Chairman's review

Desmond Sacco Chairman

"…this financial year has seen exceptionally high prices for iron ore."

Earnings for the financial year to 30 June 2011 have increased by 117,6% on the previous year to R3,2 billion due mainly to the significant increase in the earnings of Assmang Limited (Assmang), resulting from the stronger demand for all group products and in particular substantially higher prices for iron ore across the year. Strength in the iron ore price was driven by demand from China where crude steel production is expected to reach record levels during the current calendar year.

The year under review

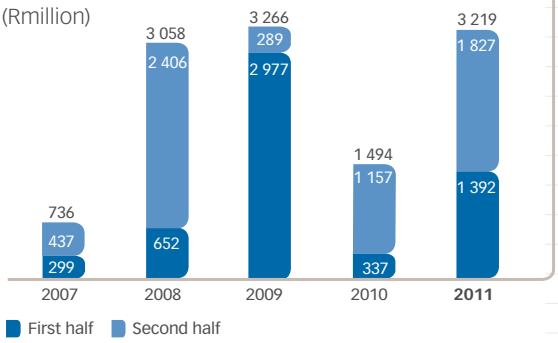
This year has seen the level of earnings return to levels experienced before the start of the world economic turmoil that set in towards the end of calendar 2008. While previous levels of earnings were largely attributable to a combination of a weaker rand and high commodity prices, this financial year has seen exceptionally high prices for iron ore. However, the impact of these higher prices and additional sales volumes was partly offset by the strong level of the rand, particularly in the second half. The increased demand for iron ore is due to record levels of global steel production experienced in the first half of the 2011 calendar year, of which China's proportion amounted to 47%. Prices for other commodities were generally range-bound during the year, given that most markets for these commodities were

Waste removal at Zeerust Chrome Mine.

Chairman's review continued

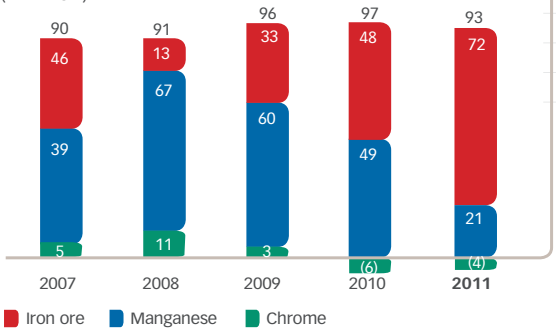
reasonably balanced throughout the year. The group's results for the past five financial years, on a six-monthly basis, are as follows:

Headline earnings
(Rmillion)



The group's prime focus remains its 50% shareholding in Assmang and the commissions and other income derived from marketing the group's products and providing technical and management services to group companies. Assmang's Khumani Expansion Project (KEP) has to date proven to be very successful, and the investment in the project (refer "Capital expenditure" below), which to date has provided the mine with the ability to produce 10 million tons of export sales annually, from its previous base of six million tons, has changed Assmang's earnings profile significantly. Additional mining infrastructure is being developed, and the additional capacity to rail the resultant planned annual export tonnage of 14 million tons is currently being negotiated with Transnet. The contribution from Assmang to Assore's headline earnings by commodity for the past five years on a percentage basis is as follows:

Percentage of headline earnings
(Rmillion)



Capital expenditure

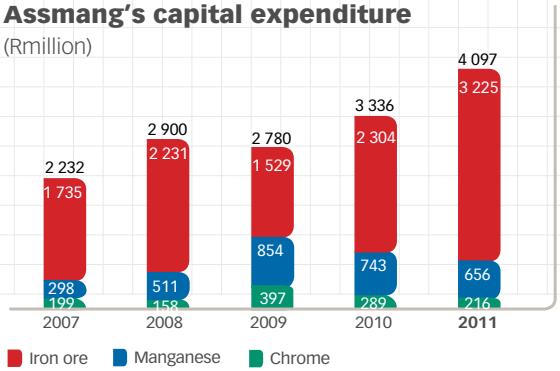
The bulk of the group's capital expenditure occurs in Assmang, with R4,1 billion of capital being spent across its operations (2010: R3,3 billion) during the year. Of this amount R2,8 billion was spent on infrastructural items on the KEP, which will enable the mine to realise sales of 16 million tons of iron ore per annum. This project remains on schedule, and the mine is expected to achieve this level of production as from 1 July 2012.

Following the successful conversion of a ferrochrome furnace at the Machadodorp Works to a ferromanganese furnace, two additional furnaces are scheduled to be converted on this basis as well. Production of ferromanganese is expected to start towards the middle of calendar 2012. Approximately R656 million of capital was spent in Assmang's Manganese division during the year, of which R313 million was utilised on rebuilding furnaces, with most of the balance spent on surface development of the new plant at the Black Rock Manganese Ore Mine and ongoing replacement expenditure.

The development of two underground shafts at Assore's chromite mine, Rustenburg Minerals, continues, and during the year, R38 million was spent on the development of these shafts, which are expected to be operational by July 2013.

Assmang's capital expenditure is summarised by division for the past five years as follows:

Assmang's capital expenditure
(Rmillion)



Dividends

Following the stronger financial results, the board doubled the level of the interim dividend for the year to 200 cents (2010: 100 cents) per share.

Due to the sustained level of earnings in the second half of the year, a final dividend of 250 cents (2010: 240 cents) per share was declared, resulting in the total dividend per share for the year amounting to 450 cents (2010: 340 cents), an increase of 32%.

Outlook

As noted in the results announcement in August, significant uncertainties still exist in the global economy with the United States and Europe showing little sign of sustainable recovery. Continued economic growth in Asia, and in particular China, is largely responsible for continued high iron ore prices. The indications are that these prices are sustainable and will be a feature of the commodities market for at least the short term. The oversupplied position in the manganese and chrome markets remains evident, and current global economic uncertainties do not provide the conditions necessary to command higher ore and alloy prices for these commodities.

Cost increases in South Africa are placing further pressure on most of the group's alloy products, which is necessitating the careful review of the cost-effectiveness of the group's operations, particularly in the manganese and chrome alloy plants. These factors, and the fact that the group's results are directly affected by the level of the rand, do not make it possible to predict the results of the group with any certainty.

Directors

Subsequent to the year-end, and upon the completion of the first phase of our third empowerment transaction, the Shanduka Group disposed of its 11,8% interest in Assore (refer "Black Economic Empowerment Status report", page 56), and Cyril Ramaphosa resigned as non-executive director.

On 3 May 2011, Don Ncube was appointed as an independent non-executive director. Don has sat on the boards of a number of South African corporates and was *inter alia* non-executive chairman of South African Airways, Sun International SA and the Atomic Energy Corporation. He is currently on the boards of Goldfields Limited, Vula Mining Supplies and Badimo Gas, of which he is the executive chairman and is eminently placed to make a valuable contribution to the group.

We welcome Ms Zodwa Manase to the board who has agreed to join the board with effect from 7 October 2011 as an independent non-executive director. Zodwa is the chairperson of Total South Africa and the State Information Technology Agency, and holds directorships in Medi-Clinic Corporation Limited and MTN Zakhele.

Appreciation

Despite the buoyant conditions in the iron ore market, this year has been difficult for the group and its staff, particularly those involved and responsible for sales of other commodities. I thank my fellow directors, the management and staff for their ongoing support and commitment during the year. In addition, the value and input received from our customers, agents, suppliers, shareholders and bankers have further enhanced the group's achievements and receive our appreciation.

Desmond Sacco
Chairman
14 October 2011

Board of directors

Executive directors

Desmond Sacco Chairman

BSc (Hons) (Geology) (Wits) (Unisa)

Des qualified as a geologist and joined the Assore group in 1968. He was appointed to the Assore board in 1974 and, on retirement of his father in 1992, was appointed Chairman and Managing Director. In that year, he was also appointed Deputy Chairman of Assmang Limited and in 1999, he became Chairman of Assmang. He is a fellow of the Institute of Directors (IOD) and of the Geological Society of South Africa (GSSA).

Chris J Cory Chief Executive Officer

BA, CA(SA), MBA (Wits)

Chris completed articles with Alex. Aiken & Carter (now KPMG) and qualified as a chartered accountant in 1982. In 1989, he joined the Assore group as Group Accountant. In 1992, he was appointed Group Financial Director and made Chief Executive Officer in June 2004 when the roles of Chairman and Managing Director were split. He was appointed to the Assmang board as a non-executive director in 1993 and currently chairs the Assmang Audit Committee. He is a member of the South African Institute of Chartered Accountants (SAICA).

Philip C Crous Group Technical Director

BSc (Eng), BCom, MBA

Phil trained as a mining engineer, obtaining a BSc (Eng) degree at Pretoria University in 1975. Thereafter he joined Iscor, and in 1977 he took up a position with Assmang where he advanced to Mine Manager. In 1982, he joined Sasol as General Mine Manager and was subsequently promoted to Operations Manager at Secunda Collieries, responsible for four mechanised mines. In 1988 he joined manufacturing company Sandock-Austral as Managing Director. In 1991 he was invited to join Assore in his current position as Group Technical Director and was appointed to the Assmang board in 1992. He is a member of the South African Institute of Mining and Metallurgy (SAIMM) and the Institute of Directors (IOD).

Non-executive directors

Edward M Southey Deputy Chairman and lead independent non-executive director

BA, LLB

Ed was admitted as an attorney, notary and conveyancer in 1967 and practised as a partner of Webber Wentzel until his retirement as senior partner of that firm in 2006. He remains an executive consultant to the firm. He is a former president of the Law Society of the Northern Provinces and of the Law Society of South Africa. He is a director of a number of companies. He joined the Assore board as a non-executive director in January 2009, and was appointed as Deputy Chairman and lead independent director in November 2010. He is the chairman of the group's audit and risk, and remuneration committees.

Robert J Carpenter Non-executive director

BA, ACIS

Bob joined the Ore & Metal Company Limited in 1964 and was appointed as its Managing Director in 1991. Ore & Metal is a wholly owned subsidiary of the Assore group and acts as selling and shipping agent for products produced by all the Assmang and Assore group companies. He was appointed to the Assore board in 1987 and to the Assmang board in 1989. He served as Deputy Chairman of Assore from 1993 until November 2010, when he stood down in this capacity, in anticipation of his retirement as executive director in February 2011 from both the Assore and Assmang boards.

Non-executive directors continued

Zodwa P Manase Independent non-executive director

BCompt (Hons) (Unisa), CA(SA), H Dip Tax (Natal)

Zodwa is a chartered accountant and was appointed to the board in October 2011. She is founder and Chief Executive Officer of accounting firm Manase & Associates. She is Chairperson of Total SA and a director of Medi-Clinic Corporation Limited and MTN Zakhele. She has served on the boards of a number of entities, among them the SA Reserve Bank, the International Marketing Council (IMC) and was Chairperson of the State Information Technology Agency (SITA).

Don MJ Ncube Independent non-executive director

BA (Econ), MSc (Mgt), DCom (HC) (Transkei), Postgraduate Diploma in Labour Relations and Financial Management

Don was appointed a director of Assore on 3 May 2011 and is also an independent non-executive director of Goldfields Limited. Previously, he was an alternate director of Anglo American Industrial Corporation and Anglo American Corporation, a director of AngloGold Ashanti as well as non-executive Chair of South African Airways, Real Africa Asset Management, African Life Assurance, Sun International SA Limited, Oceana Fishing Limited and Atomic Energy Corporation. He is currently Managing Director of Vula Mining Supplies and Executive Chair of Badimo Gas. He has also been the recipient of numerous awards including IPM Presidents Award (1990), Business Day's Business Achievement Award (1994) and Human Resources Award of Excellence (1994).

William F Urmson Independent non-executive director

CA(SA)

Bill was appointed as an independent non-executive director of Assore in October 2010 and serves on the group's audit and risk, and remuneration committees. He is a former Deputy Chairman of Ernst & Young and has served the accounting profession as Chairman of the Accounting Practices and Ethics committees of the South African Institute of Chartered Accountants. He is a former Director: Surveillance of the JSE Limited and remains as a part-time consultant to the exchange with responsibility for internal audit.

Dr Johannes C van der Horst Independent non-executive director

BA, LLD

Johannes studied at the universities of Stellenbosch and Hamburg (Germany) and the Harvard Business School. He held various positions in Old Mutual from 1971 to 2002 where he was General Manager (Investments) from 1985 to 1997. In September 1997, he was appointed to head up Old Mutual's demutualisation project which culminated in the listing of Old Mutual on the London Stock Exchange and the JSE Limited in July 1999. He served on the Assore board between 1989 and 1997, and again since January 2003 when he was appointed as an independent non-executive director and serves on the group's audit and risk, and remuneration committees. He is also on the boards of Reunert Limited and Foord Compass Limited. He has indicated his intention to resign as independent non-executive director with effect from 31 December 2011, following a total of 17 years' service on the board.

Mineral Resources and Reserves

Summary

Assmang (jointly held)

Iron ore mines	MEASURED AND INDICATED		PROVED AND PROBABLE	
	Mineral Resources		Mineral Reserves	
	Mt	Fe %	Mt	Fe %
BEESHOEK	118,97	63,75	55,13	64,04
KHUMANI				
Bruce	226,97	64,44	196,96	64,43
King	376,46	64,51	348,40	64,60

Manganese ore mines	MEASURED AND INDICATED			PROVED AND PROBABLE		
	Mineral Resources			Mineral Reserves		
	Mt	Mn %	Fe %	Mt	Mn %	Fe %
NCHWANING						
No 1 Seam	126,69	44,9	8,6	106,28	44,9	8,6
No 2 Seam	180,80	42,4	15,5	–	–	–
GLORIA						
No 1 Seam	92,23	37,8	4,9	68,25	37,8	4,9
No 2 Seam	29,40	29,9	10,1	–	–	–
BLACK ROCK						
No 1 Seam	43,60	40,6	18,1	–	–	–
No 2 Seam	26,81	38,6	19,8	–	–	–

Chromite mine	MEASURED AND INDICATED		PROVED AND PROBABLE	
	Mineral Resources		Mineral Reserves	
	Mt	Cr_2O_3%	Mt	Cr_2O_3%
DWARSRIVIER	48,77	39,05	33,44	35,69

Subsidiary companies

	Mineral Resources				Mineral Reserves		
	Measured Mt	Indicated Mt	Inferred Mt	Total Resource	Proved Mt	Probable Mt	Total Reserve
Chromite mines							
RUSTENBURG MINERALS	3,4	2,2	7,7	13,3	2,7	1,8	4,5
ZEERUST CHROME	1,9	1,5	8,4	11,8	2,4	5,2	7,6
Pyrophyllite mine							
WONDERSTONE	3,5	0,0	104,8	108,3	3,3		3,3

Construction of beneficiation plant on King (Khumani Iron Ore Mine).

Mineral Resources and Reserves continued

Salient features for the year ended 30 June 2011

Khumani Waste stripping at King progressed in preparation for production.

Beeshoek Production mainly for the domestic market came from offgrade stockpiles processed through the jig plant.

Nchwaning Investigations initiated to model the full package of the manganese seams in 0,5 m layers.

Gloria Measured and Indicated Mineral Resources increased by 79% to 92,23 million tons at 37,8% Mn as a result of remodelling which incorporated 42 new additional surface boreholes. The Inferred Resource decreased to 84 million tons.

Dwarsrivier Surface drilling of 52 boreholes to upgrade the Mineral Resource confidence in the southern portion of the mine completed. Remodelling to commence when all assay results are received.

Competent person's report on Mineral Resources and Mineral Reserves 2011

This report is issued as the annual update of Mineral Resources and Reserves to inform shareholders and potential investors of the mineral assets held by Assmang Limited.

General statement

Assmang's method of reporting Mineral Resources and Mineral Reserves conforms to the South African Code for Reporting Mineral Resources and Mineral Reserves (SAMREC Code) and the Australian Institute of Mining and Metallurgy Joint Ore Reserves Committee Code (JORC Code).

The convention adopted in this report is that Mineral Resources are reported inclusive of that portion of the total Mineral Resource converted to a Mineral Reserve. Resources and reserves are quoted as at 30 June 2011. External consulting firms audit the resources and reserves of the Assmang operations on a three to four-year cycle basis.

Underground resources are in situ tonnages at the postulated mining width, after deductions for geological losses.

Underground Mineral Reserves reflect milled tonnages while surface Mineral Reserves (dumps) are in situ tonnages without dilution. Both are quoted at the grade fed to the plant. Open-pit Mineral Resources are quoted as in situ tonnages and Mineral Reserves are tonnages falling within an economic pit-shell.

The evaluation method is generally Ordinary Kriging with mining block sizes ranging from 10 x 10 metres to 100 x 100 metres to 250 x 250 metres in the plan view. The blocks vary in thickness from 2,5 to 10 metres. The evaluation process is fully computerised, generally utilising the Datamine software package.

The Mineral Resources and Mineral Reserves are reported on a total basis regardless of the attributable beneficial interest that Assmang has on the individual projects or mines. When the attributable beneficial interests on a mine or project is less than 100%, the actual percentage of the attributable interest is specified.

Maps, plans and reports supporting resources and reserves are available for inspection at Assmang's registered office and at the relevant mines.

In order to satisfy the requirements of the Minerals and Petroleum Resources Development Act, Assmang's operations will have to obtain new mining rights for all properties required to support the planned operations over the next 30 years. The act was effective from 1 May 2004 and the new rights must be obtained within five years from then. The operations are at various stages of application.

