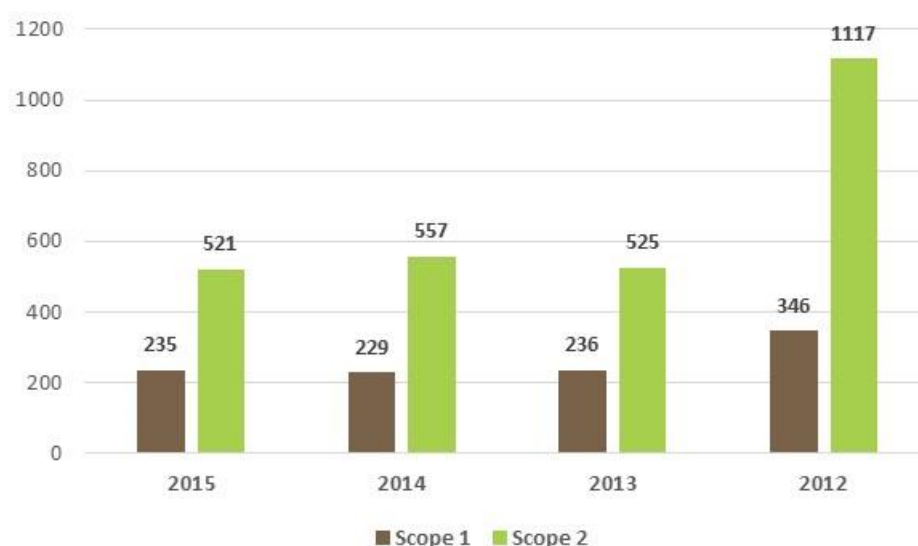
## Greenhouse gas emissions

(kt CO <sub>2</sub> e)	2015	2014	2013	2012
Scope 1	235,2	229,8	236	346
Scope 2	521,9	557,6	525	1117
Total scope 1 and 2	757,1	787,0	761	1463
Year-on-year change (%)	3,9	3,4	(0,4)	1,4
Scope 3	73 847	74 768	69 737	70 645
Year-on-year change (%)	1,2	7,2	(1,2)	0,2

Scope 2: Electricity-based emissions are derived from the grid emission factor for South Africa (0,94t CO<sub>2</sub>e/MWh)

Scope 3: Reported emissions are based on emissions from the use of product sold by Exxaro plus transmission and distribution losses from the South African grid derived from Eskom's emissions factor for electricity sold (1,03t CO<sub>2</sub>e/MWh) and the grid emission factor for South Africa (0,94t CO<sub>2</sub>e/MWh). Reported emissions represent over 99% of Exxaro's scope 3 emissions.

## Greenhouse gas emissions – scope 1 and 2 (kt CO<sub>2</sub>e)



Diesel and electricity are Exxaro's primary sources of energy. Total energy consumed increased by 0,8% in 2015 to 4 364 142 giga joules (GJ), mainly on higher electricity use which rose by 10%. The bulk of this was due to expansion activities at Grootegeeluk. Energy sourced from diesel consumption decreased 6,8% in 2015.

## Carbon disclosure

The CDP (formerly the Carbon Disclosure Project) is a UK-based global climate change reporting system. This data provides valuable insights into corporate strategies and helps channel investment to companies adhering to sustainable carbon and emissions management.

Exxaro participates in two programmes: CDP Climate Change (since 2008) and CDP Water. To facilitate our reporting under the climate change programme, we manage a central data repository that

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records energy consumption, energy intensity performance, carbon emissions measurement and cost performance in each business unit and the group. This database is externally audited and assured each year.

### ***Energy management***

Our coal operations account for almost all energy consumption in the group after divesting of the mineral sands and base metals businesses in recent years. As part of Exxaro's energy and carbon management programme, our coal operations have focused on reducing energy consumption, including projects to specifically increase the efficiency of diesel and electricity use. This led to a significant decrease in energy consumed through electricity in 2015, on the back of increased production.

Specific energy-intensity improvement targets were set for each operation in 2015. These targets formed part of relevant managers' remuneration-linked performance contracts and further absolute emission reductions are expected from these initiatives in future.



### Energy consumption by source by business unit

GJ	Electricity				Diesel				Petrol			
Business unit	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012
Coal	1 974 254	2 039 476	1 923 707	1 897 646	2 356 217	2 120 656	2 128 526	2 221 489	8 836	8 947	7 066	7 583
Year-on-year change (%)	(3,3)	6,0	1,4	(1,3)	10,0	(0,4)	(4,2)	2,7	(1,3)	26,6	(6,8)	(16,9)
Arnot	179 071	188 557	183 733	186 447	38 133	16 235	20 989	19 570	1 198	925	2 010	2 285
Char plant	-	-	-	-	5 192	4 547	5 857	3 081	-	-	-	-
Durnacol	504	551	612	354	1 583	1 711	1 903	2 533	203	279	211	160
Grootegeeluk	1 230 955	1 183 010	1 008 230	950 991	1 188 660	1 061 859	905 312	830 549	1 954	2 520	1 592	2 251
Hlobane	68	119	86	15	1 320	1 334	1 376	1 275	138	117	51	64
Inyanda	24 563	27 328	28 397	27 747	98 830	103 487	119 968	166 070	-	-	-	-
Leeuwpans	97 333	90 112	85 576	88 927	622 920	595 468	539 944	605 280	-	-	14	-
Matla	389 466	449 492	434 560	459 302	97 850	107 524	84 530	69 087	4 049	4 336	3 187	2 823
New Clydesdale	7 661	16 474	63 086	59 599	0	126	18 532	23 947	-	-	-	-
North Block	28 296	27 094	26 867	22 490	296 835	189 710	267 426	343 347	-	-	-	-
Tshikondeni	16 337	56 740	92 560	101 774	4 896	38 655	162 690	156 750	1 295	769	-	-
Corporate	24 530	96 106	88 013	89 666	1 989	2358	137	1 074	180	302	2 573	3 022
Year-on-year change (%)	(291,8)	9,2	(1,8)	68,8	(18,6)	1 621	(87,2)	32,2	(67,8)	(88,3)	(14,9)	12,6
AlloyStream	0	53 939	35 672	38 205	-	1 426	-	347	-	-	46	63
FerroAlloys	5 147	19 606	19 638	21 362	842	564	114	294	-	-	15	30
Head office	254	17 039	27 216	24 922	27	31	24	155	180	201	2 511	2 838
R&D	1 413	5 522	5 486	5 177	1 120	338	-	278	-	101	-	91
Total	1 998 785	2 135 581	2 011 719	1 987 312	2 358 206	2 123 014	2 128 665	2 222 563	9 016	9 249	9 638	10 605
Year-on-year change (%)	(6,8)	6,2	1,2	0,6	10,0	(0,3)	(4,2)	2,7	(2,6)	(4,0)	(9,1)	-

Site	Other energy sources (GJ)				Total energy used (GJ)			
	2015	2014	2013	2012	2015	2014	2013	2012
Business unit								
Coal	-	8 583	692	442	4 335 669	4 168 714	4 059 990	4 127 160
Year-on-year change	-	1 140	56,5	29,6	3,9	2,7	(1,6)	0,8
Arnot	606	462	-	31	217 810	205 255	206 732	208 333
Char plant	23	583	347	23	5 214	5 131	6 204	3 104
Durnacol	102	142	-	-	2 188	2 404	2 726	3047
Grootegeeluk	1 726	1 698	262	196	2 421 341	2 246 567	1 915 396	1 783 987
Hlobane	70	63	-	-	1 458	1 516	1 514	1 354
Inyanda	0	-	-	3	123 393	130 815	1 483 364	193 820
Leeuwpan	0	-	-	49	720 253	685 579	625 534	694 256
Matla	2 024	2 275	75	102	489 341	559 291	522 352	531 314
New Clydesdale	0	-	-	25	7 661	16 599	81 618	83 571
North Block	-	-	-	1	325 131	216 803	294 292	365 838
Tshikondeni	647	3 359	7	12	21 880	98 754	255 257	258 536
Corporate	-	62 363	52 378	70 976	28 473	160 827	143 101	164 738
Year-on-year change	0	19,1	(26,2)	-	(464,8)	12,4	(13,1)	185,3
AlloyStream	-	58 504	51 171	69 698	-	113 869	86 890	108 313
FerroAlloys	-	1 156	1 183	1278	21 199	21 326	20 950	22 964
Head office	125	2 440	7	-	1 066	19 510	29 757	27 915
R&D	1 828	263	17	-	6 207	6 123	5 503	5 546
Total	-	70 946	530 070	71 418	4 364 142	4 329 542	4 203 091	4 291 898
Year-on-year change	-	33,8	(25,7)	-	0,8	3,0	(2,1)	3,3

\*Other energy sources including paraffin, Sasol gas, LP gas

### Diesel consumption

Diesel is the most significant energy source in our coal operations, consuming over 50% of energy alone, slightly ahead of energy from electricity consumed in 2015. The electricity and diesel intensity in 2015 per total tonnes mined was respectively 3 72MWh/kt and 363ℓ/kt.

