

Term	Definition
AET	Adult education and training
ADR	American depositary receipts
Ag	Silver
AMCU	Association of Mineworkers and Construction Union
AMD	Acid mine drainage – outflow of acidic water formed by mining activity and egress of water following contact with certain types of ore bodies and host rock. Also known as acid rock drainage
AMF	Harmony's asset management forum (AMF) is entrusted with the management of all Harmony's non-operational South African assets. This includes, among other things, the management, care and maintenance of two pumping shafts. In addition, AMF undertakes the rehabilitation of shafts and plants which have ceased operating.
ART	Antiretroviral therapy
Au	Gold
BEE	Black economic empowerment
BBBEE	Broad-based black economic empowerment
By-products	Any products emanating from the core process of producing gold, including silver and uranium in South Africa and copper, silver and molybdenum in Papua New Guinea
Capital expenditure (capex)	Expenditure on tangible assets – includes on-going and project capital. In particular, capex includes spending on on-going development, abnormal expenditure, shaft projects and major projects, and covers both sustaining and growing operations
Carbon-in-leach (CIL)	Gold is leached from a slurry of gold ore with cyanide in agitated tanks and adsorbed on to carbon granules in the same circuit. Granules are separated from the slurry and treated to remove gold
Carbon-in-pulp (CIP)	Gold is leached conventionally from a slurry of gold ore with cyanide in agitated tanks. The leached slurry passes into the CIP circuit where carbon granules are mixed with the slurry and gold is adsorbed onto the carbon. Granules are separated from the slurry and treated to remove gold
Cash costs	Total cash costs include site costs for all mining, processing and administration, reduced by contributions from by-products and include royalties and production taxes. Depreciation, rehabilitation, corporate administration, retrenchment, capital and exploration costs are excluded. Total cash costs per ounce are attributable total cash costs divided by attributable ounces of gold produced



Term	Definition
CDP	Carbon Disclosure Project – an independent not-for-profit organisation that acts as an intermediary between shareholders and corporations on all climate change-related issues, providing primary climate change data from the world's largest corporations to the global marketplace
CEO	Chief executive officer
CO ₂ emissions	Total CO ₂ emissions calculated from direct emissions generated from petrol and diesel consumption and indirect emissions generated from electricity consumption (expressed in tonnes)
Critical skills training – number of people trained in FY15 ¹	 The following disciplines are defined as core skills: Mining Engineering Ore reserves Metallurgy The critical skills within these disciplines are: Mining – general manager; mine manager; mining manager Engineering – engineers; junior engineers Ore reserves – ore reserve management; HOD – geology, survey and planning; section geologist/senior geologist; section surveyor/mine surveyor/senior shaft surveyor; section geostatistician/senior geostatistician (geological technician); section planner/senior planner; surveyors/geotechs Metallurgy – plant manager; senior metallurgist
CSI/R	Corporate social investment/responsibility
Cu	Copper
Cut-off grade	Minimum grade at which a unit of ore will be mined to achieve the desired economic outcome
Cyanide Code	International management code for manufacture, transport and use of cyanide in producing gold. The aim is to promote responsible management of cyanide used in gold mining; to protect human health and reduce potential for environmental impacts
Depletion	Decrease in quantity of ore in a deposit or property due to extraction or production
Development	Process of accessing an ore body through shafts or tunnelling in underground mining
Discontinued operation	A component of an entity that has been disposed of or abandoned or classified as held for sale until conditions precedent to the sale have been fulfilled
DMR	Department of Mineral Resources, South Africa



Term	Definition
DOTS	Directly observed therapy short-course
DSM	Demand-side management
DTI	Department of Trade and Industry
EBIT	Earnings before interest and tax
Electricity purchased (kWh) ¹	Electricity purchased from the supplier during the reporting period. This includes all electricity purchased by source (fossil fuel, nuclear, hydroelectric, wind, solar, etc). It excludes electricity generated by the operation itself and electricity supplied to third parties such as mine hostels/accommodation where cost is recovered from employees, communities and businesses
EMP/S	Environmental management programme/system
EMPR	Environmental management programme report
Employment equity in management in South Africa (%)	Employment equity is reported as a number and percentage of the total number of historically disadvantaged South Africans employed per band. For historically disadvantaged South Africans we refer to: black people (African, coloured and Indian males and females) and white women. White males and foreigners (including those naturalised after the DTI code date on March 1994) are excluded Employment equity is measured in the bands C, D, E and F, where: Top management (F band) Senior management (E band) Professionally qualified and experienced specialists/middle management (D band) Skilled technical and academic qualified/junior management/supervisors/foremen/superintendents (C band) Core and critical (C-E management levels in core disciplines)
Energy consumption	Energy use calculated from electricity purchased and diesel and petrol consumed during the reporting period
Environmental incidents – levels 3 to 5	A level 3 incident may result in either mitigation costs of between R250 000 and R500 000 or serious medium-term environmental effects, breaches in legislation and serious adverse media attention. A level 4 incident has a mitigation cost of more than R1 million with the possibility of significant fines or prosecution. A level 5 incident carries mitigation costs exceeding R3 million and a very significant impact on highly valued species, habitat or ecosystem with potential for international condemnation and possible director liability.
ERP	Enterprise resource planning
ESOP	Employee share ownership scheme