Rounding of figures may result in computational discrepancies on the Mineral Resource and Reserve tabulations.

Definitions

The definitions of Mineral Resources and Reserves, quoted from the SAMREC Code, are as follows:

A "Mineral Resource" is a concentration or occurrence of material of economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, or estimated from specific geological evidence, sampling and knowledge interpreted from an appropriately constrained and portrayed geological model. Mineral Resources are sub-divided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories.

An **"Inferred Mineral Resource"** is that part of a Mineral Resource for which volume or tonnage, grade and mineral content can be estimated with only a low level of confidence. It is inferred from geological evidence and sampling and assumed but not verified geologically or through analysis of grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited in scope or of uncertain quality and reliability.

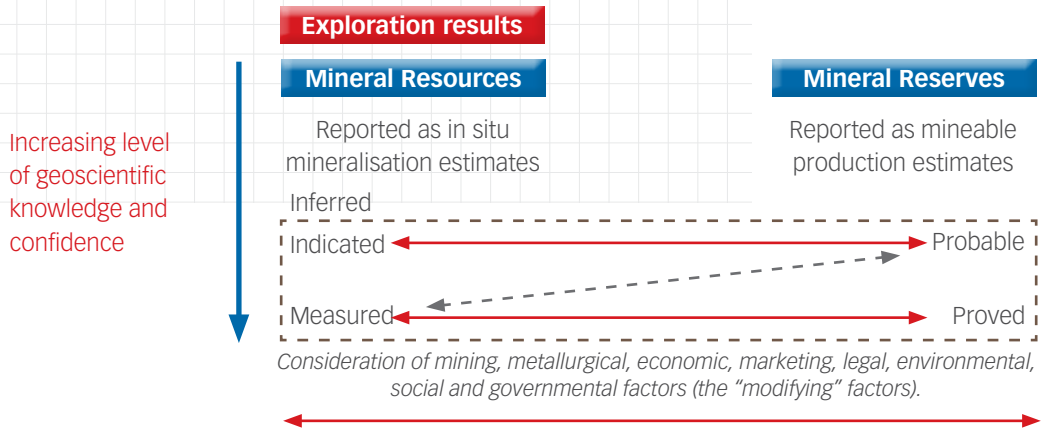
An **"Indicated Mineral Resource"** is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on information from exploration, sampling and testing of material gathered from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological or grade continuity but are spaced closely enough for continuity to be assumed.

A **"Measured Mineral Resource"** is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable information from exploration, sampling and testing of material from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

A **"Mineral Reserve"** is the economically mineable material derived from a Measured or Indicated Mineral Resource or both. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project and a life-of-mine plan for an operation must have been completed, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors). Such modifying factors must be disclosed.

A **"Probable Mineral Reserve"** is the economically mineable material derived from a Measured or Indicated Mineral Resource or both. It is estimated with a lower level of confidence than a Proved Mineral Reserve. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project or a life-of-mine plan for an operation must have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.

A **"Proved Mineral Reserve"** is the economically mineable material derived from a Measured Mineral Resource. It is estimated with a high level of confidence. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project or a life-of-mine plan for an operation must have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.



Mineral Resources and Reserves continued

Iron ore mines

Locality – The iron ore division is made up of the Beeshoek Mine located on the farms Beeshoek (448) and Olynfontein (475), and the Khumani Mine situated on the farms Bruce (544), King (561) and Mokaning (560). All properties are in the Northern Cape approximately 200 kilometres west of Kimberley. The Beeshoek open-pit operations are situated 7 kilometres west of Postmasburg and the new Khumani open pits are adjacent to, and south-east of, the Sishen mine, which is operated by Kumba Resources. Located at latitude 28°30'00"S/longitude 23°01'00"E, and latitude 27°45'00"S/longitude 23°00'00"E respectively. Khumani Mine supplies iron ore to the export markets. Exports are railed to the iron ore terminal at Saldanha Bay. Beeshoek ore is supplied to local customers.

History – Mining of iron ore (mainly specularite) was undertaken as early as 40 000 BC on the farm Doornfontein which is due north of Beeshoek. The potential of iron ore in this region was discovered in 1909, but due to the lack of demand and limited infrastructure, this commodity was given little attention. In 1929 the railway line was extended from Koopmansfontein (near Kimberley) to service a manganese mine at Beeshoek. In 1935 the Associated Manganese Mines of South Africa Limited (Assmang) was formed, and in 1964 the Beeshoek iron ore mine was established, with a basic hand sorting operation. In 1975 a full washing and screening plant was installed and production increased to seven million tons over the years. The Khumani Iron Ore Mine was commissioned in 2007 and is ramping up to approximately 10 million tons per annum with expansion plans to 16 million tons per annum being investigated.

Mining authorisation – The Beeshoek mining lease (ML3/93) comprises an area of 5 686 hectares and is located on the farms Beeshoek (448) and Olynfontein (475). The application for the conversion to a new mining order right submitted during the 2009 financial year is still pending. The application has been forwarded to Pretoria from the Kimberly regional office recommending its approval.

The Khumani mining right comprises an area of 7 388 hectares and is located on the farms Bruce (544), King (561) and Mokaning (560). The mining right was granted during the 2007 financial year.

Geology – The iron ore deposits are contained within a sequence of early Proterozoic sediments of the Transvaal Supergroup deposited between 2 500 and 2 200 million years ago. In general two ore types are present, namely laminated hematite ore forming part of the Manganore Iron Formation and conglomerate ore belonging to the Doornfontein Conglomerate Member at the base of the Gamagara Formation.

The older laminated ore types occur in the upper portion of the Manganore Iron Formation as enriched high-grade hematite bodies. The boundaries of high-grade hematite orebodies crosscut primary sedimentary bedding, indicating that secondary hematitisation of the iron formation took place. In all of these, some of the stratigraphic and sedimentological features of the original iron formation are preserved.

The conglomeratic ore is found in the Doornfontein Conglomerate Member of the Gamagara Formation and is lenticular and not persistently developed along strike. It consists of stacked, upward fining conglomerate-gritstone-shale sedimentary cycles. The lowest conglomerates and gritstones tend to be rich in sub-rounded to rounded hematite ore pebbles and granules and form the main orebodies. The amount of iron ore pebbles decreases upwards in the sequence so that upper conglomerates normally consist of poorly sorted, angular to rounded chert and banded iron formation pebbles.

The erosion of the northern Khumani deposit is less than that in the southern Beeshoek area. The result is that Khumani is characterised by larger stratiform bodies and prominent hangingwall outcrops. The down-dip portions are well preserved and developed, but in outcrop the deposits are thin and isolated. Numerous deeper extensions occur into the basins due to karst development. A prominent north-south strike of the ore is visible. The southern Beeshoek orebodies were exposed to more erosion and are more localised and smaller. Outcrops are limited to the higher topography on the eastern side of the properties. Down dip to the west, the ore is thin and deep. The strike of the orebodies is also in a north-south direction, but less continuous.

Hematite is the predominant ore mineral, but limonite and specularite also occur.

Underground dump truck at Nchwaning Manganese Mine.

Mineral Resources and Reserves continued

Mining operations are all open pit, based on the conventional drill-and-blast, truck-and-shovel operations. Run-of-mine ore is crushed and stored as on or off-grade on blending stockpiles. Ore from the stockpiles is either sent to the wash-and-screen plants or, if off-grade, to the beneficiation plants. The washing and screening plants consist primarily of tertiary crushing, washing, screening, conveying and stacking equipment. The beneficiation plants consist of tertiary crushers; scrubbers; coarse and fine jigs; lumpy, fines and scaw product stockpiles; and a rapid load-out facility. No chemical is being used in any of the treatment plants.

Mineral Resources and Reserves – In the iron ore operations, the following table shows how the search ellipse (ie the ellipsoid used by the Kriging process to determine if a sample is used in the estimation of a block) is used to classify the Mineral Resources:

	Minimum number of samples	Maximum number of samples	Search ellipse settings XYZ (m)
Measured	6	30	100 x 100 x 10
Indicated	5	30	200 x 200 x 20
Inferred	4	30	400

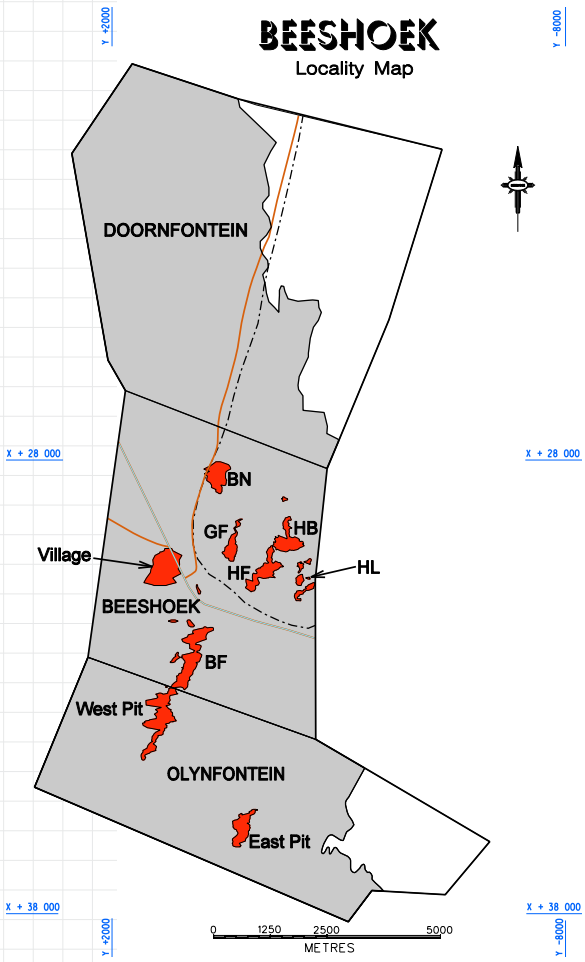
Only Measured and Indicated Resources are converted to Proved and Probable Reserves respectively. Modifying factors were applied to these resources and financially optimised. The financial outline is used to define the optimal pit by means of the Lersch-Grossman algorithm. The resources within this mining constraint are defined as reserves. These are categorised into different product types, destined for the different plant processes and scheduled for planning.

The methodology followed to identify targets is initiated with geological mapping, followed by geophysics (ground magnetics and gravity). Percussion drilling is used to pilot holes through overlying waste rock down to the iron orebodies. Diamond drilling is the next phase, which is usually on a 200 x 200 metre grid. Further infill drilling is carried out at spacing ranging from 100 x 100 metres to 25 x 25 metres, depending on the complexity of the geological structures. Numerous exploration programmes have been completed in the last 40 years. A total of 2 832 holes (1 315 holes on Khumani and 1 517 holes on Beeshoek) have been drilled. Core samples are logged and split by means of a diamond saw and the half-core is sampled every 0,5 metres. Before submission for assaying, the half-cores are crushed, split and pulverised. Samples with values larger than 60% are included in the definition of the orebodies. Any lower-grade samples inside the orebody are defined as internal waste and modelled separately. Each zone is modelled per section, and then wireframed to get a three-dimensional (3D) model.

Ordinary Kriging interpolation within CAE Datamine is used to estimate the grade of each 10 x 10 x 10 metre block generated within the geological model. Density in the resource model is calculated using a fourth degree polynomial fit applied to the estimated Fe grade. Densities range from 4,38 t/m^3 (60% Fe) to 5,01 t/m^3 (68% Fe). A default density of 3,2 t/m^3 is used for waste.

At the Iron Ore Mines all blast holes are sampled per metre, but composited per hole. All holes are analysed for density and blast holes in ore are sampled and analysed for Fe, potassium oxide (K_2O), sodium oxide (Na_2O), silica (SiO_2), aluminium oxide (Al_2O_3), phosphorus (P), sulphur (S), CaO, MgO, Mn and barium oxide (BaO). Every fifth blast hole is geologically logged per metre, which is used to update the geological model. The chemical results of these holes are used to update the ore block model. The major analytical technique for elemental analyses is XRF spectroscopy. Volumetric titration is used as verification method for the determination of total iron in the ore. International standards (eg SARM11) and in-house iron standards are used for calibration of the XRF spectrometer. The Khumani laboratory participates in a round robin group that includes 11 laboratories for verification of assay results.

Beeshoek year-on-year change – Measured and Indicated Resources for the Beeshoek Mine increased to 118,97 million tonnes from 113,35 million tons, mainly due to the increase in the resources for Village pit where remodelling of the orebody was undertaken. The 2011 Mineral Reserves increased by 16% to 55,13 million tons due to increase in Village and East Pit reserves. A feasibility study for Village pit is still in progress.



Beeshoek Iron Ore Mine: Resources and Reserves

	Measured Resources		Indicated Resources		Inferred Resources		Total Measured and Indicated		Proved Reserves		Probable Reserves		Total Reserves	
Pit/Area	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %	Mt	Fe %
BN	23,42	63,40	–	–	–	–	23,42	63,40	13,92	63,55	–	–	13,92	63,55
HF/HB	16,00	64,10	–	–	–	–	16,00	64,10	6,87	64,27	–	–	6,87	64,27
BF	8,45	63,51	0,23	63,54	0,001	65,24	8,68	63,51	1,02	61,59	–	–	1,02	61,59
East Pit	8,91	64,63	0,04	64,23	–	–	8,95	64,63	6,16	64,43	0,01	63,64	6,17	64,43
Village	42,71	63,72	2,98	63,57	0,002	63,71	45,69	63,71	27,15	64,24	–	–	27,15	64,24
GF	3,13	63,81	0,09	61,80	–	–	3,22	63,75	–	–	–	–	–	–
HH Ext	0,28	62,63	–	–	–	–	0,28	62,63	–	–	–	–	–	–
HL	3,23	65,07	0,05	65,20	–	–	3,28	65,07	–	–	–	–	–	–
West Pit	9,45	63,19	–	–	0,050	61,88	9,45	63,19	–	–	–	–	–	–
Detrital	–	–	–	–	2,500	60,00	–	–	–	–	–	–	–	–
Total 2011	**115,58**	**63,76**	**3,39**	**63,55**	**2,553**	**60,04**	**118,97**	**63,75**	**55,12**	**64,04**	**0,01**	**63,64**	**55,13**	**64,04**
Total 2010	112,59	63,71	0,76	63,61	2,55	60,04	113,35	63,71	47,64	64,93	0,03	66,45	47,67	64,93

Mineral Resources are inclusive of Mineral Reserves.
Totals are rounded off.
Modifying factors: Economic pit design; Fines generated; Customer product specifications.

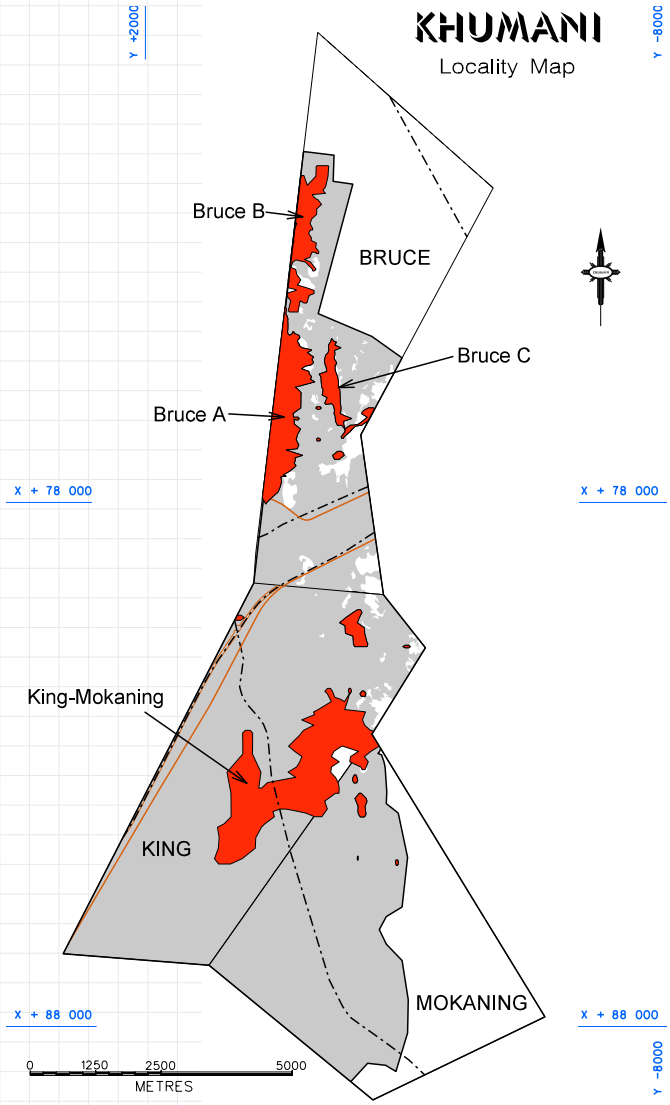
Mineral Resources and Reserves continued

A stacker/reclaimer in operation in the final product yard of Khumani Iron Ore Mine.

Khumani year-on-year change – At the Khumani Mine Measured and Indicated Resources decreased from 613,73 million tons to 603,43 million tons mainly due to Bruce B and C pits where reduced tonnage is attributable to mining depletion and remodelling of Bruce C. Total reserves increased marginally to 545,36 from 543,63 million tons in 2010.