By continuing focusing on diesel efficiency, we have reduced consumption by over 13,5% in 2015 from 2012, despite a significant rise in diesel consumption at Leeuwpan and North Block Complex.



### Energy consumption

	Electricity (MWh)				Production (kt)				Electricity intensity (MWh/kt)			
	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012
Coal	548 404	566 521	534 363	527 125	38 912	37 203	37 332	38 808	38 912	15,95	14,3	13,6
Change %	(3,2)	6,0	1,4	(1,3)	4,4	(0,4)	(3,8)	(1,1)	4,4	11,5	5,2	0,0
Arnot	49 742	52 377	51 037	51 791	1 401	1 440	1 633	2 081	1 401	36,4	31,2	24,9
Char plant	-	-	-	-	48	127	91	43	48	-	-	-
Durnacol	-	153	170	98	-	-	-	-	-	-	-	-
Grootegeluk	140	328 614	280 064	264 163	-	18 838	17 813	17 517	-	17,4	15,7	15,1
Hlobane	341 932	33	24	4	23 555	-	-	-	23 555	-	-	-
Inyanda	19	7 591	7 888	7 708	-	1 633	1 992	1 845	-	4,7	4,0	4,2
Leeuwpans	6 823	25 031	23 771	24 703	1 035	2 443	2 240	2 601	1 035	10,2	10,6	9,5
Matla	27 037	124 859	120 711	127 584	2 202	9 513	10 133	10 948	2 202	13,1	11,9	11,7
New Clydesdale	108 185	4 576	17 524	16 556	7 859	-	419	717	7 859	-	41,8	23,1
North Block	2 128	7 526	7 463	6 247	-	2 602	2 668	2 717	-	2,9	2,8	2,3
Tshikondeni	7 860	15 761	25 711	28 271	2 812	154	343	339	2 812	102,5	74,9	83,4

### Diesel consumption performance in coal operations

	Diesel (kl)				Production (kt)				Diesel consumption intensity (l/kt)			
	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012
Coal	64 520	57 477	58 236	60 779	38 912	37 203	37 332	38 808	1 658	1 547	1 560	1 566
Change %	10,9	(1,3)	(4,2)	2,7	4,4	(0,4)	(3,8)	(1,1)	-	(0,83)	(0,4)	3,9
Arnot	1 043	444	574	535	1 401	1 440	1 633	2 081	6,7	309	352	257
Char plant	142	124	160	84	48	127	91	43	744	979	1 754	1 960

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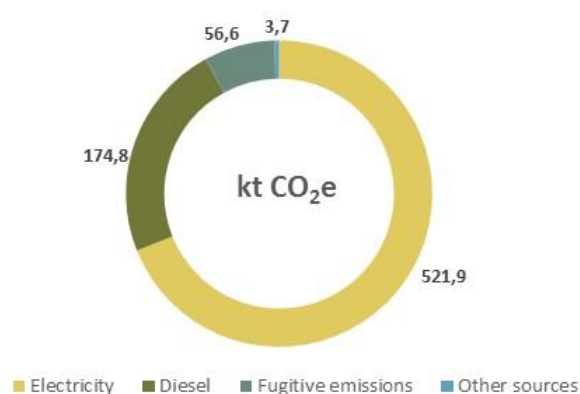


	Diesel (kt)				Production (kt)				Diesel consumption intensity (l/kt)			
	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012
Durnacol		47	52	69		-	-	-	2 968	-	-	-
Grootegeeluk	43	28 833	24 769	22 724		18 838	17 813	17 517		1 531	1 391	1 297
Hlobane	32 521	37	38	35	23 555	-	-	-	1 381	-	-	-
Inyanda	36	2 831	3 282	4 544		1 633	1 992	1 845	-	1 734	1 648	2 463
Leeuwpn	2 704	16 292	14 773	16 560	1 035	2 4434	2 240	2 601	2 613	6 666	6 594	6 366
Matla	17 043	2 942	2 313	1 891	2 202	9 513	10 133	10 948	7 740	309	228	173
New Clydesdale	2 677	3	507	655	7 859	-	419	717	341	-	1 210	914
North Block	0	4 867	7 317	9 394		2 602	2 668	2 717	-	1 870	2 764	3 457
Tshikondeni	8 121	1 058	4 451	4 289	2 812	154	343	339	2 888	6 875	12 968	12 645

As expected, we are realising further benefits from specific electricity-management projects initiated in prior periods. For example production has increased 4,4% and overall energy intensity from electricity decreased by 15% and increase by 6,7% for diesel. This shows that efficiency projects focused on electricity are starting to bear consistent benefits and there is high level of awareness within the organisation. Diesel consumption and efficiency interventions are more complex. The ever expanding mining operations and increase rehabilitation activities results in significant increase in diesel consumption. Future efficiency focus will focus more on reducing diesel consumption per tonne of production.

## Carbon emissions

### Greenhouse gas emissions by source



### Carbon emissions by source

(kt CO <sub>2</sub> e)	2015	2014	2013	2012
Electricity	521,9	557,6	525,3	518,9
Year-on-year change	(6,8%)	6,1%	1,2%	0,6%
Source proportion	68,9%	70,7%	68,8%	68,9%
Diesel	174,8	155,9	157,8	164,8
Year-on-year change	10,8%	(1,2%)	(4,2%)	2,7%
Source proportion	23,1%	20,0%	20,8%	21,6%
Fugitive emissions	56,6	67,6	77,9	
Year-on-year change	(19,4%)	(5,8%)	(7,8%)	3,9%
Source proportion	7,5%	8,6%	9,4%	10,2%
Other sources	3,7	6,2	2,4	
Year-on-year change	(40%)	6,9%	147,3%	11,5%
Source proportion	0,5%	0,8%	0,8%	0,3%