Historical production at the Beeshoek and Khumani Mines (saleable product)

Financial year	Beeshoek Mt	Khumani Mt
2006/2007	6,70	–
2007/2008	5,30	2,00
2008/2009	2,66	6,65
2009/2010	0,52	8,77
2010/2011	0,96	8,73



Khumani Iron Ore Mine: Resources and Reserves

Pit/Area	Measured Resources Mt	Measured Resources Fe %	Indicated Resources Mt	Indicated Resources Fe %	Inferred Resources Mt	Inferred Resources Fe %	Measured and Indicated Mt	Measured and Indicated Fe %	Proved Reserves Mt	Proved Reserves Fe %	Probable Reserves Mt	Probable Reserves Fe %	Total Reserves Mt	Total Reserves Fe %
Bruce A	76,39	64,48	34,36	64,20	0,02	63,93	110,75	64,39	69,13	64,54	31,60	64,21	100,73	64,44
Bruce B	72,32	64,42	25,35	63,98	0,19	65,31	97,67	64,31	69,29	64,41	14,99	63,63	84,28	64,27
Bruce C	11,70	65,45	6,85	65,45	0,36	63,36	18,55	65,45	10,31	65,50	1,64	65,85	11,95	65,55
King-Mokaning	253,73	64,53	122,73	64,48	4,85	63,02	376,46	64,51	238,90	64,63	109,50	64,55	348,40	64,60
Detrital	–	–	–	–	4,00	60,00	–	–	–	–	–	–	–	–
Total 2011	**414,14**	**64,53**	**189,29**	**64,40**	**9,42**	**61,80**	**603,43**	**64,49**	**387,63**	**64,60**	**157,73**	**64,41**	**545,36**	**64,54**
Total 2010	477,18	64,50	136,55	64,52	26,85	63,43	613,73	64,50	463,77	64,45	79,86	64,32	543,63	64,43

Mineral Resources are inclusive of Mineral Reserves.
Totals are rounded off.
Modifying factors: Economic pit design; Fines generated; Customer product specifications.

Mineral Resources and Reserves continued

Manganese mines

Locality – The manganese mines are situated in the Northern Cape province in South Africa, approximately 80 kilometres north-west of the town of Kuruman. Located at latitude 27°07'50"S and longitude 22°50'50"E, the site is accessed via the national N14 route between Johannesburg and Kuruman, and the provincial R31 road.

History – In 1940, Assmang acquired a manganese ore outcrop on a small hillock known as Black Rock. Several large properties underlain by ore were subsequently found and acquired. Today the Black Rock area is considered to be the largest and richest manganese deposit in the world. Manganese ore operations were extended and today include the Gloria and Nchwaning underground mines. Manganese ore is supplied locally to Assmang-owned smelters, but is mainly exported through Port Elizabeth to Japanese and German customers.

Mining authorisation – The Nchwaning mining lease (ML10/76) comprises an area of 1 986 hectares and is located on the farms Nchwaning (267), Santoy (230) and Belgravia (264). The Gloria mining lease (ML11/83) comprises an area of 1 713 hectares and is located on portion 1 of the farm Gloria (266). The new mining right was executed on 13 July 2011. Registration of the right is in process.

Geology – The manganese ores of the Kalahari Manganese field are contained within sediments of the Hotazel Formation of the Griqualand West Sequence, a subdivision of the Proterozoic Transvaal Supergroup. At Black Rock, Belgravia and Nchwaning, the Hotazel, Mapedi and Lucknow Formations have been duplicated by thrusting. The thrusted orebodies comprising Black Rock (Koppie), Belgravia 1 and Belgravia 2 are collectively known as Black Rock orebodies. The average thickness of the Hotazel Formation is approximately 40 metres.

The manganese orebodies exhibit a complex mineralogy and more than 200 mineral species have been identified to date. The hydrothermal upgrading has resulted in a zoning of the orebody with regard to fault positions. Distal areas exhibit more original and low-grade kutnohorite and braunite assemblages, while areas immediately adjacent to faults exhibit a very high-grade hausmannite ore. The intermediate areas exhibit a very complex mineralogy, which includes bixbyite, braunite and jacobsite amongst a host of other manganese-bearing minerals. A similar type of zoning also exists in the vertical sense. At the top and bottom contacts it is common to have high iron (Fe) and low manganese (Mn) contents while the reverse is true towards the centre of the seam. This vertical zoning has given rise to a mining practice where only the centre 3,5-metre high portion of the seam is being mined. At the Gloria Mine the intensity of faulting is much less, which also explains the lower grade.

Two manganese seams are present. The No 1 seam is up to 6 metres in thickness, of which 3,5 metres are mined, using a manganese marker zone for control. There is, therefore, minimum dilution. No mining is presently undertaken on No 2 seam at Nchwaning or Gloria.

Nchwaning Mineral Resources and Reserves

Mineral Resource classification at the Nchwaning Mine is based on consideration of a number of parameters: kriging variance, kriging efficiency, regression slope, geological structures and quality of assay data. Each of these parameters contributes to the overall classification depending on weighting assigned to each of the parameters. Measured and Indicated Resources have been defined for Nchwaning. Geological losses are built into the grade models.

The Nchwaning Mine was diamond drilled from surface at 330 metre centres and the data is now captured in a Geological Database Management System (GDMS) developed by CAE Datamine SA. The core was logged and 0,5-metre long, half-core, diamond-saw cut samples were submitted to Assmang's laboratory at Black Rock for X-ray fluorescence (XRF) analyses. Mn and Fe values were checked by Wet Chemical analyses. Several standards were used to calibrate XRF equipment, and results are compared with other laboratories on a regular basis.

At Nchwaning a total of 316 boreholes as well as a total of 30 587 face samples were considered in the grade estimation for the Nchwaning 1 orebody. The available data for an area was optimised over a thickness of 3,5 metres and exported into data files for computerised statistical and geostatistical manipulation to determine the average grades of Mn, Fe, silica (SiO_2), calcium (CaO) and magnesium (MgO).

Iron ore being drilled at Khumani Iron Ore Mine.

Mineral Resources and Reserves continued

Ordinary Kriging interpolation within Datamine was used to estimate the grade of each 50 x 50 x 3,5 metre block generated within the geological model.

Sub-cell splitting of the 50 x 50 metre blocks was allowed to follow the geological boundaries accurately. The relative density of Nchwaning manganese ore was taken as 4,3 t/m^3.

Trackless mechanised equipment is used in the board and pillar mining method. Mining in the eastern extremity of Nchwaning occurs at a depth of 200 metres while the deepest (current) excavations can be found at a depth of 519 metres below surface.

Ore from the Nchwaning No 2 Mine is crushed underground before being hoisted to a surface stockpile via a vertical shaft. Similarly, ore from the Nchwaning No 3 Mine is crushed underground before being conveyed to a surface stockpile via a declined conveyor system. Ore is withdrawn from the surface stockpile and forwarded to two stages of crushing, dry screening and wet screening to yield lumpy and fine products.

At the plant the finer fractions are stockpiled while the coarser fractions are extracted from the respective product boxes into road haulers, sampled, weighed and stored on stacks ahead of despatch. Samples from each stack are analysed for chemical content and size distribution. This ensures good quality control and enables the ore control department to blend various stacks according to customer demand.

Nchwaning year-on-year change – Mineral Reserves for Nchwaning lower seam (1 body) decreased to 106,28 million tons from 107,96 million tons mainly due to depletion by production. The Mineral Resources for 1 body changed from 128,63 million tons to 126,69 million tons. Nchwaning 2 body Mineral Resources remained at 180,8 million tons.

Nchwaning Mine: Lower Seam (1 Body) Manganese Resources and Reserves

Mineral Resources	Mt	Mn %	Fe %	Mineral Reserves	Mt	Mn %	Fe %
Measured	37,61	46,3	9,0	Proved	32,34	46,3	9,0
Indicated	89,08	44,3	8,4	Probable	73,94	44,3	8,4
Total Resources 1 body 2011	**126,69**	**44,9**	**8,6**	**Total Reserves 1 body 2011**	**106,28**	**44,9**	**8,6**
Total Resources 1 body 2010	128,63	45,3	8,7	Total Reserves 1 body 2010	107,96	45,3	8,7

Mineral Resources are inclusive of Mineral Reserves.
Totals are rounded off.
Modifying factors: pillar losses, mining losses.

Nchwaning Mine: Upper Seam (2 body) Manganese Resources			
Mineral Resources	Mt	Mn %	Fe %
Measured	53,37	42,0	16,3
Indicated	127,43	42,6	15,2
Total Resources 2 body 2011	180,80	42,4	15,5
Total Resources 2 body 2010	180,80	42,4	15,5

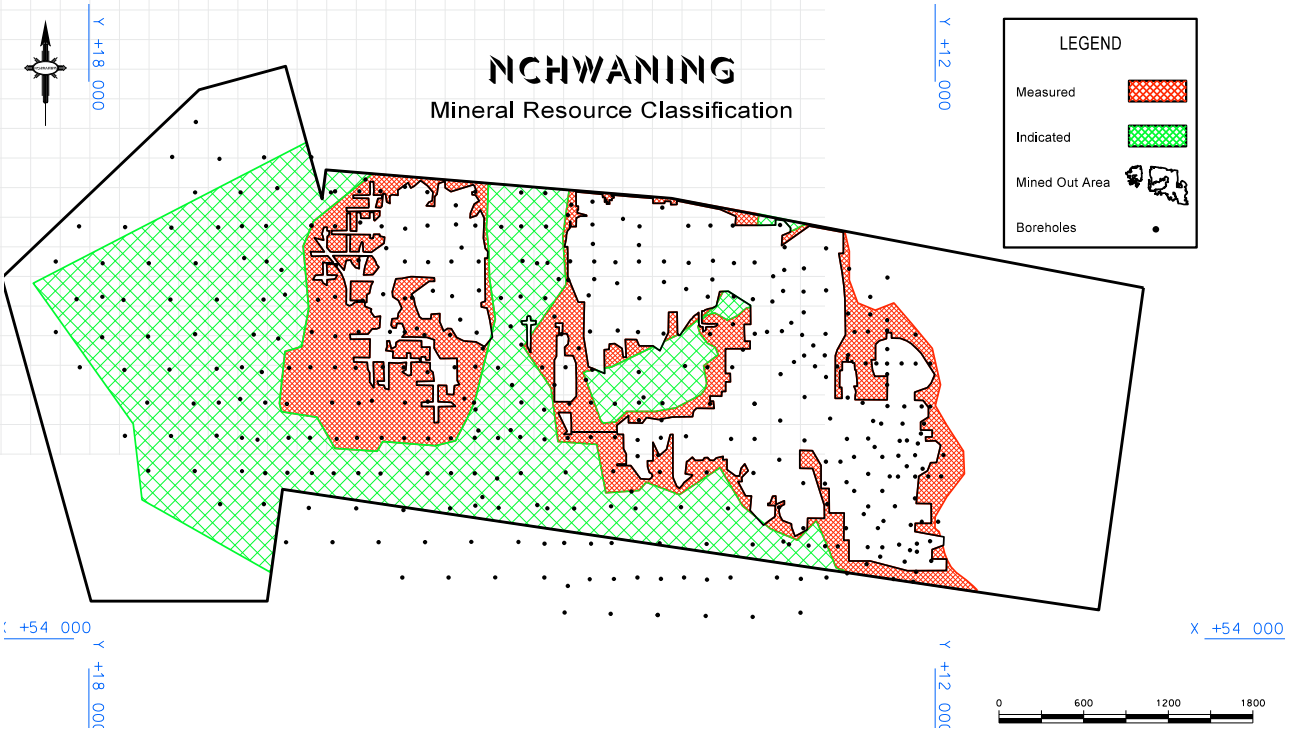
Black Rock: Lower Seam (1 body) Manganese Resources			
Mineral Resources	Mt	Mn %	Fe %
Measured	9,03	40,3	18,1
Indicated	34,57	40,7	18,1
Total Resources 1 body 2011	43,60	40,6	18,1
Total Resources 1 body 2010	–	–	–

Totals are rounded off.

Black Rock: Lower Seam (2 body) Manganese Resources			
Mineral Resources	Mt	Mn %	Fe %
Measured	8,23	37,4	19,8
Indicated	18,58	39,2	19,8
Total Resources 2 body 2011	26,81	38,6	19,8
Total Resources 2 body 2010	–	–	–

Black Rock Mineral Resources

The Black Rock orebodies occur in the Black Rock (Koppie), Belgravia 1 and Belgravia 2 areas. They are all part of a large thrust complex. Modelling of these orebodies was undertaken using 151 Nchwaning boreholes that intersected the thrust complex and 174 Black Rock infill boreholes. A cut-off of 38% manganese was used in the modelling. 1 and 2 body seams were modelled at different thicknesses.



Mineral Resources and Reserves continued

Gloria Mineral Resources and Reserves

Procedures for drilling and assaying at the Gloria Mine are the same as at Nchwaning. A total of 109 boreholes and 6 480 face samples were considered in the evaluation of the Gloria 1 Body Mine. The underground sampling values were used in evaluating areas close to current mining. The boreholes were optimised over a stoping width of 3,5 metres and the relative density was taken as 3,8 t/m^3. The seams were evaluated by means of statistical and geostatistical methods to determine the average grades of Mn, Fe, SiO_2, CaO and MgO. Ordinary Kriging interpolation within Datamine was used to estimate the grade of each 50 x 50 x 3,5 metre block generated within the geological model. Sub-cell splitting of the 50 x 50 metre blocks was allowed to follow the geological boundaries.

The Gloria Mine is extracting manganese at depths that vary between 180 to 250 metres. Ore is crushed underground before being conveyed to surface stockpile via a decline shaft.

Gloria year-on-year change – Remodelling of the Gloria orebody after drilling of 42 new boreholes resulted in significant 79% increase in Measured and Indicated Mineral Resources to 92,23 million tons as the Inferred Resources were upgraded to higher category resources. Mineral Reserves also increased from 39,71 million tons to 68,25 million tons. The Mineral Resources for Gloria 2 body remained the same. No South African markets exist for Gloria 2 body ore at this time.

Gloria Mine: Lower Seam (1 body) Manganese Resources and Reserves

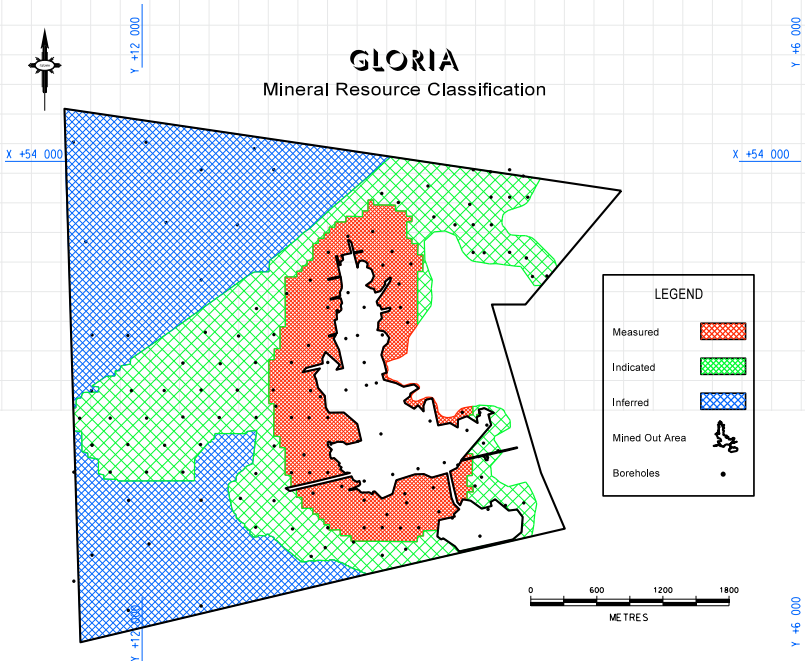
Mineral Resources	Mt %	Mn %	Fe %	Mineral Reserves	Mt %	Mn %	Fe %
Measured	31,46	37,7	4,8	Proved	23,28	37,7	4,8
Indicated	60,77	37,8	4,9	Probable	44,97	37,8	4,9
Total Resources 1 body 2011	**92,23**	**37,8**	**4,9**	Total Reserves 1 body 2010	68,25	37,8	4,9
Total Resources 1 body 2010	51,57	38,3	5,5	Total Reserves 1 body 2009	39,71	38,3	5,5
Inferred 2011	84,00	36,8	4,8				
Inferred 2010	128,24	–	–				

Mineral Resources are inclusive of Mineral Reserves.
Totals are rounded off.
Modifying factors: pillar losses, mining losses.

Gloria Mine: Upper Seam (2 body) Manganese Resources Mineral Resources	Mt	Mn %	Fe %
Measured	–	–	–
Indicated	29,40	29,9	10,1
Total Resources 2 body 2011	**29,40**	**29,9**	**10,1**
Total Resources 2 body 2010	29,40	29,9	10,1
Inferred 2011	128,24	–	–
Inferred 2010	128,24	–	–

Totals are rounded off.

Historical manganese production at the Nchwaning and Gloria Mines (Saleable product) Year	Nchwaning Mt	Gloria Mt
2006/2007	2,49	0,43
2007/2008	2,71	0,41
2008/2009	2,63	0,51
2009/2010	1,30	0,67
2010/2011	2,35	0,70



Mineral Resources and Reserves continued

Chromite mine

Locality – Chromite operations at the Dwarsrivier Mine form part of the chrome division of Assmang Limited. The mine is situated on the farm Dwarsrivier (372KT), approximately 30 kilometres from Steelpoort and 60 kilometres from Lydenburg, in the Mpumalanga province in South Africa. Located at longitude 30°05'00"E/latitude 24°59'00"S, Assmang purchased the farm from Gold Fields Limited, together with all surface and mineral rights in October 1998.

History – Neighbouring properties to the north and south of Dwarsrivier had existing chrome mining operations at the time of purchase. The feasibility study of the plant, tailings dam and designs for the open-cast and underground mines then commenced. After the completion of the feasibility study, approval to proceed with the final design and construction work was given in July 1999.

Chromite was obtained from the open-cast mining areas at a rate of approximately 0,9 million tons a year and these areas were mined out within five years. Underground mining commenced in 2005 at a rate of 1,2 million tons ROM a year. The Dwarsrivier Mine is specifically geared to deliver high-quality metallurgical grade chromite to the Machadodorp smelter. In addition, the plant has been designed to produce chemical grade products.

Mining authorisation – An old-order Mining Licence 21/99 was granted in October 1999. An application for the conversion to a new-order mining right submitted in October 2007 is still pending.

Geology – The Dwarsrivier Mine is situated in the eastern limb of the Bushveld Complex, which comprises persistent layers of mafic and ultramafic rocks, containing the world's largest known resources of platinum group metals, chromium and vanadium. The mafic rocks termed the Rustenburg Layered Suite, are approximately 8 kilometres thick in the Eastern Lobe, and are divided formally into five zones.

The rocks of the Marginal Zone at the base of the succession consist mainly of pyroxenites with some dunites and harzburgites. Above the Marginal Zone, the Lower Zone comprises mainly pyroxenites, harzburgites and dunite, and is present only in the northern part of the Eastern Lobe, and only as far south as Steelpoort. The appearance of chromitite layers marks the start of the Critical Zone, economically the most important zone. The layers are grouped into three sets termed the Lower, Middle and Upper groups. The sixth chromitite seam in the Lower Group (LG6), is an important source of chromite ore and is the orebody being mined at the Dwarsrivier Mine. In the Eastern Lobe, in the vicinity of Dwarsrivier, the strike is nearly north-south, with a dip of approximately 10 degrees towards the west. Average thickness of the LG6 seam is about 1,86 metres in the Dwarsrivier area. Pipe-like dunite intrusions are evident in the area, as well as dolerite dykes that on average strike northeast-southwest. No significant grade variation is evident, especially not vertically in the ore seam. Small, insignificant regional variations do, however, exist.

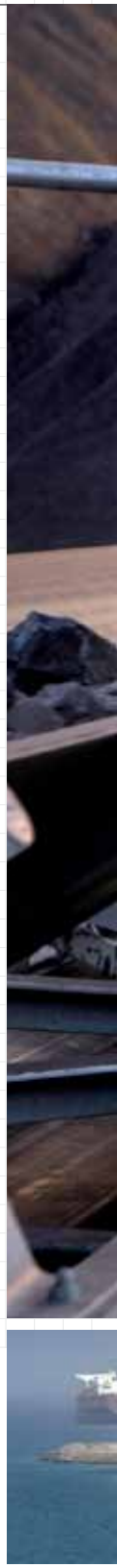
Mineral Resources and Reserves – Information was obtained from boreholes with a 300 to 150-metre grid spacing. Resources were determined with a decreasing level of confidence.

- Measured Resource (150 metres drill grid spacing);
- Indicated Resource (300 metres drill grid spacing); and
- Inferred Resource (drill grid spacing greater than 300 metres).

All possible resources down to a mineable depth of 350 metres below ground level have been considered.

Vertical diamond drill holes are used for geological and grade modelling, except where information is needed to clarify large-scale fault planes. The Mineral Resources at the Dwarsrivier Mine are based on a total of 237 diamond drill holes that have been used for grade estimation and orebody modelling purposes. The drill core is NQ size and is geologically and geotechnically logged. The collar position of the drill holes is surveyed, but no down-hole surveys are done, and the holes are assumed to have minimal deflection.

The chromitite seam is bounded above and below by pyroxenites. As such, the ore horizon is clearly defined. The core is sampled from the top contact downwards at 0,5-metre intervals. The core is split and half is retained as reference material in the core sheds. The other half is crushed and split into representative samples, which are crushed and pulverised for chemical analysis. The samples are analysed using fusion/ICP-OES for chrome oxide (Cr_2O_3), SiO_2, FeO, Al_2O_3, MgO and CaO. Three laboratories, all ISO 17025 accredited for this method, are used. Every tenth sample is analysed in duplicate. SARM 8 and SARM 9 standards, as well as in-house reference material, are included every 20 to 30 samples in each batch. The density for each sample is measured using a gas pycnometer.



Manganese beneficiation plant at Nchwaning Mine.

Mineral Resources and Reserves continued

Mineral Resources have been estimated using Ordinary Kriging, where Cr_2O_3, FeO, Al_2O_3, MnO and MgO contents of the LG6 seam and densities were determined, using block sizes of 50 x 50 x 4 metres.

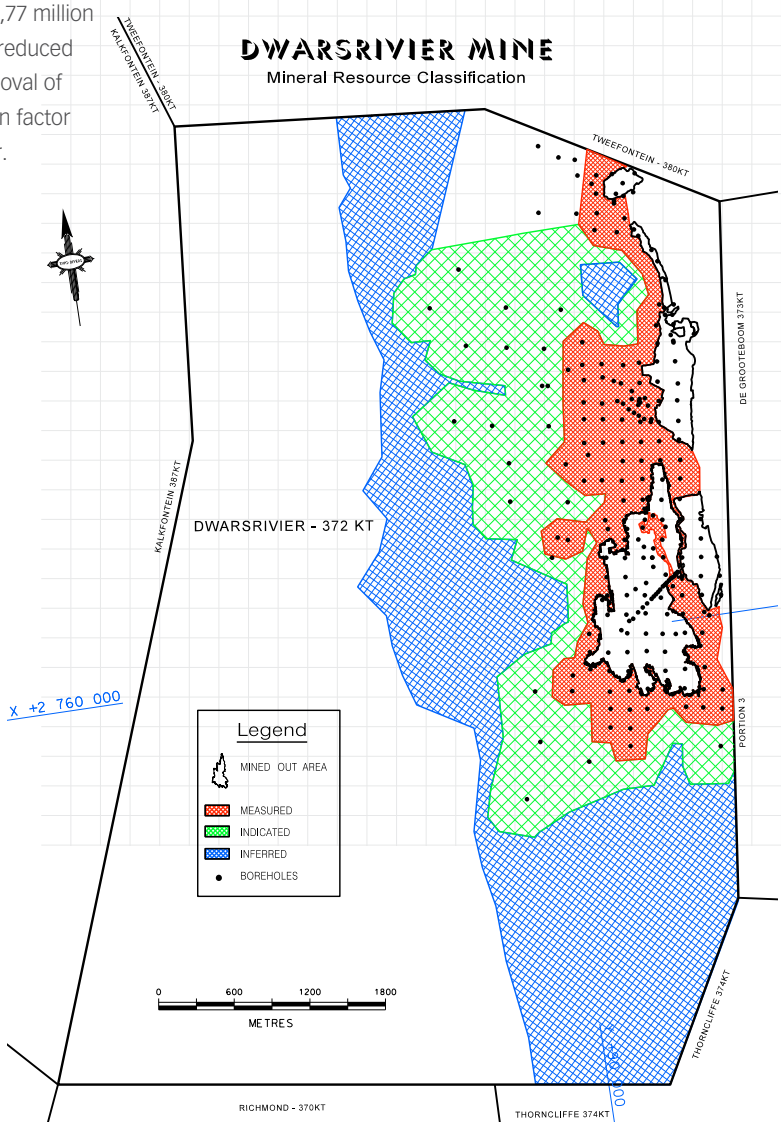
During mining, a slightly diluted run-of-mine ore inclusive of the "false" hangingwall is fed to the beneficiation plant. In the dense media separation part of the plant, the coarse fraction is upgraded to 40% Cr_2O_3, with a yield of 80%. In the spiral section of the plant the finer fraction is upgraded to 44% Cr_2O_3, and 46% Cr_2O_3 respectively, for metallurgical grade fines and chemical grade fines. A 67% yield is achieved in the spiral circuit.

Historical production at Dwarsrivier Chrome Mine

Financial year	Mt
2006/2007	1,01
2007/2008	1,24
2008/2009	1,03
2009/2010	0,78
2010/2011	1,25

Year-on-year change – 2011

Mineral Resources decreased by 1,83 million tons to 48,77 million tons mainly due to mining depletion. Mineral Reserves reduced to 33,44 million tons from 39,50 million tons due to removal of additional structural blocks, reduction of pillar extraction factor from 77% to 75% and mining depletions during the year.



Dwarsrivier Chrome Mine: Chrome Resources and Reserves

Mineral Resources	Mt	Mn %	Fe %	Mineral Reserves	Mt	Mn %	Fe %
Measured	17,25	39,20	23,07	Proved	9,57	35,75	22,00
Indicated	31,52	38,97	23,01	Probable	23,87	35,66	22,04
Total Measured and Indicated 2011	**48,77**	**39,05**	**23,03**	**Total Reserves 2011**	**33,44**	**35,69**	**22,03**
Total Measured and Indicated 2010	50,60	39,03	22,98	Total Reserves 2010	39,50	35,75	22,00
Inferred	48,05	39,15	23,01				

Mineral Resources are inclusive of Mineral Reserves.
Totals are rounded off.
Modifying factors: geological losses, mining losses and pillar losses.

Competence

The competent person with overall responsibility for the compilation of the Mineral Reserves and Resources Report is Paul van der Merwe, Pr.Sci.Nat, an ARM employee. He consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

Paul van der Merwe graduated with a BSc (Hons) in Geology from Free State University. He spent four years as an exploration geologist for FOSKOR. He then joined the Uranium Resource Evaluation Group of the then Atomic Energy Corporation of South Africa for 12 years. While employed there he studied geostatistics and spent some time at the University of Montreal, Canada. In 1991 he joined Anglovaal Mining (now ARM) in the Geostatistics Department and evaluated numerous mineral deposit types for this group in Africa. In 2001, he was appointed as Mineral Resources Manager for the ARM group. He is registered with the South African Council for Natural Scientific Professions as a Professional Natural Scientist in the field of practice of geological Science, registration number 400498/83, and as such is considered to be a competent person.

All competent persons at the operations have sufficient relevant experience in the type of deposit and in the activity for which they have taken responsibility. Details of the competent persons are available from the Assmang Company Secretary on written request.

The following competent persons were involved in the calculation of Mineral Resources and Reserves:

M Burger, *PrSciNat*	Iron
S v Niekerk, *PrSciNat*	Iron
B Ruzive, *PrSciNat*	Manganese
A Pretorius*, *PrSciNat*	Chrome
S Kadzviti, *PrSciNat*	Iron/Chrome/Manganese

**External consultant*

PJ van der Merwe
24 Impala Road, Chislehurston, Sandton
30 September 2011

Corporate governance and risk management report

The Assore board (the board) is of the opinion that strong corporate governance and risk management not only enhance sustainability of an organisation, but that they are essential to preserving organisational reputation, investor confidence, access to capital, when required, and sustainable employee motivation.

The group subscribes in all its activities to principles of best practice in business management and corporate governance for South African companies as set out in the King III Report, and which it implements in accordance with the following framework:

- Installing a risk and control environment within its business entities where management, in conjunction with the necessary support from the Audit and Risk Committee, is responsible for identifying, quantifying and managing risks to achieve the organisation's objectives on a sustainable basis. The process of the quantification of identified risks takes into account qualitative aspects, in addition to their estimated financial impact.
- Creating a process which provides the board, through the Audit and Risk Committee, with assurance over the adequacy of internal control within the organisation, ie that the risk and control environment in place is appropriate for the business concerned and is operated in a manner to provide the board with reasonable assurance that appropriate safeguarding of the group's assets is achieved.
- Establishing a formalised review process to identify the effectiveness of both the risk management environment and the assurance processes. This is generally the role of the internal audit function and other independent technical assurance specialists used on a consultancy basis.

The company's shares are listed on the JSE Limited which requires that all listed companies comply with the Code of Corporate Practices as set out in the King Report on Corporate Governance. The King Report was originally issued in November 1994 and was updated in March 2002 and in September 2009 as "King II" and "King III" respectively. The objective of the King reports is to formulate recommendations for maintaining and improving standards of corporate governance in South African companies in accordance with international best practice. For reporting purposes, King III replaced King II on 1 March 2010, and compliance therewith is mandatory for financial periods commencing on or after that date.

Management reviews the business practice across the group on an ongoing basis and has determined that they are substantially compliant with all the material requirements of King III. Where it is not practical for the group to adopt these requirements, relevant comment is provided and reference is made in this report to the alternative procedures which the board has adopted in each instance.

Board of directors

The directors are committed to the principles of corporate discipline, transparency, independence, accountability, responsibility, fairness and social responsibility.

Composition

The Assore board has a unitary structure with a preponderance of non-executive directors, comprising nine directors, three of whom are executive and six non-executive.

Of the six non-executive directors, Mr Bobby Carpenter has been appointed to the board in a non-executive capacity, following his retirement in February 2011 after 47 years of service with the group. The other four non-executive directors are independent and hold directorships in other listed and unlisted companies registered in South Africa. After nearly 17 years in aggregate of serving on the board, Dr Johannes van der Horst has indicated his intention to resign as an independent non-executive director with effect 31 December 2011.

The board evaluates annually the independence of the independent non-executive directors, who are appointed in terms of three-year contracts. In addition to this process, the executive directors review the degree of independence of the independent non-executive directors at each renewal date of these contracts. In addition, the Chief Executive Officer (CEO) conducts regular discussions with the non-executive directors regarding their continuing independence. As recommended in terms of King III, non-executive directors are not permitted to

serve for periods longer than nine years in the aggregate and non-executive directors do not receive any benefits from the company other than their fees for services as directors.

The three executive directors are Messrs Desmond Sacco (Chairman), CJ Cory (Chief Executive Officer and Financial Director) and PC Crous (Group Technical Director), and each of these executives is also on the board of joint-venture company, Assmang Limited (Assmang). Since the Sacco family controls the majority of the ordinary shareholding in the company, Desmond Sacco, although Chairman, is not regarded as an independent director. Therefore the company has appointed Mr Ed Southey as Deputy Chairman and lead independent director.

Remuneration

The approach to the remuneration of executive directors is described on page 20 of this report, while details of emoluments paid to directors and directors' interests in shares of the company are disclosed in the Directors' report. None of the executive directors has signed a service agreement with the company which specifies either a paid notice period or additional compensation in the event of termination. As noted in the Directors' report, Assore does not operate an employee share incentive scheme. Bonuses are determined based on the results and performance of the group for the year, and are reviewed and approved by the Remuneration Committee (refer below). The impact on earnings per share for the year of the bonuses paid to executive directors of Assore was 23 cents (2010: 21 cents), amounting to 0,84% (2010: 1,7%) of earnings per share. Remuneration of directors depends on the size and complexity of operations and level of professional input required by the business environment concerned and has due regard to the calibre of the person required for the position. The level of remuneration is benchmarked against remuneration paid to executives of other listed companies in the resources sector, making use of independent remuneration consultants when considered necessary.

Fees for non-executive directors are reviewed on a regular basis, and are adjusted where necessary taking into account amounts paid to non-executive directors of companies with similar complexity profiles in the South African mining sector, and the degree of skill, time and experience required to discharge their duties. The payment of fees to non-executive directors is not dependent on attendance at meetings.

The board acknowledges the requirements of King III for shareholders to pass a non-binding advisory vote on the company's remuneration policy annually. Directors' fees are approved by means of special resolution as required by section 66(8) of the Companies Act 2008, while shareholders are invited to pass a non-binding advisory vote on the group's remuneration policy. Details of these procedures and relevant information are set out in the notice to members (refer insert).

Election and succession

In accordance with the company's Memorandum of Incorporation, all directors are subject to retirement by rotation and re-election by shareholders at least once every three years. In addition, all directors are subject to re-election by shareholders at the first Annual General Meeting following their initial appointment. A brief *curriculum vitae* of each director is set out on pages 26 and 27. Due to the chairman's involvement in the controlling shareholder, appointments to the board are made with full board approval, and therefore a formal policy appointing board members and Nomination Committee is unnecessary. Instead, appointments and continued eligibility to the board are approved by the executive directors, after oversight by the executive directors and consultation with the board as a whole. This process is deemed most appropriate to the group's circumstances as described above and to the industry in which it operates, and therefore it is not group policy to ensure that a third of the non-executive directors rotate annually as required by King III.

Appointments to the board in an executive directorship capacity are based on the nominees holding the appropriate professional qualifications and having had substantial exposure to business as a whole, and in particular in the mining industry, in senior managerial roles and/or related professional practice, which includes the necessary exposure to applicable laws, rules, codes and standards. In the event that a director does not possess the necessary knowledge, the group provides the necessary formal and on-the-job training as required. Incoming non-executive directors are fully apprised of the group's activities and relevant issues. Assore believes that these requirements and processes obviate the necessity for a formalised orientation and mentorship programme for its directors.