### Greenhouse gas emissions by business unit and source

kt CO <sub>2</sub> e	Purchased electricity				Diesel				Fugitive emissions				Other sources*				Total emissions <sup>#</sup>			
Business unit	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012	2015	2014	2013	2012
Coal	515,5	532,5	502,3	495,5	174,7	155,8	157,8	164,7	56,6	67,6	71,8	77,9	3,59	3,1	3,0	1,2	750,4	758,9	735,0	739,3
Year-on-year change (%)	(3,3)	11,0	1,4	(1,3)	10,8	(1,3)	(4,2)	2,7	(19,4)	(5,9)	(7,8)	3,9	13,6	3,3	150	100	1	3,3	(0,6)	0,2
Arnot	46,8	49,2	48,0	48,7	2,8	1,2	1,6	1,5	0,4	0,4	0,4	0,5	0,04	0,1	0,2	0,2	50,0	50,8	50,1	50,9
Char plant		-	-	-	0,4	0,3	0,4	0,2		-	-	-	-	-	-	-	0,4	0,4	0,4	0,2
Durnacol	0,1	1,4	0,2	0,1	0,1	0,1	0,1	0,2		-	-	-	-	-	-	-	0,2	0,3	0,3	0,3
Grootegeeluk	321,4	308,9	263,3	248,3	88,1	78,1	67,1	61,6	17,5	15,5	14,7	14,2	2,28	2,2	1,8	0,5	429,3	404,8	347,0	324,6
Hlobane		-	-	-	0,1	0,1	0,1	0,1		-	-	-	-	-	-	-	0,1	0,1	0,1	0,1
Inyanda	6,4	7,1	7,4	7,2	7,3	7,7	8,9	12,3	0,7	0,9	1,0	0,9	-	-	-	-	14,4	15,7	17,3	20,5
Leeuwpam	25,4	23,5	22,3	23,2	46,2	44,2	40,0	44,9	2,5	2,7	2,3	2,5	0,52	0,4	0,3	-	74,6	70,8	65,0	70,6
Matla	101,7	117,4	113,5	119,9	7,3	8,0	6,3	5,1	34,0	44,9	43,8	47,4	0,14	0,2	0,2	0,2	143,1	170,4	163,8	172,6
New Clydesdale	2,0	4,3	16,5	15,6		0,01	1,4	1,8		-	4,2	7,1	-	-	-	-	2	4,3	22,1	24,5
North Block Complex	7,4	7,1	7,0	5,9	22,0	14,1	19,8	13,2	1,5	1,5	1,5	1,4	0,57	-	-	-	31,4	21,7	28,3	32,7
Tshikondeni	4,3	14,8	24,2	26,6	0,4	2,9	12,1	2,9		1,8	3,8	3,9	0,04	0,2	0,5	0,3	4,7	19,7	40,5	42,4
Corporate	6,3	25,1	23,0	23,4	0,2	0,2	0,01	0,08	-	-	-	-	0,1	3,16	2,80	1,14	6,6	28,4	25,8	24,6
Year-on-year change (%)	(74,9)	9,1	(1,8)	68,8	-	1 900	(88)	35,0	-	-	-	-	-	12,9	145	(24)	(77)	10,1	4,7	59,6
AlloyStream	-	14,1	9,3	10,0	-	0,01	-	0,03	-	-	-	-	-	2,9	2,6	0,9	0	17,1	11,9	10,9
FerroAlloys	4,8	5,1	5,1	5,6	0,1	0,04	0,01	0,02	-	-	-	-	0,09	0,06	0,06	0,06	5,0	5,2	5,2	5,7
Head office	0,2	4,4	7,1	6,5	-	-	-	0,01	-	-	-	-	0,01	0,17	0,17	0,19	0,2	4,6	7,3	6,7
R&D	1,3	1,4	1,4	1,4	0,1	0,03	-	0,02	-	-	-	-	-	-	-	0,01	1,4	1,5	1,4	1,4
Total <sup>#</sup>	521,8	557,6	525,3	518,9	174,9	155,9	157,8	164,8	56,6	67,6	71,8	77,9	3,69	6,2	5,8	2,4	757,0	787,4	760,8	763,9
Year-on-year change (%)	(6,4)	6,2	1,2	0,6	12,2	(1,2)	(4,2)	2,7	(16,3)	(5,9)	(7,8)	3,9	(40,5)	6,9	147	11,5	(4)	3,5	(0,4)	1,4

\* Other sources include explosives, petrol, paraffin, Sasol gas, LP gas and limestone.

# Total scope 1 and scope 2 emissions.



We remain focused on reducing Exxaro's carbon footprint in line with our commitment to reduce energy consumption and improve energy efficiency. Given the fast changing legislative environment and the coming into effect of the carbon budgets and carbon tax, reduction of GHGs is a business imperative as it has the potential to impact the financial performance of the organisation.

### **2015 total GHG emissions by scope (t CO<sub>2</sub>e)**

*Arrows indicate year-on-year movement*

Business unit	Scope 1 235 179 ↑	Scope 2 521 905 ↓	Scope 3 73 846 816 ↓	Total 74 603 900 ↓
Arnot	3 230	46 757	2 550 658	2 600 646
Durnacol	124	132	15	271
Grootegeluk	107 945	321 416	42 993 688	42 423 049
Hlobane	103	18	2	123
Inyanda*	8 013	6 414	177 811	192 237
Leeuwpan	49 236	25 415	6 869 664	6 944 315
Mafube	0	0	1 863 830	1 863 830
Matla	41 388	101 694	14 303 722	14 446 804
New Clydesdale	0	2 000	228	2 228
North Block Complex	24 100	7 388	4 963 383	4 994 871
Reductants	386	0	122 600	122 986
Tshikondeni*	408	4 266	486	5 159
AlloyStream*	0	0	0	0
Corporate centre	11	239	27	277
FerroAlloys	154	4 838	551	5 543
R&D	83	1 328	151	1 562

\* Operations in closure

## **Water management**

Water is a strategic natural resource for South Africa. It is also key to our business. The Exxaro water management policy therefore defines our commitment to the sustainable use of water, with a strong focus on efficiency through reuse and recycling. This policy is aligned to the legislative environmental framework governed mainly by the National Water Act 36 1998. In support of the act, the Department of Water Affairs has issued an integrated water resource management hierarchy that prioritises mine and waste management decisions and actions. This hierarchy informs both our policy and strategy on mine and waste water management as:

- Pollution prevention
- Minimise environmental impacts



- Maximise water reuse and reclamation
- Responsible water discharge and disposal
- Water treatment.

Translating policy into action, our management standard on water for mining and industrial use articulates our commitment to develop and implement an effective integrated water and waste management plan across the lifecycle of a mine. This includes planning, construction, operation, decommissioning, closure and rehabilitation phases. The standard reflects management's vision to:

- Ensure a cost-effective integrated approach to water management
- Be environmentally responsible
- Be ecologically sustainable.

These management standards are enacted by adhering to the Department of Water and Sanitation's best practice guidelines on:

- The integrated water and waste management plan
- Stormwater management planning
- Water and salt balances
- Water monitoring systems
- Water reuse and reclamation
- Pollution control dams
- Environmental performance indicators.

### ***Progress***

Water management is integral to our licence to operate and, in recent years, we have made considerable progress on our focus areas, notably:

- Our vision, strategy and policy for water management
- Data management that facilitates water accounting and reporting
- Regulatory compliance
- Improving skills and knowledge in water management
- Water and related technology solutions
- Water business opportunities
- Stakeholder engagement
- Communications.

A comprehensive programme is entrenching responsible and sustainable water management across Exxaro. It concentrates on relevant water-use and related risk issues – from security of supply to water efficiency and water-cost management – and manages these within current and anticipated regulatory compliance requirements. This is supported by continually enhancing our competence in

water-management issues through company-wide research and skills development. We also reinforce awareness of water issues through ongoing communication and training.

While 16 strategic initiatives have been identified to reach specific five-year goals, our strategy also articulates aspirational goals that include becoming self-sufficient in our operational water requirements and becoming a leader in water technology solutions.

Under a holistic strategy, we are managing water-related risks, minimising impacts, and operating efficiently through reduction, reuse and recycling. Most of our operations have water conservation plans that support the national strategy to ensure equitable distribution of water resources that allows for business growth and protection (sustainable use).

We are also committed to protecting and improving water quality by ensuring the water we discharge is the same or better than the original. Central to this are the three water treatment plants planned for our Mpumalanga region as part of our long-term water management strategy. These plants will have total capacity to treat 17,5 mega litres per day. The plant at Matla has been commissioned and performance tests are under way (case study). The second plant is being commissioned at North Block Complex, and is expected to be fully operational later in 2016. For the plant at Arnot, a pre-feasibility study has been completed, and a bankable feasibility is under way. This plant is expected to be in operation by 2017.

Our prime focus is optimising the use of recycled water. We have installed a filtration plant at Matla to treat water for reuse in underground workings. With a maximum capacity of 3 mega litres a day, this plant operated well during the year and reduced Matla's intake of fresh water slightly.

Innovative passive water treatment systems are being evaluated by our R&D department in collaboration with the University of the Free State and the Technology Innovation Agency. As part of a long-term solution to water management including post-closure, Exxaro has developed a new treatment plant for acid mine drainage. Based in Belfast, the plant effectively treats major contaminants found in acid mining wastewater using a low-cost and low-maintenance passive water treatment system. This patented technology has treated over 1,8 million litres of acid mine drainage to date, producing water of a quality accepted for drinking purposes by the South African National Standards (SANS) 241:2006 and 2011 regulation. The pilot plant exploration is now complete and techno-economic studies for upscaling are under way.

We continue to collaborate with other mining houses through a local research institution on a project to develop appropriate technology to deal with waste from planned water treatment plants. This will enhance the efficiency of the waste treatment process and mitigate potential exposure linked to waste management. Two technologies were successfully tested ahead of scaling up and implementation.

*Exxaro 2015 supplementary report*



## Case study: New water treatment plant

A new R250 million water treatment plant at Matla will reduce the safety risk of water-filled mined-out cavities while benefiting the environment and local water users. The plant will treat 10 mega litres (10 million litres) per day, and is part of our holistic strategy to manage our water stewardship by reducing, reusing and recycling water.