Each executive director is understudied by appropriately qualified and experienced alternate directors or senior staff, ensuring sufficient depth in areas that are critical to the continuation of

Corporate governance and risk management report continued

the group's business activities. Therefore, taking the managerial structure and the current make-up of the board into account, a detailed succession plan is not warranted. The Chief Executive Officer assumes ultimate responsibility for all executive issues, and ensures that issues raised within the group's various committees and sub-committees (certain of which are set out on page 10 of this report and throughout) are addressed by the responsible staff, and further, that these are elevated to the appropriate level when it is apparent that more senior management involvement is necessary. Based on the submission by the Audit and Risk Committee, dispensation was granted by the JSE for the roles of CEO and Financial Director to be combined on condition that the appropriateness of the situation is reviewed and confirmed by the Audit and Risk Committee on an annual basis.

Meetings

The board meets at least four times per annum on predetermined dates with meetings convened on an ad hoc basis when considered necessary. The board met four times in the year under review and attendance at these meetings is tabled below:

	Possible attendance	Attended
Desmond Sacco	4	4
EM Southey	4	4
CJ Cory	4	4
PC Crous	4	4
RJ Carpenter	4	4
BM Hawksworth[#]	–	–
DJ Ncube	1	–
MC Ramaphosa	4	2
WF Urmson	3	3
Dr JC van der Horst	4	4

[#] *Stood down on 27 August 2010.*

Board and committee performance evaluation

Ongoing evaluation of the board and its various committees does not occur on a formal basis at present. However, on the back of the involvement of the controlling shareholder, and due to the size of the business, regular interaction occurs between all levels of management to ensure that the various bodies in the Assore group act within their terms of reference. As stated under "Remuneration" (refer above), executive directors are not appointed in terms of contracts, and their services may be terminated without notice without the commitment of monetary implications for the group. Documented terms of reference for the board are not required, since the majority of directors on the board are independent, the lead independent director has the dual role of deputy chairman, and chairs the Audit and Risk Committee, and all of the directors have substantial business experience at a senior level. The composition of the board as described above has a preponderance of non-executive directors, and ensures regular formal and informal interaction, to ensure appropriate application of authority in the decision-making process. Since a key aspect of the group's activities includes marketing and distribution, its reputation and relationships with its customers, together with all stakeholders, is assessed in all of the board's actions, and not in isolation. The chairman has effective control over the majority shareholding in Assore and in order to compensate for the resulting lack of formal appraisal of his performance, further insight into the group's activities is provided to the chairman at regularly convened Excom meetings, which are attended by the executive directors, and other senior members of management. The skill set required of directors by the group is determined by the executive. Attendance by external advisers at meetings of the board and its various committees is arranged when considered necessary.

Group boards

The subsidiary and joint-venture companies of the group have properly constituted boards, whose directors operate independently in respect of the affairs of these companies. The board of the holding company respects the fiduciary duties of the directors of these companies, and policies and procedures adopted by these companies are considered by the respective boards prior to their adoption, necessary alteration or rejection.

Audit and Risk Committee

	Qualifications	Years of service on the committee
EM Southey (Chair)	BA, LLB	2
WF Urmson	CA(SA)	1
Dr JC van der Horst	BA, LLD	9

Currently, the chairman of the committee reports to the board on its activities at each board meeting. Representatives of the internal and external auditors are also invited to attend all meetings of the committee and, if necessary, have direct access to the chairman of the committee throughout the year. The CEO and FD, group accountant, and representatives of the Company

Secretaries attend all meetings by invitation. Internal and external auditors meet with members of the committee at least once annually without members of management being present in order to discuss and evaluate the quality of their relationship and level of cooperation which they were afforded during their activities undertaken in the year under review. The committee recommended the acceptance of the 2011 annual integrated report to the board on 14 October 2011.

The terms of reference of the Audit and Risk Committee are documented and were approved by the board, and are reviewed on an annual basis to ensure they remain appropriate to the activities of the group. The prime objectives of the committee that emanate from its terms of reference, which were applied during the year under review, are to:

- provide a forum for the management of the external and internal audit functions and the resolution of issues which arise from all external and internal audit activities;
- make recommendations to the shareholders regarding the appointment of the external auditors;
- review the activities, services and performance of the external auditors, evaluating their independence and reviewing their overall role and appropriateness of fees charged;
- review and approve the annual financial statements, interim reports and related disclosures and other significant announcements made by the group, making the necessary recommendations to the board;
- consider the appropriateness of the group's accounting policies;
- monitor and supervise the effective functioning of the internal audit function (refer "Internal audit and internal control"), to ensure that the roles of both internal and external audit are clear to provide an objective overview of the operational effectiveness of the group's systems of internal control and reporting;
- monitor the risk profile as determined by management, and make recommendations on the composition and classification of the risk profile for the group (refer "Risk management");
- obtain representations from management, and make the necessary enquiries from external and internal audit and of management, on any matters under litigation, ensure compliance with material aspects of legislation and create awareness of pending changes to legislation (refer "Legal compliance"); and
- monitor the ethical tone of the group through its executives and senior officials (refer "Ethics").

All of the members of the committee, including the chairman (who will make himself available to take questions at the annual general meeting), are independent non-executive directors, who collectively possess the appropriate level of knowledge and experience pertaining to legislative requirements, financial risks, financial and sustainability reporting and internal controls, applicable to the group. The committee meets at least three times per annum on predetermined dates, with ad hoc meetings convened where necessary, and holds ongoing informal meetings to keep abreast of business developments. During the year under review, the committee met on three occasions with attendance as detailed below:

	Possible attendance	Attended
EM Southey	3	3
WF Urmson	2	2
Dr JC van der Horst	3	3

Internal audit has adopted its terms of reference from the board, and all internal audit work is undertaken based on the ongoing risk assessment process which is presented annually by internal audit to the Audit and Risk Committee, to ensure that the focus of the internal audit effort is optimised (refer "Risk management" and "Internal audit and internal control" below). The internal audit function of Assore is outsourced, and the responsible senior executive on the engagement has direct access to the chairman of the committee and meets with external audit independently in order to exchange views on issues pertaining to internal audit, evaluation of internal controls, as well as those that may have a bearing on the external audit process and objectives. Internal audit certify to the board and committee on an annual basis, that the internal controls and financial controls respectively have not revealed any significant breakdown in internal controls or any issues that require their attention. The committee, having due regard for materiality and the inherent nature of the business, is satisfied that the internal controls were effective, and operated as designed for the period under review. In addition, the committee, having reviewed the reports of internal and external audit tabled at the meetings of the committee, and having conducted enquiries of the attendees at its meetings, is not aware of any weaknesses in internal controls that have or may give rise to material financial losses, fraud or material errors during the year under review.

Corporate governance and risk management report continued

The committee does not consider a formal audit review of the interim results necessary, as the interim results of Assmang, which comprise the majority of the group's results, are reviewed and reported on by the external auditors prior to the publication of the group's interim results. The committee, after due enquiry with external and internal audit, has satisfied itself on the appropriateness of the expertise and adequacy of the finance function and experience of the senior members of management responsible for the financial function to render this process unnecessary.

Company Secretary

The company has appointed a wholly owned subsidiary, African Mining and Trust Company Limited, as Company Secretary. The board and senior staff who are all appropriately qualified, ensure that the necessary application of company law and other regulatory aspects are applied in the affairs and management of the group.

Remuneration Committee

EM Southey (Chair)
Desmond Sacco
WF Urmson
Dr JC van der Horst

The committee is chaired by the lead independent director, and consists of a majority of independent non-executive directors. Desmond Sacco is appointed as a member of this committee, based on his interest in the company, which the board believes adds to the overall appropriateness of the decisions and policies of the committee. Its terms of reference have been approved by the board, and are reviewed annually by the board. Since salaries and bonuses are reviewed on an annual basis, the committee meets formally at least once a year, in addition to ad hoc meetings that may be necessary from time to time. The Chief Executive Officer (CEO) attends meetings of the committee by invitation, but is not entitled to vote. Recommendations on the broad framework and cost of executive remuneration are made annually to the committee for approval. To do so, the committee is required to determine:

- the group's general policy on executive remuneration;
- specific remuneration packages for executive directors;
- where necessary, criteria to assess the required performance of executive directors; and
- the necessity to take independent professional advice where necessary.

The remuneration of non-executive directors is determined by the Assore executive, using *inter alia*, industry benchmarks, and are approved in advance at the Annual General Meeting (AGM).

Remuneration of other employees in the group is determined annually by the executive directors in conjunction with the human resources department and departmental heads, and where necessary, benchmarks remuneration levels with the industry using independent advisers. Due to the sensitivity of remuneration levels, the remuneration of individuals who are not directors are not individually disclosed; however, the total cost of the remuneration of senior employees is disclosed (refer page 129). Directors' remuneration for the current and previous financial year is disclosed on page 84.

Insider trading and closed periods

The group operates a closed period prior to the publication of its interim and final results. During these periods directors, officers and designated persons who may have access to price-sensitive information are precluded from dealing in the shares of the group. The closed period extends from the first day of the month following the end of a financial reporting period and expires on the day on which the interim or final results are published. Where appropriate, dealing is also restricted during sensitive periods where major transactions are being negotiated and a public announcement is imminent. All employees are required to obtain the written approval of the CEO prior to dealing in the company's shares at any time during the year.

Risk management

The board has delegated the assessment and management of the group's risk profile to the Audit and Risk Committee, which advises the board of unresolved risk management issues. Risk is an ever-present feature of business in general. It is exacerbated in the mining industry by the volatility of exchange rates and commodity prices applicable to the resources sector, the remote locations of operations, the physical danger inherent in the day-to-day activities of mining and smelting operations and the volume and complexity of legislative requirements, in particular with regard to environmental management with which these industries have to comply.

Group risk management is achieved through the identification and control of all significant business risks by various risk management committees, including operational risks, which could adversely affect the achievements of the group's business objectives. Risk assessments are ongoing, and risk registers for all significant operations in the joint-venture entity, Assmang, are prepared and updated quarterly by a dedicated risk management department, with assistance from specialised external consultants.

For larger business entities, independent risk engineering consultants grade each operation against international risk standards for fire, security, engineering, commercial crime, contingency planning and mining, as well as environmental risk to monitor whether current practices meet the set criteria and are being maintained. Input is obtained from various risk management committees comprising representatives from senior management. On completion and review of these processes, insurance cover is acquired where significant uncontrollable exposures remain.

In addition to these processes, other risks deemed relevant to the Assore group are presented to the Audit and Risk Committee, which is given the opportunity to comment and provide input to the assessments tabled. The assets of subsidiary companies in the Assore group are included in a comprehensive insurance programme, with an independent valuation of fixed assets occurring every three years.

The board is aware of the inherent risks contained in establishing the size and remaining life of the ore reserves exploited by the group in its current and intended mining operations. All orebodies and Mineral Reserves are measured and updated annually in accordance with the methodologies described in the "Mineral Resources and Reserves report" (refer pages 28 to 47), and mining is planned to ensure that optimal utilisation of the mineral resource is effected, taking into account market conditions and customer specifications.

The most prominent financial risks to which the group is exposed, namely fluctuations in exchange rates and international commodity prices in the ferrous metals sector (usually US dollar denominated), are to a large extent outside the board's direct control and can only be indirectly controlled by timely response to market fluctuations and setting of appropriate business strategies. Refer note 26 to the consolidated financial statements for more detail on financial risks.

The respective risk management committees are also responsible for ensuring that appropriate financial and insurance mechanisms are integrated into the risk plan and that the group is protected against catastrophic risk, including failure of information technology systems. Therefore, the group risk management process includes an ongoing review of compliance with relevant legislation and standards in the following areas (refer "Sustainability report"):

- environmental rehabilitation management;
- health and safety management;
- human resource management; and
- quality of products and management systems.

The board believes that the risk management processes described above are effective in managing the risks to which the group is exposed, and that they are sufficiently flexible to meet the changing needs of the operations and the group's stakeholders. Further, due to the relatively low staff complement of Assore, employees are informed of the risks relevant to their particular activities within the business and risk assessments performed indicate that these business risks are managed effectively and mitigated wherever possible.

Detail of the risks to which the group is exposed is included on pages 11 and 12 of this report.

Information technology

The management of information technology (IT) falls within the remit of the CEO who convenes regular meetings with responsible IT staff to address the appropriateness and relevance of the IT infrastructure, information security, the design and maintenance of disaster recovery procedures and related staffing and administrative issues, and engages necessary external advice and consultation when required. Documented terms of reference for IT and information security management systems are not considered necessary at this stage, given the degree of involvement by the CEO and senior management on an ongoing basis in these issues. In addition, the IT systems are subjected to a detailed annual external audit, which is reported on to the CEO for attention and action where necessary. The group is currently in the process of adopting an enterprise-wide resource planning system (ERP), which will be used as a partial departure point to develop a charter for IT in the near future. Where appropriate, other members of senior management also attend these meetings, to provide the necessary input. External audit conducts an annual review of the application by management of the controls pertaining to the group's hardware and software, related physical and access controls, and licensing. Where major IT projects are undertaken, eg the ERP referred to above, a steering committee is formed, which ensures that the various aspects and deliverables of the project are scheduled and achieved. Matters of relevance to the business are communicated by the CEO to the Excom or the board where appropriate. Disaster recovery is catered for by means of daily back-ups of electronic information and media, which are physically housed in a building separate from where the IT hardware is located.

Corporate governance and risk management report continued

Legal compliance

The board has delegated the responsibility for legal compliance to the Audit and Risk Committee, which appoints suitably qualified consultants to ensure that legal compliance is maintained in the areas in which the group operates. Therefore, the CEO has not appointed an individual person responsible for the management of compliance. Since the group's main activity is the marketing and distribution of the products of the joint venture, Assmang, a competition law compliance programme is in place. The Audit and Risk Committee ensures matters material to the group receive the appropriate attention, and that adequate provision and appropriate disclosure are made for known and determinable exposures. Legal issues specific to the Assore group are also discussed at Audit and Risk Committee meetings, where management is provided with additional guidance where necessary.

Safety, health and environmental (SHE) legal compliance audits are conducted on an ongoing basis for all operations. In addition, high-level compliance reviews are conducted every second year for Assore's subsidiary operations and reports submitted to the Audit and Risk Committee.

The size of the group, as well as the experience of the executive directors and senior management, affords it the opportunity to resolve all disputes, whether of a legal or non-legal nature, based on their respective characteristics. External legal counsel is consulted when considered necessary to ensure the appropriateness of the resolution methods adopted.

Internal audit and internal control

The board, through its appointed Audit and Risk Committee, is accountable for ensuring the implementation of appropriate internal controls, which are reviewed regularly for efficiency and effectiveness, taking into account the risk profile of the group (refer pages 11 and 12). These controls are designed to manage the risk of failure, and provide reasonable assurance that there is an adequate system of internal control in place. As with all management systems, the assurance provided is not absolute and the risk of failure cannot be eliminated entirely. The internal audit functions at the various operations in the group have been outsourced to the respective special services divisions of recognised professional auditing firms. Internal auditors monitor the operation of the internal control systems and governance processes and, after discussion with management, report findings and recommendations to the Audit and Risk Committee. Corrective action is taken to address control deficiencies as and when they are identified. Since material issues of compliance are amongst standard items on the agenda of the Excom, and minutes of these meetings are made available to internal audit, the group does not extend an invitation to the head of internal audit to attend Excom meetings; however, access to the chairman of the Audit and Risk Committee is available throughout the year. Nothing has come to the attention of the Audit and Risk Committee or board to indicate that any material breakdown in the effective functioning of controls, procedures and systems has occurred during the year under review.

Representatives of the internal audit team are invited to attend Audit and Risk Committee meetings and, where areas of new risk are identified, eg initiation of capital projects or new systems of internal control, IT systems implementation, separate independent investigations take place on an ad hoc basis in addition to the programmed reviews referred to above.

Ethics

Due to the degree of executive involvement in day-to-day management processes and the size of the group, ethical issues are managed on an ongoing basis by senior management who interact with staff at all levels to ensure that high ethical standards commensurate with board expectations are maintained. Therefore, the establishment of a documented code of ethics and conduct would be superfluous. The group has various channels to facilitate effective whistle-blowing procedures and is of such a size that any material violation of the ethical behaviour demonstrated by any member of staff is dealt with appropriately and timeously. The board believes that management is sufficiently experienced to ensure that the requirements of the group in respect of laws, rules, codes and standards do not expose the group to material risks in this respect. In addition, senior management are closely involved with external legal counsel in unfamiliar and complex areas.

Black economic empowerment status report

Assore is supportive of the broad-based economic imperatives contained in the Minerals and Petroleum Resources Development Act (the MPRD Act) and the Broad-based Socio-economic Empowerment Charter for the South African Mining Industry issued thereunder (the Mining Charter), and since their inception has embarked on initiatives aimed at meeting these requirements at its mining operations, as set out below.

The MPRD Act has changed the previous common law and statutory position in South Africa in terms of which mineral rights could be held privately. Instead, pursuant to the MPRD Act and with effect from 1 May 2004, the state has assumed sovereignty and custodianship of all mineral rights in South Africa and will grant prospecting rights and mining rights to applicants based on the merits of their applications (which are designated as new-order rights). A transitional period commencing in May 2004, and ending in May 2014 is provided for, during which holders of existing mineral and exploration rights (designated as old-order rights), upon meeting certain requirements, may convert such existing in-use old-order rights into new-order rights, or in the case of unused rights, may apply for new-order rights.

The Mining Charter is intended to facilitate the entry of historically disadvantaged South Africans (HDSAs) into the mining industry. The scorecard which the state has issued pursuant to the Mining Charter requires, *inter alia*, that mining companies achieve 15% HDSA ownership of mining assets within five years (ie 1 May 2009) and 26% within 10 years (ie 1 May 2014), which has been maintained by the Department of Mineral Resources (DMR), following a review of the Mining Charter in September 2010, as the target required to be achieved by mining companies. The Mining Charter also requires, *inter alia*, that mining companies provide plans and achieve employment equity at management level and procure goods and services from black empowered organisations on a preferential basis in accordance with the predetermined criteria set out in such plans. Since 2004, in view of meeting the Charter's requirements, Assore, through its various group companies, has achieved the following milestones:

- concluded an empowerment transaction with Mampa Investment Holdings (being the commercial arm of the Mankwe Development Foundation) (Mampa) in April 2004, pursuant to which new-order mining rights for the chrome operations in Rustenburg Minerals Development Company (Proprietary) Limited (RMDC or Rustenburg Minerals) on the farms Zandspruit and Groenfontein were obtained;
- concluded empowerment transactions with the Bokamoso Trust in February 2006 and March 2010; representing control of Assore's issued ordinary shares of 3,26% and 11,02% respectively;
- through Assmang, applied for and obtained new-order mining rights on the iron ore deposits mined at Khumani. Conversion of the old-order rights to new-order rights on the manganese deposits at Black Rock (comprising Nchwaning and Gloria Mines) was obtained and applications for the conversion of all remaining old-order rights to new-order rights, in particular, iron ore (Beeshoek), chrome ore (Dwarsrivier) and pyrophyllite (Wonderstone) which were submitted prior to 1 May 2009 and are being finalised;
- implemented a preferential procurement policy at all its operations (refer "Preferential procurement" on page 57); and
- developed social and labour plans (SLPs) for each of its operations, as well as local economic development (LED) projects which support the integrated development plan of the relevant local authority. The plans, which have received the approval of the relevant departments, include the construction of educational facilities, food security projects and presentation of programmes on adult education, health and safety and environmental awareness.

The extent of compliance with the Charter is reported on and monitored on a regular basis at the Excom level, specifically, on new-order mining rights, which are subject to audit by the DMR. No significant issues of non-compliance have been reported by the DMR.

Black economic empowerment status report continued

Following the introduction of the MPRD Act, Assore has entered into the following empowerment-related transactions:

- In April 2004, an empowerment transaction was finalised with Mampa in terms of which Mampa acquired a 44% interest in RMDC. RMDC mines chromite in the Rustenburg area and was previously a wholly owned subsidiary of the Assore group. Mampa is represented on both the Management Committee and the board of RMDC and in October 2005, RMDC was successful in its application to convert all of its mining rights to new-order rights.
- In February 2006, the Assore group entered into empowerment transactions effecting the acquisition of 15,02% of its issued ordinary shares at that date by two BEE entities, namely:
  - Shanduka Resources, a subsidiary of Shanduka Group (Proprietary) Limited (Shanduka), a black-owned and managed investment holding company, which purchased 11,76% of Assore's ordinary shares in issue at that date (refer "Shanduka Resources" below). In July 2011 (subsequent to the end of the 2011 financial year), shareholders were advised of the company's intention to enter into its third empowerment transaction, the first phase of which was to provide financial assistance to a special purpose vehicle (SPV), in order for the SPV to buy back Shanduka's interest in Assore, comprising 16 464 450 shares, representing 11,79% of the issued ordinary shares at June 2011. The transaction was approved by the requisite majority of shareholders at a general meeting on 10 August 2011, and as a result, these shares were warehoused in the SPV on 19 August 2011. The majority interest in the SPV will be controlled by a broad-based black-empowered trust; and
  - the Bokamoso Trust (refer "The Bokamoso Trust" below), which has been formed to benefit HDSAs and HDSA community groupings, residing in areas surrounding the group's mining activities, which purchased 3,26% (4 568 550 shares) of Assore's ordinary shares in issue at that date.

- In March 2010, Assore entered into its second empowerment transaction, in terms of which:
  - 13 618 265 shares, representing 9,88% of the issued ordinary shares at that date, were acquired by an entity in which the Bokamoso Trust (the Trust) and Assore have a 51% and 49% interest respectively; and
  - a specific issue of 1 748 735 treasury shares was effected, which resulted in the Trust achieving control of 14,28% (19 935 550) of the issued ordinary shares after the transaction.

Note: The number of Assore ordinary shares in issue quoted in the report, prior to September 2010 have been multiplied by a factor of five, following the sub-division of five-for-one ordinary shares for each Assore share on 10 September 2010.

The control by HDSAs of Assore's shares at 30 June 2011 is as follows:

Shareholder	% of shareholding
Bokamoso Trust	14,28
Shanduka Resources (bought back subsequent to the year-end, now forming part of the third empowerment transaction)	11,79
	26,07

The Bokamoso Trust

The Bokamoso Trust (the Trust) was established for the benefit of HDSAs and broad-based HDSA community groupings residing in the areas in which the Assore group's mines and beneficiation plants are located. Assore has initiated a process through which it will identify HDSA trustees in accordance with the trust deed. The majority of the Board of Trustees is independent, and in terms of the second empowerment transaction, the Trust is entitled to an annual flow-through payment of at least R2 million per annum, to the beneficiaries irrespective of the commitments to the Assore group with regard to the funding of the transaction.

Assore concluded a relationship agreement with the Trust in order to regulate the respective relationship between the parties to ensure, in so far as is possible, the continued compliance by the Trust (as the Assore group's BEE partner) with the direct ownership requirements of the Mining Charter.

Shanduka Resources

Shanduka Resources is a wholly owned subsidiary of Shanduka Group, a black-owned and managed investment holding company founded by Cyril Ramaphosa, James Motlatsi and several other black professionals.

On 19 August 2011, further to the approval of the shareholders of Assore and Shanduka, Shanduka Resources sold its interest in Assore to the SPV referred to above. The transaction (ie the third empowerment transaction) is intended to secure Assore's empowered status for the long term, ahead of the 2014 target established in the Mining Charter. Shanduka acquired its interest in Assore in 2005 for approximately R280 million (R17 per Assore share), and disposed of these in the amount of R2,7 billion (R163 per Assore share, representing a discount of 24,2% to the market price), realising a profit of approximately R2,4 billion. While the transaction provides Shanduka with the opportunity to diversify its own interests, the discount secured by Assore creates the necessary sustainability of the proposed broad-based BEE structure, to be finalised in the second phase of the transaction. The conclusion of this second phase will

result in all of Assore's BEE control being broad-based in nature, which will be of direct benefit to the communities in which the group operates.

Preferential procurement

Assore is committed to bringing previously disadvantaged South Africans into the mainstream of the economy by identifying, developing and availing business opportunities to BBBEE suppliers at all its operations. Without compromising on quality, Assore has adopted a policy of precluding vendors from supplying goods and services to its operations who do not have valid empowerment credentials. A summary of the percentage BBBEE procurement measured against total discretionary procurement is presented in the table below:

2011	Total discretionary procurement R million	Aggregate BBBEE expenditure R million	Aggregate % BBBEE
Assmang	**6 796,2**	**4 591,1**	**67,6**
Rustenburg Minerals	**163,6**	**117,8**	**72,0**
Zeerust	**88,3**	**74,4**	**84,3**
Wonderstone	**38,9**	**12,8**	**32,9**
African Mining and Trust	**41,1**	**18,4**	**44,8**
2010			
Assmang	5 448,4	3 028,3	55,6
Rustenburg Minerals	113,3	78,6	69,4
Zeerust	1,6	0,3	16,4
Wonderstone	9,8	5,2	52,9
African Mining and Trust	55,6	23,9	42,9

Total discretionary procurement is defined as total procurement less procurement through public sector vendors, eg rates and taxes and utility service providers.

Assmang's increased proportion of BBBEE expenditure is the result of continued focus on supplier selection and evaluation. The overall increased proportion of BBBEE expenditure for African Mining and Trust Company Limited (African Mining and Trust), Rustenburg Minerals is due to the group's ongoing commitment to the implementation of the requirements of the Mining Charter and the DTI Codes of Good Practice. Expenditure at Rustenburg Minerals has increased, due to the development of its two underground shafts. The recently commenced open-cast mining operation at Zeerust gave rise to the significant increase in its discretionary procurement, while a temporarily expired supplier's certificate at Wonderstone resulted in a decrease of the proportion of BBBEE expenditure at that operation.

Sustainability report

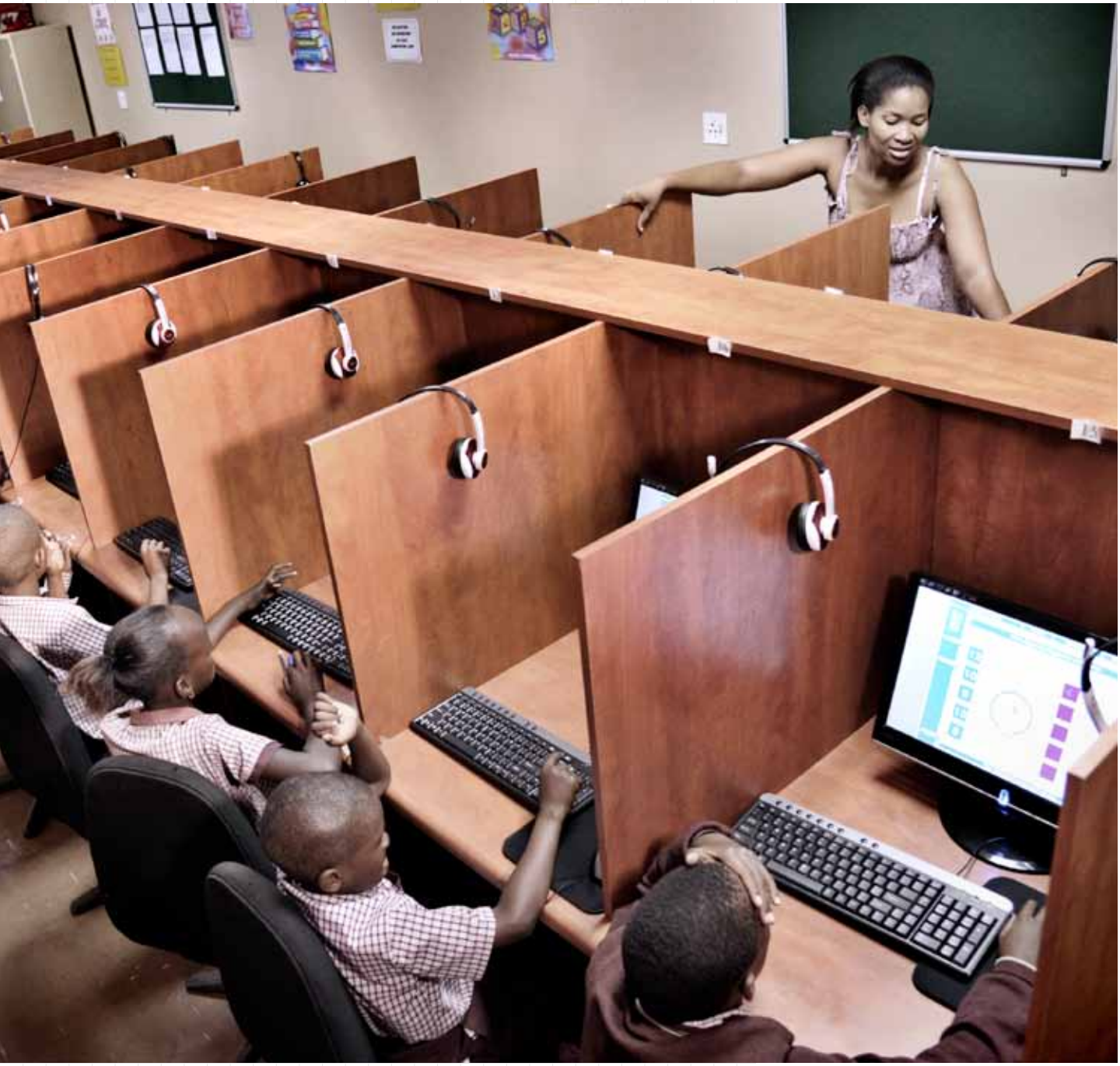
This report provides a summary of health, safety, environmental and sustainable development performance across the operations of the Assore group. Assore also recognises that it has a responsibility to promote the sustainability of its business by taking an active role in shaping the development and performance of its business in the sectors in which it operates.

This sustainability report covers all of the entities in which the Assore group has an interest (other than portfolio investments) and, for ease of reference, has been split into the following two sections:

- Assmang, jointly controlled by Assore 50% and African Rainbow Minerals Limited (ARM) 50%, which includes the following operations:
  - Khumani Iron Ore Mine (Khumani);
  - Beeshoek Iron Ore Mine (Beeshoek);
  - Black Rock Manganese Mines (Black Rock);
  - Cato Ridge Works ferromanganese smelter, incorporating Cato Ridge Alloys (CRA) (Cato Ridge Works);
  - Dwarsrivier Chrome Mine (Dwarsrivier); and
  - Machadodorp Works ferrochrome and ferromanganese smelter (Machadodorp Works)
- AMT operations, being the subsidiary companies of Assore, which include:
  - Rustenburg Minerals Development Company (Proprietary) Limited (RMDC);
  - Zeerust Chrome Mines Limited (Zeerust);
  - Wonderstone Limited (Wonderstone); and
  - Head Office operations (Head Office), combining African Mining and Trust Company Limited (AMT) and Ore & Metal Company Limited (Ore & Metal).

In previous years, this report has reported on the sustainability performance of the Xertech operation. However, Xertech ceased production in early 2010, and is therefore not included in the data sets presented in this section.

The group recognises that sustainable development issues are material to its business beyond the level of legal compliance in response to customer requirements, regulator and stakeholder expectations and continues to focus on strengthening its internal capacity, management systems and stakeholder engagement as part of corporate strategy.



Computer centre at the Makgophe Primary School, RMDC.

Sustainability report continued

Management systems

The group's sustainability risk management systems are based on the International Standards Organisation (ISO) suite of standards.

All group operations are certified to the ISO9001:2008 quality and the ISO14001:2004 environmental standards (with the exception of Zeerust, which will seek certification in the forthcoming financial year). In the year under review, RMDC was certified to ISO14001 in October 2010, and Khumani was certified to ISO9001 in November 2010 and ISO14001 in January 2011.

Certification to the internationally recognised OHSAS18001 occupational health and safety management standard has been achieved at all Assmang operations with the exception of Black Rock, which will seek certification in the coming year. Khumani is the most recent of the operations to be certified to OHSAS18001, which was achieved in January 2011.

Approach to reporting

Over the past year, data gathering and reporting systems have continued to evolve to provide management with timely information to inform their decisions and actions. Report formats have expanded to report on a wider range of sustainability indicators that allows health, safety and sustainability considerations to be incorporated into decision making on a systemic and ongoing basis.

Environment, health and safety staff on the sites report directly to mine management and are also supported by corporate staff who are responsible for establishing group-wide policy and performance standards, facilitating internal and external reporting and auditing operational performance. Material issues such as fatalities, lost time injuries (LTIs), major environmental incidents and issues of legal non-compliance are reported to Assore's group Technical Director as soon as they occur. Quarterly reports on compliance with safety, health and environmental legislation for all group operations are submitted to the Assore Audit and Risk committee for review. Similarly, a review of safety, health and environmental performance takes place quarterly within Assmang and is attended by divisional executives and corporate personnel as well as senior operational staff.

The group reports on sustainability performance in accordance with Global Reporting Initiative (GRI) G3 indicators. A suite of reporting indicators has been selected on the basis of their materiality to the specific risk profile of the operations and are referred to in the sections below. More detail on the assurance of the sustainability data sets is included on page 3.

Legal compliance

Legal compliance is the foundation of the group's environmental, health and safety policies and is the basis on which the group's environmental, health and safety management systems have been developed. Legal compliance is a minimum performance requirement for the group's operations and is determined by a programme of ongoing internal and external reviews and audits against the requirements of the relevant legislation.

As part of their ISO-based management systems, each operation has a site-specific legal register detailing the applicable legislation with which the operation needs to comply. Legal audits for both Assmang and the AMT operations are performed on a biannual basis to confirm that all sites have either been granted, or have at least applied for by the group, all permits, licences, authorisations and exemptions required to operate in compliance with the requirements of the health, safety and environmental law. However, due to limitations in the respective regulators' capacity, significant delays are still being experienced in the issuing of environmental permits, licences and authorisations, as well as the approval of EMP amendments. Nonetheless all sites continue to ensure that all reasonable steps are taken to achieve legal compliance as a minimum.

Compliance with environmental legislation

All mining operations within the group have approved EMPRs, as required in terms of the MPRDA. In order to reflect the dynamic nature of the operations and changes to mining operations and infrastructure, these documents undergo periodic review and revision and are resubmitted to the Department of Mineral Resources (DMR) for authorisation.

During the period under review, an amendment to the Wonderstone EMP was approved, and the Zeerust EMP was revised and upgraded to include infrastructure associated with open-cast mining, plant upgrade and expansion of the tailings facilities.

In the 2011 financial year, the necessary environmental authorisations were also secured to permit the conversion of two ferrochrome smelters at the Machadodorp Works to ferromanganese production which commenced during the year.

No fines or prosecutions were incurred by either Assmang or the AMT operations over the current financial year.

Compliance with health and safety legislation

During the year, a total of three Section 54 notices were issued to Assmang operations in terms of the MPRDA, resulting in a

total loss of five days production at Dwarsrivier and one day of production at Black Rock. This compares favourably with the seventeen Section 54 notices issued during the preceding year. One Section 54 notice was issued to Zeerust during the current financial year, resulting in a five day production loss, as compared to no Section 54 notices served to the AMT operations in the previous financial year.