Water flows into Matla's underground mining operations from the surface, leading to flooding risks that affect the safety of workers. This could also affect the environment if contaminated water is released to the surface without prior treatment.

After discussions with the national departments responsible for water, environmental affairs and mineral resources, Exxaro mapped out a sustainable solution. Underground water is pumped to the surface where innovative filtration processes remove contaminants and purify the water. Of the 10 mega litres treated each day, two thirds is discharged into the Olifants River and the balance is used at Matla operations or for drinking water at the mine.

The Matla water treatment plant is a prime example of our approach to water stewardship and one of three in our Mpumalanga region forming part of our long-term water management strategy.

### **Benefits of the water treatment plant**

By actively managing and limiting the volume of water underground, Matla has:

- Improved the safety levels of employees and the underground working environment
- Reduced its daily intake of fresh water, thus reducing its water footprint
- Provided high-quality water for farmers and other users by discharging clean water into the Olifants River.

In addition, 200 temporary jobs were created during construction and 14 permanent jobs to operate the water treatment plant.

### ***Water use monitoring and measurement***

Exxaro monitors and reports against the ESG reporting categories of global stock exchanges, in turn aligned to definitions and environmental categories in the GRI's mining and metals sector guidelines. Our data also correlates to the reporting format of the annual submission to the CDP-Water, where we remain among the leaders in disclosure [[www.exxaro.com](http://www.exxaro.com) link].

To facilitate disclosure, we maintain a centralised database. Our water accounting methodology



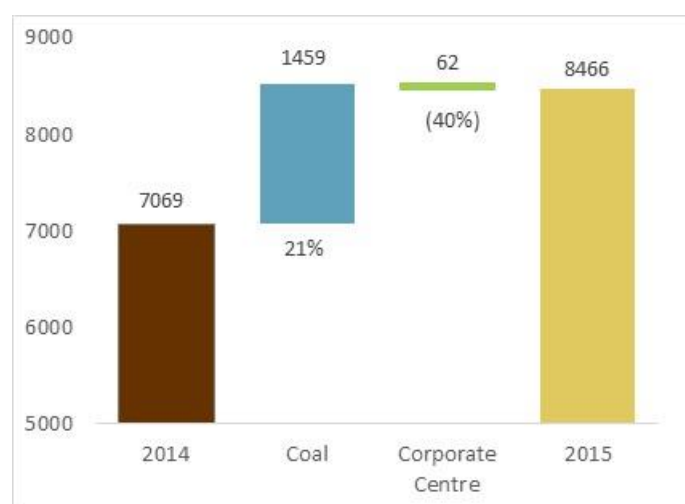
includes measuring water volumes and water quality against efficiency and intensity targets, water-use permit conditions and internal benchmarks and trends. While the accuracy of water measurement, monitoring and reporting has improved significantly in recent years, on-site operational challenges remain.

The focus in 2015 was on maintaining progress at larger water-withdrawing operations while rolling out initiatives at other operations. Water-withdrawal intensity targets were introduced in 2013. As monitoring and reporting against these targets matures, we plan to include these targets in the performance contracts of relevant managers in 2016.

### ***Water withdrawal performance***

Exxaro increased water withdrawals by 20% in 2015 compared to 2014. This is mainly due to Grooteegeluk, where the two new plants (GG7 and 8) are now fully operational. Other business units, including head office, show a slight reduction in water withdrawals, reflecting the ongoing commitment to operational efficiency.

### ***Water withdrawal performance – 2014 vs 2015 (mega litres)***



### Water withdrawal performance

Business unit	Water source	Water withdrawals (kℓ)			Production (kt)			Water withdrawal intensity (ℓ/t)		
		2015	2014	2013	2015	2014	2013	2015	2014	2013
Coal		8 372 045	6 912 951	8 024 612	40 969	37 611	37 332	205	184	215
Year-on-year change (%)		21	(14)	6						
Arnot	Potable water supplier	532 320	562 110	559 480	1 401	1 440	1 633	380	391	343
Char plant	Supplied by Grootegeluk	29 343	89 939	82 388	48	127	91	614	750	905
Durnacol	Water abstraction: river	24 120	24 787	26 808						
	Municipal supply: potable									
Grootegeluk	Water abstraction: borehole	5 870 059	3 871 449	4 512 003	25 554	18 838	17 813	230	192	253
	Water abstraction: dam									
	Potable water supplier									
Hlobane	Municipal supply: potable	612	819	1 820						
Inyanda	Water abstraction: borehole	217 766	337 361	298 448	1 035	1 632	1 992	210	207	150
	Water abstraction: Dam									
Leeuwpan	Water abstraction: borehole	185 984	114 907	174 044	2 202	2 444	2 240	84	47	78
Matla	Potable water supplier	1 316 137	1 305 935	1 324 667	7 858	10 374	10 133	167	126	131
New Clydesdale	Water abstraction: river	7 497	11 101	55 149			419			132
North Block Complex	Municipal supply: potable	29 057	26 648	28 637	2 871	2 602	2 668	13	10	11
Tshikondeni	Water abstraction: river and dam	159 150	567 845	961 168		154	343		2 707	2 802

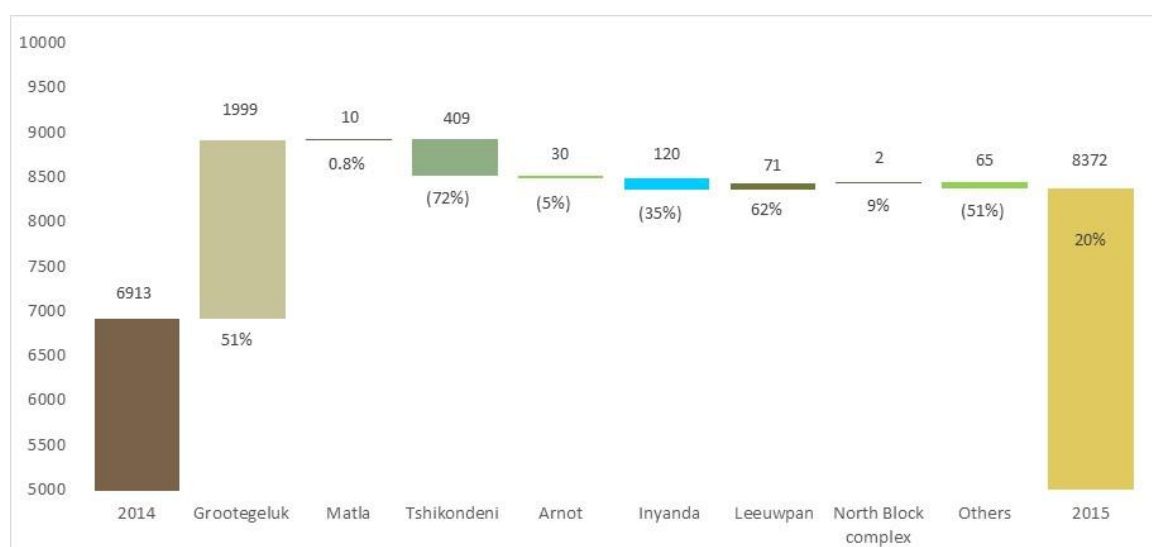
**Water withdrawal performance (non-mining sites)**

		Water withdrawals (kℓ)		
Business unit	Water source	2015	2014	2013
Corporate office		93 863	156 006	154 089
Year-on-year change (%)		(40)	1	36
AlloyStream	Municipal: potable – invoiced		69 907	45 058
FerroAlloys	Municipal: potable – invoiced	32 841	18 560	18 822
Head office	Municipal: potable – invoiced	56 560	62 806	87 047
R&D	Municipal: potable – invoiced	4 462	4 733	3 162
Total		8 465 908	7 068 957	8 240 594
Year-on-year change (%)		20	(14)	(33)

*Water management reporting from business units is not subject to audit review*

In 2015, coal operations accounted for 99% of our water withdrawals. Total withdrawals by these operations rose by 20% in tandem with higher production, leading to a slight increase in water intensity (water withdrawals relative to production). Water intensity for 2015, albeit higher, is still better than 2013 and underscores our commitment to water stewardship. The increase is largely due to higher withdrawals at Grooteegeluk. Given the relative scale of this mine, water withdrawal intensity rose across our coal operations. Water withdrawals at mines in closure are reducing significantly, as expected.

### ***Water withdrawal at coal operations 2014 vs 2015***



### ***Hazardous waste management***

Waste management is a key compliance indicator in Exxaro's social licence to operate. Our group-wide standard enforces use of the waste management hierarchy, which in turn promotes waste prevention or minimisation, reuse, recycling, recovering energy and ensuring safe disposal of waste in line with the National Environmental Management: Waste Act 59 2008 and supporting legislation. To summarise the hierarchy:

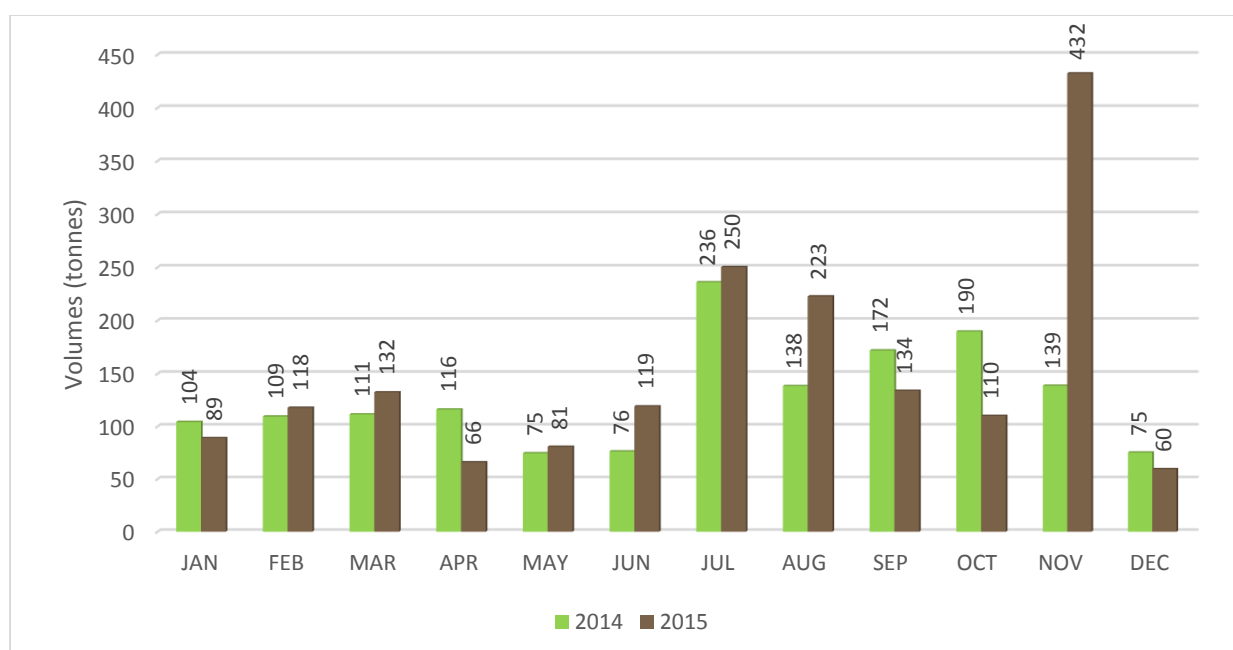
- **Waste prevention or minimisation** – procuring goods or equipment designed to minimise their waste components
- **Reusing** a material removes it from the waste stream for another purpose without changing its form or properties
- **Recycling** – separating materials at source from the waste stream and processing them as products or raw materials
- **Recovery** – reclaiming particular components or materials, or using waste as a fuel
- As a last resort, waste enters the lowest level of the hierarchy to be treated and/or disposed of, depending on the safest manner for its final disposal.



These first four stages of the hierarchy are the foundation of the cradle-to-cradle approach to waste management that Exxaro promotes in its business units. This approach reuses or recycles a product when it reaches the end of its lifespan so that it becomes an input for new products and materials.

The total weight of hazardous waste generated at our managed coal operations in 2015 was 1 814 tonnes (2014: 1 541 tonnes). The increase in volumes removed (18%) for 2015 reflects the planned clean-up operation conducted at a business unit to increase efficiency in the sewage treatment plant. This activity contributed to the increase in volumes (429 tonnes) in November 2015, as it involved removal of the sludge from the treatment plant by an external contractor and responsible disposal into a registered landfill. ECC operations produced small amounts of waste in 2015 (60 tonnes hazardous waste and 58 tonnes general waste).

#### **Hazardous waste removal – 2014 and 2015**



We are setting up recycling stations in selected business units to divert all recyclable wastes currently being sent to landfill sites for potential and practical reuse options that make economic sense. We are also exploring opportunities with industrial partners and research institutions to use viable solutions in converting waste into renewable energy.

Disposing of waste to landfill imposes significant costs on the environment and broader society, in the form of health, social and environmental hazards. By contrast, moving up the waste management hierarchy (reducing, reusing, recycling and recovery) has clear benefits over final disposal to landfill. It saves natural resources and energy; reduces production costs associated with using recycled as

opposed to virgin materials; reduces the costs of waste management; reduces environmental impacts, demand for landfill airspace and other costs associated with landfilling; and generates income and job-creation opportunities for the poor and unemployed.

Exxaro is working with the Department of Environmental Affairs to adhere to regulations that eliminate the use of polychlorinated biphenyl (PCBs) materials in all equipment used by our operations by 2023.

## ***Responsible conservation of biodiversity***

Our vision is to conserve biodiversity for future generations through the sustainable co-existence of our mining operations and South Africa's natural resources. In addition to complying with legislation and best practice, we aim to develop a competitive advantage through conservancy and re-establishing resilient ecosystems that underscore our commitment to duty-of-care principles.

We have developed the strategy and framework to reach our goals, and compiled baseline reports and biodiversity action plans for most business units. A draft wetland policy and management standard was compiled in 2013 but not finalised nor approved, given that Exxaro needed to align this with new guidelines. The best-practice standard (Wetland Offsets: A Best Practical Guideline for South Africa 2014), as well as the mining and biodiversity guideline (Mainstreaming biodiversity into the mining sector (DEA, DMR, Chamber of Mines, SA Mining and Biodiversity Forum and SANBI, 2013)) will be taken into account in finalising Exxaro's wetland policy and management standard.

A draft biodiversity offset strategy is being compiled and will be aligned to best-practice guidelines. The approved biodiversity policy and management standard are also currently under review and will be finalised in 2016 in line with latest best-practice guidelines to ensure continuous improvement.

The principles of these guidelines are already being incorporated into our planning. As example, the principles of the best-practice standard were used in revising the Belfast mine layout plan to avoid constructing the coal-washing plant in a sensitive hillslope wetland while the opencast life-of-mine plan was adjusted to exclude mining in a sensitive pan area. These standards were also applied for the proposed Leeuwpan reserve block authorisations.

Performance reviews against biodiversity action plans continued in 2015. Our detailed management standard guides business units in implementing group policy, aiming to:

- Ensure a cost-effective integrated approach to biodiversity management
- Be environmentally responsible in protecting and managing biodiversity
- Be ecologically sustainable by ensuring biodiversity-rich areas are contained within mining right areas, to manage and monitor protected and threatened Red Data species, and control declared category 1, 2 and 3 invasive plants.



Wetland baseline assessments for all business units were updated in recent years and wetland maps for all business units compiled. These include: desktop NFEPA (national freshwater ecosystem priority areas) maps, Mpumalanga biodiversity sector plans (2014), site-specific wetland types and their distribution, present ecological status (PES) of each identified wetland and wetland type, and the ecological importance and sensitivity (EIS) of each identified wetland and wetland type. This data is used to consider biodiversity-sensitive areas as part of our business and mine-planning decisions. During mine planning, we consider the hierarchy of avoidance, minimisation, rehabilitation and, as a last resort, offsets.

### ***Significant impact of activities***

While Exxaro is not yet able to quantify its impact in protected sites or areas of high biodiversity value, new industry guidelines have been used to update areas of high biodiversity value for all business units. Please see tables later in this section.

Approximately R12 million was spent in 2015 on biodiversity management, including wetland offsets, wetland delineation and wetland studies and biomonitoring.