No prohibition notices in terms of the Occupational Health and Safety Act (OHSA) were served at either of the two smelter operations by the Department of Labour during the financial year.

Climate change and energy consumption

In response to growing consumer concern about climate change and pending national climate change legislation, the group has embarked on a process of understanding and responding to the risk that climate change poses to its business.

As an intensive energy user, energy consumption, and the resultant greenhouse gas emissions which are linked to climate change, is a material environmental issue for the group. Reduction in gaseous emissions is also linked to legal compliance with respect to emission licences issued in terms of the National Environmental Management: Air Quality Act and also has potential implications for the proposed taxation of carbon emissions.

Climate change poses a potential threat to water availability as most operations are located within the arid zone, and also has implications in terms of compliance with other environmental legislation, such as the National Water Act.

For most sites, diesel consumption in the reporting year has been broadly in line with consumption during previous years except for Khumani which reflected a 55% increase in diesel consumed resulting from the mining and construction activities associated with the Khumani Expansion Project (KEP).

For the AMT operations, diesel consumption at Zeerust has increased significantly as a result of the ramp-up of the open-cast operations.

In terms of electricity consumption, the most material change has been a 56% increase in electricity consumption at the Machadodorp smelter. This reflects increased smelter operation during the reporting year, after a decline in production in 2010, during which the furnaces were switched out for an extended period.

Electricity and diesel consumption

Operation	**Diesel use 2011 '000ℓ**	Diesel use 2010 '000ℓ	**Electricity use 2011 MWh**	Electricity use 2010 MWh
Beeshoek	**2 048**	1 604	**31 193**	33 529
Khumani	**27 535**	18 844	**101 078**	87 720
Black Rock	**4 119**	3 094	**105 186**	87 609
Cato Ridge Works	**524**	642*	**588 410**	533 183
Dwarsrivier	**1 429**	1 183	**40 523**	26 750
Machadodorp Works	**1 501**	417	**1 007 538**	645 107
RMDC	**2 642**	2 730*	**4 092**	4 123*
Zeerust	**1 993**	104*	**1 285**	200*
Wonderstone	**212**	182*	**2 147**	1 184*

** Note that the fuel and energy consumption figures for AMT operations have been restated from last year's report to reflect total consumption by the site and all its contractors in order to ensure comparability of data sets.*

Sustainability report continued

Greenhouse gas emissions and corporate carbon footprints

During the previous financial year, corporate carbon footprints (CCFs) were calculated for both Assmang and the AMT operations for the first time. This established a baseline for the measurement of the group's energy consumption and greenhouse gas (GHG) emissions, and as a result of this exercise, routine reporting on energy consumption was modified to include parameters used to calculate the respective CCFs.

Methodology

The CCF for both Assmang and Assore has been calculated by an external service provider, PE International, in accordance with the Greenhouse Gas Protocol – Corporate Standard. The data collation process complies with the data quality requirements set out in ISO14044 as well as the GRI-G3 guidelines established by the Global Reporting Initiative (GRI).

The carbon footprint has been calculated for sites, subsidiaries, operations and activities over which the group has operational control. Thus, GHG generation by activities associated with the group, but over which the group has no operational control, is not taken into account.

GHG emissions are split into three categories:

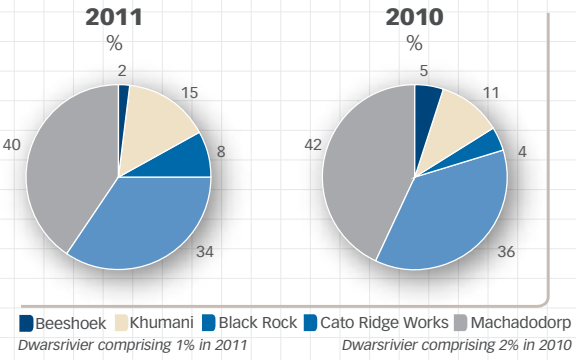
- Scope 1: Direct GHG emissions which occur from sources that are owned or controlled by the company (eg emissions resulting from diesel consumption by mine vehicle fleets, consumption of reductants in furnaces and burning of liquid petroleum gas)
- Scope 2: GHG emissions from the generation of purchased electricity consumed by the company. This is purchased from Eskom, whose power generation is predominantly sourced from the burning of coal
- Scope 3: GHG emissions which are a consequence of the company's activity but occur from sources not owned or controlled by the company (eg business travel).

Summary of findings

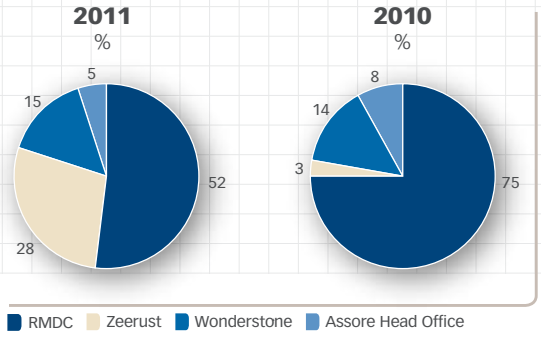
The comparative data for the CCFs calculated for the previous and current reporting period are presented in the figures below:

2011	Scope 1 tons CO_2e	Scope 2 tons CO_2e	Scope 3 tons CO_2e	Total tons CO_2e
AMT operations	**12 891**	**8 174**	**1 156**	**22 221**
Assmang	**573 055**	**1 426 879**	**415 954**	**2 420 888**
2010				
AMT operations	8 272	7 447	965	16 684
Assmang	584 717	1 277 003	257 223	2 118 943

Assmang carbon emissions



AMT carbon emissions



The CCF demonstrated that Scope 2 emissions due to electricity consumption account for the bulk of Assmang's GHG emissions, due to the energy intensive nature of smelting processes. By contrast, Scope 1 emissions predominate on both the Assmang and AMT operations, due to diesel consumption by the mine vehicle fleet.

Scope 3 emissions are dominated by rail transportation of bulk commodities for export from mine to port and are particularly significant for the Khumani and Black Rock operations.

Strategies to combat climate change

Over the reporting year, the group has focused on developing an integrated approach to mitigate the potential impacts of climate change on its operations.

Advocacy on issues related to climate change is undertaken through membership of the Intensive Energy Users' Group and the Chamber of Mines who engage on an ongoing basis with Eskom and Government, and through the International Council on Metals and Mining (ICMM) which undertakes lobbying in this regard. Through these mechanisms, the group is engaging with Government on various aspects of the proposed taxation of carbon emissions, whose impact could be material to the group.

During the past financial year, Assmang introduced an Energy Efficiency Charter and is in the process of developing an energy reduction strategy and associated targets. Particular focus has been placed on improving the energy efficiency of the smelters at the Cato Ridge Works and Machadodorp Works (which are the group's largest energy consumers). In order to incentivise the production teams to identify and implement reduction strategies for energy consumption, targets have been established for energy efficiency and progress against these targets has been integrated into staff performance assessment and bonus incentives at the smelters.

Water

Virtually all of the group's mines are located in water scare regions, and so priority is placed on water efficiency and the prevention of pollution that could compromise the suitability of the water resource for current and future water uses. Water consumption is reported on monthly, and monitoring of water levels and water quality is undertaken in accordance with corporate standards to demonstrate compliance with the site's Water Use Licence.

Water consumption

Operation	**2011 m³**	2010 m³
Beeshoek	**4 611 620**	5 426 839
Khumani	**2 611 648**	2 448 975
Black Rock	**857 030**	883 707
Cato Ridge Works	**374 163**	329 713
Dwarsrivier	**362 522**	73 638
Machadodorp Works	**130 620**	52 031
RMDC	**286 202**	173 485
Zeerust	**22 255**	Monitoring commenced mid year
Wonderstone	**3 252**	4 378

** Includes water supply to the mine village.*

The most significant year-on-year increase in the volume of water consumption took place at Dwarsrivier, which increased by 101% compared to the previous year. This is due to the opening of the North shaft during the current year, which required significant additional pumping to dewater the workings.

In accordance with the group's holistic approach to managing the potential impacts of climate change, the possible effects of climate change on water availability and storm magnitude are being considered.

During the past financial year, the Cato Ridge Works has undertaken a major programme of capital works to construct a series of three retention dams and one water storage dam to optimise the re-use of process water and prevent the release of contaminated water from site. This project will be commissioned by the start of the forthcoming rainy season and will minimise the risk of contaminated water being released from the site, as well as reducing consumption of make-up water as a result of greater water recycling and reuse. Beyond this, the sites continue to investigate opportunities for water use reduction, reuse and recycling on an ongoing basis.

Sustainability report continued

Waste

Mining and smelting operations produce a range of waste streams that require specialist management and disposal and financial provision for the rehabilitation of waste facilities constitutes the majority of the group's closure liability. In terms of volume, the most significant waste streams are tailings and waste rock generated by the mining operations, and slag from the smelters, as summarised in the table below.

In line with the principles of waste management outlined in the National Environmental Management: Waste Act, the operations are encouraged to actively pursue opportunities for waste recycling and reuse. At Cato Ridge, between October 2007 and June 2011, a total of 2 451 622 tons of slag produced by the Works has been processed through the Metal Recovery Plant, resulting in the recovery of a total of 109 200 additional tons of ferromanganese. Over the same period, 1 117 674 tons of slag (which would otherwise have been disposed of as waste on the slag dump) was sold into the concrete making industry. When offset against the 528 517 tons of new slag arising from production over the same period, the operation has therefore managed to reduce the size of the slag dump over the four-year period under consideration by 698 357 tons of slag.

In the current year, a number of the group mines have reprocessed historical mine waste deposits in order to generate product, thus reducing the volume of mine waste disposed of on site. Dwarsrivier has commenced with retreatment of tailings from the old tailings dam, which will allow the recovery of additional chrome, as well as the future extraction of Platinum Group Metals (PGMs). Similarly, historic tailings have been reprocessed at Zeerust in order to recover chrome and tailings from RMDC have been sold to third parties for chrome recovery.

Waste generated by operations

Operation	**Waste rock/slag 2011 m^3**	Waste rock/slag 2010 m^3	**Tailings/slag 2011 tons**	Tailings/slag 2010 tons
Beeshoek	**–**	–	**1 025 030**	1 120 340
Khumani	**11 776 314**	15 423 509	**1 262 318**	1 310 810
Black Rock	**97 265**	135 541	**158 550**	352 376
Cato Ridge Works	**n/a**	n/a	**163 483**	252 227
Dwarsrivier	**348 893**	587 733	**369 483**	134 945
Machadodorp Works	**n/a**	n/a	**539 185**	78 304
RMDC	**1 587 966**	1 381 860	**36 005**	57 853
Zeerust	**1 559 978**	n/a	**50 371**	41 177
Wonderstone	**149 470**	130 529	**n/a**	n/a

n/a = not applicable

Land management and mine closure

Land management is a material issue for the group since mining and minerals processing are temporary land uses and, on closure, disturbed land must be rehabilitated to a state which is safe, stable and does not pose a threat to the ecosystem and human health. The land must thus be managed throughout the life of the operation in a manner that is consistent with the end land use(s) that have been agreed with key stakeholders, as outlined in the closure plans and provided for in the financial closure provision.

Land management

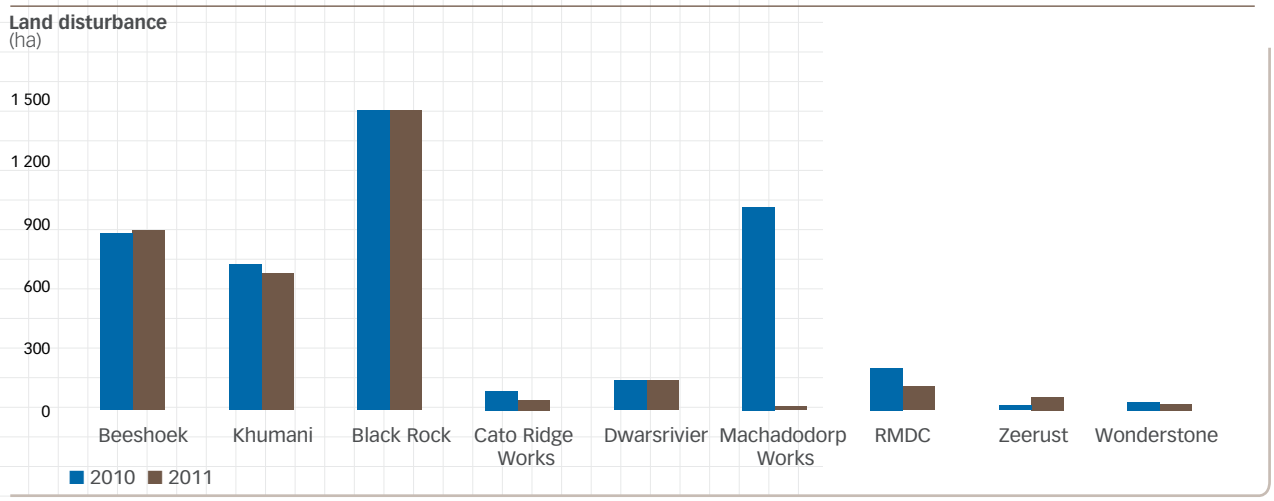
In response to the requirements of the National Environmental Management: Biodiversity Act, sites are required to develop Biodiversity Action Plans (BAPs) to appropriately manage the on-site ecosystems. BAPS focus on identifying and implementing responsible land management practices including the protection of vulnerable ecosystems, the control and eradication of alien and invasive species and veld fire management. These plans are also used to influence decisions on site rehabilitation and revegetation in order to identify sustainable post-closure land uses and select rehabilitation techniques and species that are compatible with the natural environment.

BAPs have been developed for all the AMT operations and have been integrated into the site's environmental management systems.

All Assmang sites have commenced with biodiversity studies, and the biodiversity assessments have already been completed for the Dwarsrivier and Machadodorp operations. The Dwarsrivier and Machadodorp operations are of particular biodiversity significance as they are located within the Sekhukhune and Machadodorp centres of endemism. This means that they contain endemic species of flora which are not found elsewhere and management plans need to be developed and implemented to ensure that these species are not adversely impacted as a result of mining or smelting operations.

The construction of a new access road for the Cato Ridge Works will result in the fragmentation of 20 hectares of Ngongoni grassland, which has a high conservation status. A biodiversity offset agreement was confirmed in July 2010 between the Cato Ridge Works and various municipal and provincial government departments and is being presently implemented.

The graph below shows the areas of disturbed land at each operation as of the end of the reporting year.



Sustainability report continued

The most significant percentage increase in disturbed land footprint took place at Zeerust as a result of the ramping up of open-cast mining operations. In the case of RMDC, a virtual halving of the disturbed land footprint reflects the shift from surface to underground mining production and the resultant rehabilitation of worked-out quarries. At Wonderstone, the disturbed footprint has also been significantly reduced as a result of concurrent rehabilitation.

Mine closure and financial provisions

Financial provision for mine closure and rehabilitation constitutes the single largest environmental liability for the group's mines, constituting a total liability of R376 million (2010: R310 million) for Assmang and R17 million (2010: R17 million) for AMT operations.

Closure plans developed for the group mines inform the financial provision made for rehabilitation and closure, which is funded through a combination of contributions to environmental trust funds and bankers' guarantees.

The largest change has been the closure provision for Khumani, which has increased by 120% year-on-year, reflecting the significantly increased footprint of disturbed land and associated mining infrastructure as a result of the KEP. The closure provision for Dwarsrivier has also increased by 32% year-on-year, as a result of two EIA processes for additional mining-related infrastructure, combined with an external review of the mine's closure provision.

These closure provisions are reviewed and, where needs be, revised on an annual basis. Where possible, concurrent rehabilitation is undertaken in areas where mining and minerals processing has been completed. This allows the operations to test rehabilitation and revegetation techniques, the long-term sustainability of which can then be monitored, and also allows the operations to keep their 'footprint' of disturbed land (and the associated financial provision for closure) to a minimum.

All group mines have a conceptual closure plan which is a requirement of EMPR approval. As a minimum requirement, the MPRDA requires that mines that have a remaining life of five years or less are required to deliver a detailed closure plan. Although all of the group's mines have mine lives considerably in excess of this, emphasis is being placed on the development of more detailed closure plans well ahead of mine closure to assist in rehabilitation planning and realistic financial provision for closure. As part of the Zeerust EMP amendment, the group undertook a focused programme of engagement with landowners, regulators and other interested and affected parties in order to develop a suite of quantifiable mine closure criteria that address the priorities of all stakeholders, and will allow the site to monitor and report on progress on concurrent rehabilitation in a meaningful manner and will provide a template for closure plans for all the AMT operations, which are scheduled for revision in the coming financial year.

The Cato Ridge Works and Machadodorp Works are classified as industrial (rather than mining) facilities and therefore there is no legal requirement to make financial provision for closure or rehabilitation of these operations. However, site remediation and rehabilitation at the group smelters is managed and provided for in accordance with the principles of responsible environmental management outlined in national legislation.

Human resources

The group undertakes statutory reporting on employment equity and other labour-related issues to both the Department of Labour and the DMR. The occupational levels and employment equity categories reported on are based on the definitions outlined in the Employment Equity Act and the Broad-based Socio-Economic Empowerment Charter for the Mining Industry (the Mining Charter) and are summarised below.