### ***Biodiversity across the Exxaro group 2015***

According to the latest national spatial biodiversity assessment report (2011) shape files of national protected areas, none of Exxaro's business units fall within these areas. Only Tshikondeni is next to a protected area (Kruger National Park), although several business units fall within protected vegetation types.

Exxaro has evaluated and identified all protected vegetation units with important conservation targets and listed as protected by the national spatial biodiversity assessment report (2011) – shown overleaf.

Exxaro also references the mining and biodiversity guideline (M&BG, 2013), the Mpumalanga biodiversity sector plan (2014), and the national freshwater ecosystem priority areas (NEPA 2011) guidelines during proposed expansion and new projects. Information from these guidelines is considered during desktop ecological and wetland studies and included in detailed site-specific assessments to confirm the accuracy of the guidelines on the ground. As guideline information is based on historical data, aerial photographs, land-use maps and various layers of information, it is important to conduct site-specific assessments to confirm conditions.



Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
Mpumalanga	Arnot	Grassland	Eastern Highveld grassland (GM12)	Endangered: conservation target of 24%	Mostly underground with limited opencast	Combination of owned, leased and managed by Exxaro – some farms in mining right area belong to private landowners/farmers. Mining activities take place only on land belonging to Exxaro/ Eskom	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	18 668ha (8 116ha grassland, 931ha wetland, 435ha secondary/transformed grassland consisting of abandoned croplands/rehabilitated areas, 497ha plantations, woodstocks, shelterbelts, 6 909ha cultivated lands, 902ha mine tailings and mining-related infrastructures, 518ha open water, 33ha grassland scrub and 327ha buildings)	Endangered
		Grassland	Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Least threatened
	NBC Glisa	Grassland	Eastern Highveld grassland (GM12)	Endangered: conservation target of 24%	Opencast and underground	Owned and managed by Exxaro	Not close to any Ramsar or protected areas/nature reserves protected under the Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	1 014ha (247ha natural grassland, 33ha wetland grassland, 7ha grassland scrub, 3ha buildings, 10ha cultivated fields, 293ha mine tailings and associated infrastructure, 49ha open water, 291ha plantations and 82ha secondary/ transformed grassland)	Endangered
			Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Least threatened
			Lydenburg montane grassland (GM18)	Vulnerable: conservation target of 27%					Vulnerable
	NBC Strathrae	Grassland	Eastern Highveld grassland	Endangered: conservation target	Historical – opencast and	Combination of owned, leased and managed	Not close to any Ramsar or protected	6 166ha (3 206ha natural primary grassland, 358ha	Least threatened

Exxaro 2015 supplementary report



Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
			(GM12)	of 24%	underground– no further mining taking place	by Exxaro – some farms in mining right area belong to private landowners/farmers	areas/nature reserves under the Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	wetland grassland, 211ha secondary/transformed grassland consisting of abandoned cropland and rehabilitated areas, 1 811ha cultivated fields, 296ha mine tailings, borrow pits etc, 240ha open water, 43ha plantations, wood locks, shelterbelts)	
			Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Endangered
	NBC Belfast (proposed new mine)	Grassland	Eastern Highveld grassland (GM12)	Endangered: conservation target of 24%	Proposed new opencast mine	Combination of owned (phase 1 of LOM owned by Exxaro), leased and managed by Exxaro – some farms in mining right area (phase II) belong to private landowners/ farmers	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011. S49 (PAIA) submitted by Mpumalanga tourism and parks authority (MTPA) to DMR to list proposed protected	5 800ha (1 556ha disturbed/secondary grassland, 3 078ha cultivated fields, 444ha wooded area comprising alien invaders such as wattles and blue gum trees, 33ha human settlements and 689ha other (including wetlands and aquatic ecosystems/pans)	Endangered
			Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Least threatened

Exxaro 2015 supplementary report



Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
							areas		
	NBC Eerstelingsfontein	Grassland	Eastern Highveld Grassland (GM12)	Endangered: conservation target of 24%	Opencast	Owned and managed by Exxaro	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011. S49 submitted by MTPA to DMR to list proposed protected areas	315ha (206ha pastures, 32ha rocky outcrops with open grassland, 41ha moist grassland, 5ha wetlands/pans and 32ha other land uses)	Endangered
			Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Least threatened
	Inyanda	Grassland	Rand Highveld grassland (GM11)	Endangered: conservation target of 24%	Opencast	Land owned by Exxaro	Not close to any Ramsar or protected areas/nature reserves protected under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	1 747ha (1 372ha natural grassland, 18ha grassland scrub, 248ha cultivated fields – rest comprises open water, mine tailings, secondary grassland, etc)	Endangered
	Leeuwpan	Grassland	Eastern Highveld grassland (GM12)	Endangered: conservation target of 24%	Opencast	Combination of owned, leased and managed by Exxaro – some farms in mining right area belong to private landowners/farmers	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities	2 073 ha (111ha grassland, 225ha wetland grassland, 1 061ha cultivated lands – balance mine tailings, mining-related infrastructures, secondary grassland and	Endangered
			Eastern temperate freshwater	Conservation target of 24%					Least threatened

Exxaro 2015 supplementary report



Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
			wetlands (AZf3)				listed as endangered by NSBAR 2011	open water)	
			Soweto Highveld grassland (GM8)	Endangered: conservation target of 24%					Endangered
	Matla	Grassland	Eastern Highveld grassland (GM12)	Endangered: conservation target of 24%	Underground	Combination of owned, leased and managed by Exxaro – some farms in mining right area belong to private landowners/farmers. Mining only takes place on land belonging to Exxaro/Eskom	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	26 162ha (7 329ha grassland, 3 446ha wetland grassland, 115ha stream vegetation (bushveld), 11 708ha cultivated fields, 1 654ha secondary grassland)	Endangered
			Eastern temperate freshwater wetlands (AZf3)	Conservation target of 24%					Least threatened
KwaZulu-Natal	Durnacol	Grassland	Income sandy grassland (Gs7)	Vulnerable: conservation target of 23%	Historically underground	Combination of owned, leased and managed by Exxaro – some farms in mining right area belong to private landowners/farmers	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	20 102ha (11 113ha natural grassland vegetation, 4 041ha wetland grassland, 154ha stream vegetation (bushveld), 2 263ha secondary/ transformed grassland comprising abandoned croplands and rehabilitated areas, 113ha retracted plantations, 423ha plantations, 698ha cultivated fields, 322ha grassland scrub, 97ha open water, 295ha mine	Vulnerable

Exxaro 2015 supplementary report



Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
								tailings and related infrastructure, 582ha buildings)	
	Hlobane	Grassland	Wakkerstroom montane grassland (GM14)	Least threatened: conservation target of 27%	Historically underground	Combination of owned, leased and managed by Exxaro – some farms in mining right area belong to private landowners/farmers	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	5 780ha (1 070ha grassland scrub, 152ha mountain bushveld, 16ha open bushveld, 1 729ha grassland, 1 033ha plantations, 229ha wetland grassland, 63ha stream vegetation (bushveld), 291ha buildings, 328ha mine tailings and associated infrastructure, 39ha open water, 436ha retracted plantations, 33ha rocky outcrops, 305ha secondary/ transformed grassland)	Least threatened
Limpopo	Tshikondeni	Forest – azonal	Lowveld riverine forest (FOa1)	Critically endangered: conservation target of 100%	Largely underground with three mini-pits	Surface rights belong to the state	Adjacent to Kruger National Park	22 386ha (5 710ha mopane bushveld, 3 921ha mountain bushveld, 663ha open bushveld, 473ha riparian forest, 4 469ha thicket and encroached bushveld, 103ha woodland, 40ha wetland grassland, 412ha stream vegetation, 235ha inland forests. Balance is mainly	Critically endangered
		Forest – zonal and intrazonal	Ironwood dry forest (FOz9)	Conservation target of 100%					-
		Savanna	Musina mopane bushveld (SVmp1)	Least threatened: conservation target of 19%					Least threatened

Exxaro 2015 supplementary report





Geographic location	Business unit	Biome	Name of vegetation unit*	Conservation status of vegetation units <sup>#</sup>	Type of operation	Land owned/leased/ managed by Exxaro	Position relative to protected/high-diversity area	Size of operational site (ha)– dominant vegetation surface areas per type in brackets	Biodiversity value (nature of area, listing of protected status)
		Savanna – lowveld	Makuluke sandy bushveld (SVI1)	Vulnerable: conservation target of 19%				buildings (72ha), cultivated fields (709ha), floodplain bushveld (27ha)	Vulnerable
	Grootegeeluk	Savanna – central bushveld	Limpopo sweet bushveld (SVcb19)	Least threatened: conservation target of 19%	Opencast	Exxaro	Not close to any Ramsar or protected areas/nature reserves under Protected Areas Act, but some plant communities listed as endangered by NSBAR 2011	18 391ha (11 493ha bushveld vegetation, 2 016ha open bushveld, 960ha thicket and encroached bushveld, 36ha pans, 805ha woodlands, 0,4ha cultivated fields, 187ha floodplain bushveld, 11ha floodplain grassland, 2 257ha mine tailings and associated infrastructure, 178ha buildings, 431ha transformed/ degraded bushveld and 17ha open water) (excluding properties purchased as part of proposed Thabametsi mine	Least threatened

\* Mucina & Rutherford (2006)

<sup>#</sup> National spatial biodiversity assessment report (2011)

Business unit	Biome	Name of vegetation unit (Mucina & Rutherford, 2006)	Conservation status (NSBAR)*
Glisa, Strathrae and Leeuwpan	Grassland	Eastern Highveld grassland	Endangered with conservation target of 24%
Glisa, Strathrae, Leeuwpan	Grassland	Eastern temperate freshwater wetlands	Conservation target of 24%
Glisa	Grassland	Lydenburg montane grassland	Vulnerable with conservation target of 27%
Inyanda	Grassland	Rand Highveld grassland	Endangered with conservation target of 24%
Leeuwpan and FerroAlloys	Grassland	Soweto Highveld grassland	Endangered with conservation target of 24%
Hlobane	Grassland	Wakkerstroom montane grassland	Least threatened with conservation target of 27%
Tshikondeni	Savanna	Musina mopane bushveld	Least threatened with conservation target of 19%
Grootegeeluk	Savanna – central bushveld	Limpopo sweet bushveld	Least threatened with conservation target of 19%
Tshikondeni	Savanna – lowveld	Makuluke sandy bushveld	Vulnerable with conservation target of 19%

## ***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 as per the Exxaro excess water risks and liability management standard.

### **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 plan**

All business units have a detailed concurrent rehabilitation plan and supporting material (plan, schedule and budget). These are revised and updated as necessary, but 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).

### **Liabilities**

At 31 December 2015, total land disturbed was 9 311ha and total rehabilitated 2 247ha. The Exxaro Environmental Rehabilitation Fund (EERF) provides for most liabilities, while additional bank guarantees are taken out to provide for new developments and cover any shortfalls in financial provisions. Environmental rehabilitation liabilities are updated biannually for internal reporting at interim and financial year end, and submitted annually to the Department of Mineral Resources (DMR).

EERF earned R66,2 million in 2015, which includes cash contributions, interest earned on investments and fair value adjustments. The fund has recorded 8,8% growth from an opening balance of R753 million in January 2015 to R819 million in December 2015. In addition, the group had bank guarantees of R1 457 million in place at year end. Updating these provisions biannually highlights potential rehabilitation alternatives that could decrease the long-term closure liabilities of mines.

Exxaro's direct contingent liability for environmental rehabilitation has increased 37,9% after its commitments to the Department of Mineral Resources to address shortfalls on financial provisions for

our operative mines. The company has committed to radical improvements to close the gap on concurrent rehabilitation, which will contribute to reducing these contingent liabilities by end 2016.

The promulgation of regulation 1147 under NEMA on the financial provision for prospecting, exploration, mining or production operations will require a fundamental change in how we manage these in future. Exxaro continues to comply with effective MPRDA and NEMA regulations on environmental management.

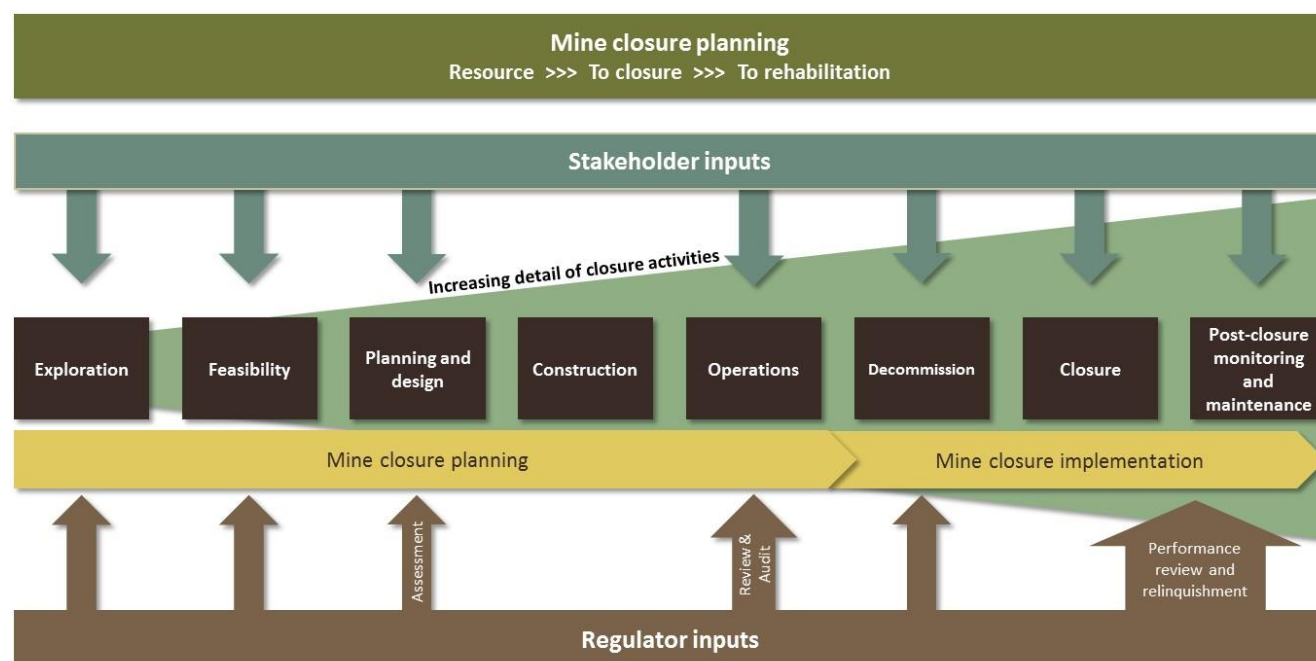
**External closure-cost reviews were completed at three operations during the year.** Performance assessments against the objectives of EMP reports were completed for **four** operations and submitted to the DMR. In line with the growing government focus on rehabilitation, all our business units have reviewed their rehabilitation plans (with appropriate schedules and budgets).

At Arnot, wetland offsets and rehabilitation interventions were completed to ensure no net loss. At Belfast, onsite wetland rehabilitation interventions were included in project development plans. A wetland management forum was established in 2015 as per conditions of the water use licence.

### **Mine closure**

Exxaro had three operations in active closure in 2015 – Tshikondeni, Durnacol and Hlobane – and their closure environmental plans are being reviewed by the authorities. The following closure-planning process is used:

### **Integrating stages of mining and mine-closure planning**



Source: *Guidelines for Preparing Mine Closure Plans*, May 2015 Department of Mines and Petroleum and Environmental Protection Authority, Western Australia

All closure activities are executed against risk-based principles. As several Exxaro mines are nearing their end of life, mine-closure planning is already in place to ensure the closure process complies with the latest legislative requirements.

### **Social closure principles**

While most closure planning relates to technical or engineering issues and the associated financial planning, social aspects are the most important part of mine closure. This includes aspects such as:

- Equipping employees with portable skills that will allow them to pursue alternative employment and participate in meaningful economic activity
- Develop and implement a communication plan for employees
- Effective training for staff on their roles and responsibilities in implementing and managing the mine closure plan
- Communities will be affected by mine closure – while they may not be directly affected by environmental management strategies, health and safety issues and possible employment opportunities related to proposed strategies should be considered
- Socio-economic activities around the mine need to continue in its absence
- Conducting socio-economic impact assessments to identify the needs and expectations of all relevant stakeholders as well as economic impacts
- Assisting host communities affected by closure to acquire skills that will equip them to participate in economic activities and provide the opportunity to use infrastructure not needed by the mining operation for their benefit
- Ensure communities have the opportunity to maintain, but preferably improve, their quality of life
- Align the closure process with community expectations. The closure plan must be in line with the requirements of that mine's social and labour plan, developed in terms of section 25 of the MPRDA
- Develop and implement an engagement plan for all relevant stakeholders (community, government, NGOs and others)
- Assist/ mine owners/operators achieve liability-free closure within a reasonable timeframe
- Effective implementation of the closure plan requires company and management commitment.