While the employment equity targets set in the Mining Charter do not apply to the group's smelters, employment equity statistics are presented for the Cato Ridge works and the Machadodorp Works operations for the sake of complete and consistent reporting.

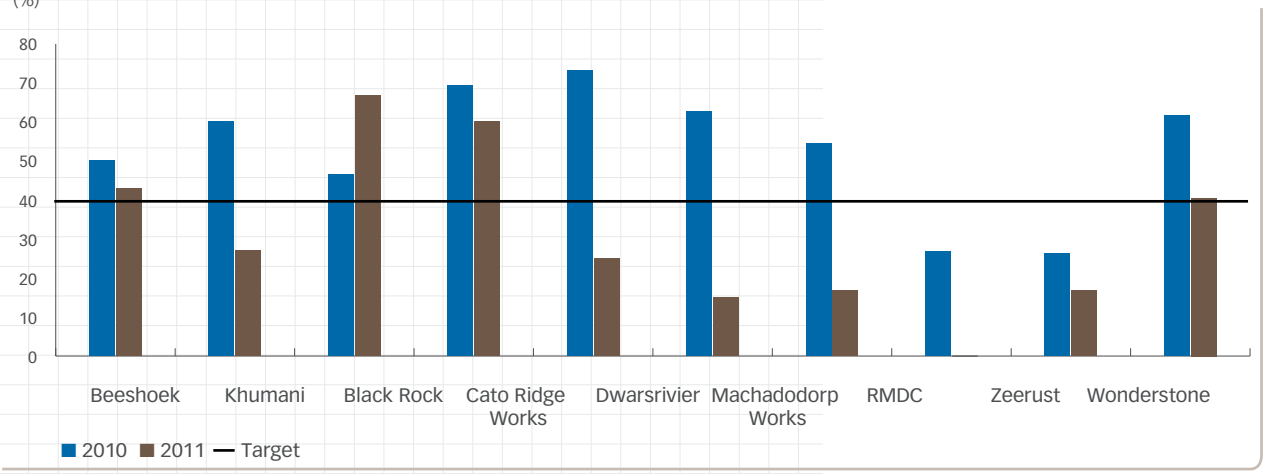
No staff were retrenched by either Assmang or Assore during the current financial year.

In line with the requirements of the Mining Charter, all of the group's operations (with the exception of Black Rock) recorded a significant year-on-year increase in the proportion of Historically Disadvantaged South Africans (HDSAs) in management positions. All operations (with the exception of Zeerust) have exceeded the Mining Charter target of 40% HDSAs in management.

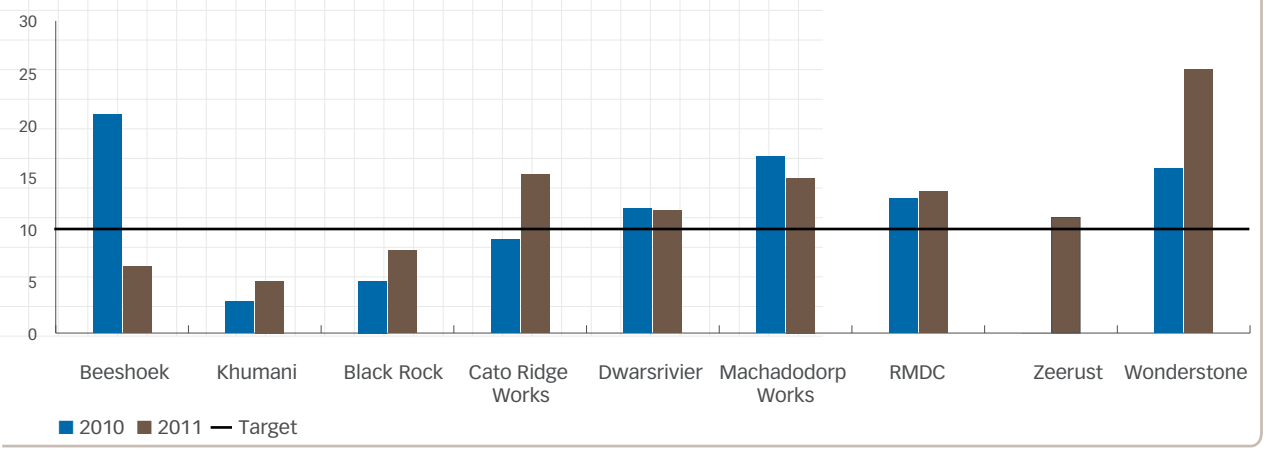
Although some operations reflected an improvement in the proportion of Women In Mining during the current year, compliance with the Mining Charter target of 10% for this indicator is proving to be challenging.

Although the proportion of Women In Mining appears to have decreased year-on-year for the majority of the group's operations, this in fact is largely due to the adoption of a stricter definition of "women in mining" by Assmang during the current year. Assmang's reporting convention on this indicator is now consistent with the criteria used by AMT operations with the statistics now reflecting the number of women in "core" production-related departments and excluding women in support departments (who were previously included in this category). Thus the year-on-year data sets for Assmang operations are not comparable.

HDSA management
(%)



Women in mining
(%)



Sustainability report continued

Contractors

Operation	2011 Permanent employees	2011 Temporary/ contract employees	2011 Contractors as a proportion of the total workforce %	2010 Permanent employees	2010 Temporary/ contract employees	2010 Contractors as a proportion of the total workforce %
Beeshoek	**326**	**17**	**5**	277	7	3
Khumani	**1 153**	**9 175**	**9**	909	5 164	85
Black Rock	**1 721**	**1 097**	**39**	1 358	1 283	52
Cato Ridge Works	**654**	**567**	**46**	607	74	11
Dwarsrivier	**1 214**	**446**	**27**	1 129	706	39
Machadodorp Works	**698**	**362**	**34**	612	234	28
Total Assmang	**5 766**	**11 664**	**40**	4 892	7 468	36
RMDC	**207**	**397**	**66**	167	278	63
Zeerust	**24**	**142**	**86**	14	31	69
Wonderstone	**115**	**36**	**24**	116	30	21
Total AMT operations	**346**	**575**	**58**	297	339	51

The majority of the Assmang operations reported an increase in permanent staff complement during the current year, with the increase in permanent staff being particularly marked at Khumani and Black Rock.

The proportion of contractors on the Assmang sites has also increased year-on-year, and reflects the contractor workforce that has established to undertake major capital projects. This includes the KEP at Khumani, as well as the rebuild of furnaces 1 and 2 and a range of environmental improvement projects undertaken at the Cato Ridge Works.

Labour relations

Over the period between December 2010 and January 2011, Dwarsrivier experienced an unprotected strike which lasted for 13 days and affected three shifts. However, no strikes or lockouts exceeding a week were experienced at any of the AMT operations during the reporting year.

Safety

One of the group's core values is ensuring that operations are managed in a manner that safeguards the safety and health of our employees.

To this end, existing management systems are continuously evolving to address the changing risk profile of our operations and we consistently strive to improve our safety performance so that workplace injuries and occupational diseases are minimised.

Once again, there were no fatalities at any of the AMT operations during the 2011 financial year. There was a single fatality at the Assmang operations during the year, when Mr Solomon Vusi Sindane a trainee crane operator, was fatally injured at the Machadodorp Works.

Lost time injury statistics

Operation	2011 LTI	2010 LTI	2011 LTIFR	2010 LTIFR
Beeshoek	**1**	1	0,17	0,88
Khumani	**13**	9	0,27	1,42
Black Rock	**9**	12	0,40	2,62
Cato Ridge Works	**3**	10	0,23	4,86
Dwarsrivier	**22**	23	1,26	9,78
Machadodorp Works	**8**	5	0,68	2,40
RMDC	**10**	6	O/S	1,86
Zeerust	**0**	1	–	2,87
Wonderstone	**6**	3	24,3	2,45
Assore Head Office	**2**	1	5,54	4,73
Assmang Head Office	**–**	–	–	–

Lost time injuries (LTI) statistics and lost time injury frequency rates (LTIFR) for each of the operations are presented in the table above. The LTIFR is calculated on the basis of 200 000 hours.

During the 2011 financial year, both Khumani and Black Rock achieved one million fatality-free shifts.

Beeshoek recorded zero lost time injuries for twelve consecutive months. As at 30 June 2011, the mine had also recorded 1,9 million fatality-free shifts with the last fatality occurred during March 2003.

Health and wellbeing

The group recognises that proactively managing the health of the workforce is central to ensuring the sustainability of its business. In order to ensure that the specific occupational health risks associated with each of the operations are effectively managed, specialist occupational health service providers are engaged by each of the operations to implement medical surveillance programmes in accordance with legal requirements.

Occupational health and hygiene monitoring

The number of employees who underwent occupational health screening (including the number of cases referred for follow up and compensation) during the current year is summarised below:

Occupational health screening

Operation	2011 Number of audiometric surveillance tests performed	2011 Number of cases referred for audiometric diagnostic testing	2011 Number of cases submitted for compen-sation	2010 Number of audiometric surveillance tests performed	2010 Number of cases referred for audiometric diagnostic testing	2010 Number of cases submitted for compen-sation
Beeshoek	**1 120**	**3**	**3**	1 324	1	1
Khumani	**7 701**	**1**	**1**	6 145	1	1
Black Rock	**3 678**	**3**	**–**	4 549	31	9
Cato Ridge Works	**3 553**	**136**	**–**	2 716	40	2
Dwarsrivier	**2 092**	**2**	**2**	2 155	4	2
Machadodorp Works	**1 070**	**–**	**–**	917	–	–
RMDC	**311**	**4**	**3**	472	3	3
Zeerust	**131**	**–**	**–**	108	–	–
Wonderstone	**128**	**1**	**–**	102	–	–

Sustainability report continued

Any cases that were referred for follow up as a result of routine medical surveillance and were subsequently found to meet the criteria for compensation in terms of the occupational health legislation were referred to the relevant industry association (Rand Mutual for mining operations and the Compensation Commissioner for industrial facilities).

In the current year, a total of 145 cases from the Assmang operations were referred for audiometric diagnostic testing, of which six were submitted for compensation. Over the same period, five cases from the AMT operations were referred for audiometric diagnostic testing, of which three were submitted for compensation.

Stakeholder engagement

The Assore group interacts with a wide range of internal and external stakeholders groups in the pursuit of its business. Each group of, often site-specific, stakeholders has different needs in terms of type of information required as well as mode and frequency of interaction, and the group's approach to stakeholder engagement has been tailored accordingly, as summarised in the following table:

Stakeholder group	Responsibility	Mode of engagement
Investors	Dealing properly with all stakeholders in order to serve the best interests of shareholders on a sustainable basis. Commitment to full compliance with all relevant laws and rules, good corporate governance, transparency and fair dealing	Annual and six-monthly reports, SENS announcements, press statements
Employees and their representatives	Employing the most appropriately skilled individuals and investing in their development in a non-discriminatory environment	Staff meetings at all levels, 'toolbox talks', inductions, health and safety meetings, internal publications, notice boards, union negotiations, career path planning
Joint-venture partners	Seeking mutually beneficial long-term relationships with joint-venture partners and industry peers	Representation on the Assmang Board and Excom and board meetings for individual Assore operations, active participation in industry associations
Contractors and suppliers	Seeking mutually beneficial long-term relationships with contractors and suppliers based on fair and ethical practices	Contract negotiations, tender processes, safety inductions, health and safety meetings, site inspections and audits, performance reviews, ISO certification
Customers	Establishing and maintaining mutually beneficial long-term relationships with customers based on fair and ethical practices	Customer site visits, contract negotiations, quality management system, conference attendance. Use of customer feedback to influence annual report content
Government	Observing the laws of the countries in which the Group operates	Statutory reporting, inspections by government representatives, permit applications, public participation process for Environmental Impact Assessments, engagement on targeted issues
Host communities	Promoting strong relationships with, and raising the capacity of, the communities in which the Group's activities are located	Public meetings, public participation process for Environmental Impact Assessments, participation in Local Economic Development initiatives, funding of Corporate Social Responsibility initiatives
Non-governmental organisations	Development and maintenance of constructive relationships with relevant non-governmental organisations	Engagement on targeted issues and partnership on certain projects

Materials stewardship

Leadership roles within the industry

Assore encourages its employees to assume leadership roles in industry associations which aim to promote the use and development of commodities which it produces, and to foster cooperation between companies in these industry sectors to address sustainability issues of common concern. Ore & Metal is responsible for marketing the products produced by the Assmang and the AMT operations. Ore & Metal recognises its responsibility in promoting the sustainability of the business by taking an active role in shaping the development and performance of the sectors in which it operates.

In this regard, an Ore & Metal representative currently serves on the Occupational Health, Environment and Safety (OHES) Committee of the International Manganese Institute (IMnI). During the past financial year, IMnI has been particularly active in its sustainability initiatives, including the development of a "first pass" life-cycle assessment for manganese, which has been used for benchmarking purposes, as well as research into occupational hygiene monitoring for monitoring inhalable and respirable manganese. Ore & Metal also chairs the IMnI's newly-constituted Regulatory Committee, on which it also represents the interests of the South African manganese industry.

Ore & Metal continues to serve on the Executive Committee of the International Chrome Development Association (ICDA). During the current financial year, the chrome operations participated in ICDA's Safety First reporting initiative, which provides member companies with the ability to benchmark its safety performance against its peers.

During the year under review, both the IMnI and ICDA have made a concerted effort to attract new members from emerging markets in order to improve sustainability performance, not only among its member companies, but across the industry sector.

Product registration and stewardship

Regulation EC1907/2006 of the European Parliament (generally referred to within the industry as REACH) requires the evaluation, authorisation and registration of chemical substances in order to ensure their safe use. The group was part of the consortia registering four substances in which it trades (iron, manganese, manganese dust produced by CRA and chrome) and successfully met the 30 November 2010 deadline for REACH registration.

The group's Safety Data Sheets (which were revised in the previous financial year) are currently undergoing review to ensure compliance with the requirements of the Global Harmonised System of Classification and Labelling of Chemical (GHS), which has been implemented through South African National Standard SANS 10234:2008.

During the year, the group has initiated proactive engagement with its customers and suppliers in respect of its sustainability performance. In particular, as a result of calculating the group's CCF, Ore & Metal has been able to provide customers with meaningful information on the carbon footprint of the products marketed.

Local economic development and corporate social investment

Social and Labour Plans (SLPs) have been developed for all group mining operations and submitted to the DMR in support of applications for the conversion of old order to new order mining rights. These SLPs detail a range of local economic development (LED) and corporate social responsibility (CSR) initiatives to which the Assore group has committed in order to facilitate economic diversification and social upliftment in our host communities.

Local economic development

LED projects have been established at all group operations and have been selected to achieve sustainable job creation and poverty alleviation in the communities that surround the group's operations. These projects are intended to develop and diversify the economy of our host communities and to develop economic opportunities that will endure beyond the end of mine life.

The group actively seeks to integrate LED projects with environmental management, particularly with respect to developing LED projects that have synergies with waste management and closure planning which generate economic opportunity as well as the financial provision required for mine closure. In this regard, a number of initiatives are underway to seek opportunities to convert mine wastes from being an economic liability into an economic asset.

Sustainability report continued

The Cato Ridge Works has undertaken a risk-based assessment of the re-use of slag. This will be used to motivate to the Department of Water and Environmental Affairs that the re-use of manganese slag be listed as an activity not requiring a Waste License in terms of section 9 of the imminent Waste Classification and Management Regulations. This will develop a bigger market for slag sales in sectors such as the road construction industry and cement making industry, and a resultant further reduction in the amount of slag disposed of on site. Similarly, at Dwarsrivier, where waste rock is being used to produce aggregate, it is planned that the rate of aggregate production will increase to support the mine's programme of local enterprise development.

Corporate social responsibility

Assore's approach to CSR continues to place emphasis on enhancing education, healthcare, safety and food security for the communities in which the group operates.

During the reporting year, the Sacco Community Centre was commissioned at Black Rock. This is a 660 m^2 facility that provides a range of recreational and social services to both the Black Rock village and surrounding communities. The complex includes a toddler care centre, a gym and a range of indoor recreational facilities including a cinema, a ten-pin bowling alley, board game lounges, table tennis, a model car racing track, a computer centre and an internet café. The project was constructed and equipped at a cost of R4 million.

AMT continues to support and extend the facilities at the Makgophe School on the RMDC mine property. In order to promote early childhood development and enhance school readiness, a crèche was established at Makgophe during the reporting year and the mine employs a teacher for Grade R. Other notable developments include the equipping of a computer centre with 34 computers and educational software in order to develop numeracy, literacy and computer skills, as well as upgrading of sporting facilities. The mine has also funded the award of bursaries for Dux learners which cover their school fees as well as the cost of uniforms and learning materials.

During the past year, Wonderstone has funded the establishment of the Rainbow Day Care facility in Letsopha township at a cost of R1,4 million. This includes purchase of furnishings and teaching materials, as well as installation of a borehole to ensure continuity of water supply to the facility.

Over the current year, the Assmang operations have focused the majority of their CSI expenditure on educational initiatives that benefit the neighbouring communities. A wide range of projects have been undertaken to support local schools, which include the construction of new classrooms, the renovation and maintenance of existing infrastructure, funding of teaching materials and the provision of salary subsidies for teachers.

As part of the group's ongoing commitment to developing the potential of its staff and generating sustainable livelihoods, the group continues to provide a range of bursaries and other study support to enable employees and their families to purse a variety of technical and vocational qualifications.