## Mineral resources and reserves

Please refer to Exxaro's comprehensive mineral resources and reserves report on this website [[www.exxaro.com](http://www.exxaro.com)].

## Group cash value-added statements

(unaudited) for the year ended 31 December

The value-added statements show the wealth the group has created through mining, beneficiation, trading and investing operations. Exxaro generates and creates value as follows:

- Employees receive salaries/wages, share-based payments and bonuses (where performance conditions are met)
- The governments of countries where Exxaro has operations receive tax and royalty payments
- Suppliers and contractors are supported through procuring consumables, services and capital goods
- Shareholders receive a return on their investment through dividends and growth in the share price
- Exxaro has corporate social investment initiatives that benefit surrounding communities
- Continuous reinvestment into the group to ensure sustainability and expansion.

The statement below summarises the total cash wealth created and how it was disbursed among our stakeholders. The retained amount was reinvested to replace assets and further develop operations.

Group	2015	2014
	Rm	Rm
Direct economic value generated	11 202	13 014
Gross revenue from the sale of products and services and other income (including value-added tax (VAT))	20 579	18 843
Shortfall income (including VAT)	-	1 671
Income from investments and interest received	1 396	3 787
Operating costs	(10 773)	(11 287)
Economic value distributed	6 849	7 626
Employee wages and benefits (excluding employees tax)	3 617	3 232
Employees' tax (PAYE) deducted from remuneration paid	861	803
Payments to government	824	1 141
Interest paid and loan cost	500	307
Cash dividend paid, excluding Mpower dividend to employees	960	2 032

Group	2015	2014
	Rm	Rm
Cash dividend paid to Mpower employee beneficiaries	24	23
Volunteerism	-	2
Community investments (including donations)	63	86
Net economic value retained to maintain and develop operations	4 353	5 388
Included above are:		
Payments to government: taxation contribution	824	1 141
Direct taxes per country (excluding deferred tax)	81	120
<i>Republic of South Africa</i>	78	45
<i>Europe</i>	-	73
<i>Australia</i>	-	2
<i>Other</i>	3	-
VAT	558	804
<i>VAT levied on purchases of goods and services</i>	(1 595)	(2 023)
<i>VAT and other duties charged on turnover</i>	2 153	2 827
Additional amounts collected by the group on behalf of government:		
<i>Unemployment Insurance Fund</i>	14	13
Levies paid to government	171	204
<i>Rates and taxes paid to local authorities</i>	8	6
<i>Royalties paid to government</i>	109	131
<i>Workers' Compensation Fund</i>	5	7
<i>Unemployment Insurance Fund</i>	14	26
<i>Skills Development Levy</i>	35	34
Community investments per region	63	86
<i>Gauteng and corporate projects</i>	14	35
<i>Limpopo</i>	26	31
<i>Mpumalanga</i>	23	20

## Glossary

Indicator	Definition
<b>Safety and health</b>	
Number of fatalities	A fatality includes all work-related incidents that resulted in a fatality
Fatality frequency rate (FFR) – employees and contractors	Rate per 200 000 hours of fatalities due to all causes for both employees and contractors
Number of lost-time injuries (LTI) – employees and contractors	LTI is a work-related injury resulting in the employee/contractor being unable to attend work or perform the full duties of regular work on the next calendar day. Restricted work cases are counted as LTIs
Lost-time injury frequency rate (LTIFR) – employees and contractors	Rate per 200 000 hours of LTIs due to all causes for both employees and contractors
Total number of people participating in HIV/Aids voluntary counselling and testing (VCT)	Total number of employees who have received counselling and tested for HIV
Number of reported and accepted cases of pneumoconiosis	Number of reported and accepted cases of pneumoconiosis in the reporting period. An occurrence of pneumoconiosis which is reported to Medical Bureau for Occupational Disease and DMR
Number of reported and confirmed cases of occupational tuberculosis	Number of reported and accepted cases of occupational tuberculosis in the reporting period. An occurrence of occupational tuberculosis which is reported to Medical Bureau for Occupational Disease and DMR
Number of reported and accepted cases of noise-induced hearing loss (NIHL)	Number of reported and accepted cases of NIHL in the reporting period. An occurrence of NIHL which is reported to Rand Mutual Assurance and DMR
Occupational health incident frequency rate (OHIFR) – Reported cases (employees and contractors)	<p>Number of reported cases of occupational diseases in the reporting period. An occurrence of an occupational disease which is reported to Medical Bureau for Occupational Disease and DMR, and for NIHL reported to Rand Mutual Assurance.</p> <p>These occupational diseases are:</p> <ul style="list-style-type: none"> <li>• Reported occupational tuberculosis</li> <li>• Reported cases of chronic obstructive airway disease</li> <li>• Reported cases of pneumoconiosis</li> <li>• Reported cases of noise induced hearing loss</li> <li>• Reported cases of silicosis.</li> </ul> <p>Occupational diseases are monitored and reported for employees and contractors. The rate is calculated per 200 000 hours for both employees and contractors</p>
<b>Environment</b>	
Total diesel used (GJ)	Direct energy consumption by diesel used
Total electricity used (GJ)	Direct energy consumption by electricity used
Electricity efficiency (kWh/tonne)	Total electricity used, measured in kilowatt-hours (kWh), divided by total tonnes mined (TTM) measured in metric tonnes
Direct CO <sub>2</sub> emissions from own	Total scope 1 emissions include total litres of diesel oil used for primary production



Indicator	Definition
operations (scope 1)	activities, fugitive emissions from mining activities and limestone emissions created through mining activities converted to tonnes CO <sub>2</sub> e
Indirect CO <sub>2</sub> emissions from electricity (scope 2)	Total electricity purchased converted to tonnes CO <sub>2</sub> e Electricity-based emissions are derived from the grid emissions factor for South Africa (0,94t CO <sub>2</sub> e/MWh)
Other indirect emissions (scope 3)	Total scope 3 emissions from use of sold products and upstream transportation and distribution
Number of integrated water use licence (IWUL) applications approved	An approved IWUL is a licence signed by the Department of Water and Sanitation director-general acting under authority delegated by the minister. An approved/signed licence authorises water uses applied for under section 21 of the National Water Act, 1998
Number of integrated water use licences (IWUL) pending	An integrated water use licence application lodged with the Department of Water and Sanitation for processing and awaiting decision by the department
Number of level 2 and 3 environmental incidents	<ul style="list-style-type: none"> <li>Level 2 – reportable environmental incidents with reversible on-site and immediate surrounding impacts, will involve over 48hrs clean-up activities and a negative impact on shareholder value of R50 000-R500 000 worth of damage has definitely occurred</li> </ul>
	<ul style="list-style-type: none"> <li>Level 3 – reportable environmental incidents with irreversible on-site, immediate and remote areas impacts, will involve long-term clean-up activities and a negative impact on shareholder value of &gt;R500 001 worth of damage has definitely occurred</li> </ul>
Total potable water use	Total invoiced potable water (municipal and Eskom) and metered potable water (Grootegeeluk only) (m <sup>3</sup> )
Hazardous waste to landfill	Hazardous waste disposed of to legal landfill during the reporting period
Mining charter	
Procurement spend from BEE entities (R value per capital goods, consumables and services)	The support of BEE (black economic empowerment) suppliers in line with the Exxaro preferential procurement policy and mining charter requirements for the review period
Employment equity	Demographic breakdown of workforce as per mining charter requirements for the review period
Training	
Number of bursaries awarded	Total number of bursaries awarded in the reporting period. A student who receives a bursary that covers university fees and expenses from Exxaro (bursar). This student is offered work experience in university holidays (working bursar) and, on the successful completion of a degree, is offered employment from Exxaro
Number of professionals in training	Total number of professionals in training (PIT) in the reporting period. A PIT is an employee holding a three-year contract to gain practical experience on the mines