Term	Definition
ETFs	Exchange traded funds
Exco	Executive committee
FIFR	Fatal injury frequency rate A work-related injury which results in loss of life The calculation for the fatality injury frequency rate (FIFR): Actual fatal injuries x 1 000 000/hours worked The calculation for hours: Actual shifts worked x 9 (this is throughout Harmony for consistency to assume every person works nine hours per shift)
FOG	Fall of ground
FOGIFR	Fall-of-ground injury frequency rate Any work-related fall-of-ground injury that calls for medication, treatment, medical checks and reviews, irrespective of time lost or not The calculation for FOGIFR: Actual fall of ground injuries x 1 000 000/hours worked The calculation for hours: Actual shifts worked x 9 (this is throughout Harmony for consistency to assume every person works nine hours)
FSC	Forest Stewardship Council
g/TEC	Grams per total employee costed
GHG	Greenhouse gas – a gas that contributes to the greenhouse effect by absorbing infrared radiation, such as carbon dioxide and chlorofluorocarbons (CFCs)
Gold produced	Refined gold derived from the mining process, measured in ounces or kilograms in saleable form
Grade	Quantity of gold contained in a unit weight of gold-bearing material, generally expressed in ounces per short ton of ore (oz/t), or grams per metric tonne (g/t)
GRI	Global Reporting Initiative
GWh	Gigawatt hours
HDSAs	Historically disadvantaged South Africans – all people and groups discriminated against on the basis of race, gender and disability as per the Mineral and Petroleum Resources Development Act (No 28 of 2002) and the Mining Charter definitions
HIV	Human immunodeficiency virus
HIV/Aids	Human immunodeficiency virus or acquired immunodeficiency syndrome
Housing and living conditions:	



Term	Definition
a) conversion of operational hostels from sharing to single occupancy rooms ¹	The number of employees who share a room in Harmony's company accommodation at active mining operations, and the number of employees who have single rooms in Harmony's company accommodation at active mining operations. This is calculated by comparing the total physical hostel design capacity (room numbers) versus the total number of hostel occupants. This gives the total average occupancy rate per hostel. An average of greater than one person for an active mining operation confirms that the occupant is sharing accommodation
b) Conversion of non-operational hostels from single- sex units to family units known as community rental units (CRU)	The number of family units is determined by the architectural design of the new structure, designed to create community rental units for both Harmony employees and members of the public
c) Promoting home ownership	Company houses sold to individual employees at special prices and other housing development initiatives being promoted or facilitated by Harmony
HR	Human resources
ICMM	International Council on Mining and Metals
ICT/IT	Information and communication technology/information technology
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
Indicated mineral resource	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 exploration, sampling and testing information using appropriate techniques from outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but close enough for continuity to be assumed
Inferred mineral resource	Part of a mineral resource for which tonnage, grade resource and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from outcrops, trenches, pits, workings and drill holes that may be limited or of uncertain quality and reliability
Interest cover	Earinings before interest and tax divided by finance costs and unwinding of obligations
IRCA	International Register of Certificated Auditors



Term	Definition
ISO	International Organisation for Standardization
ISO 9000	International Standards Organization's family of standards for quality management systems
ISO 9001	The only standard within the ISO 9000 family against which a company can be certified against. It is the standard that defines the requirements of having a Quality Management System
ISO 14001	Published in 1996 by the International Organisation for Environmental Standardisation, it specifies actual requirements for an environmental management system
ISO 50001	This standard specifies the requirements for establishing, implementing, maintaining and improving an energy management system so as to achieve continually improving energy performance, including energy efficiency, energy use and consumption
IUCN	International Union for Conservation of Nature and Natural Resources
JMS	Joint Metallurgical Services
JORC	Australian Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves
JSE	JSE Limited (Johannesburg Stock Exchange)
Kina	Papua New Guinea currency
King III	King Report on Governance for South Africa, published in 2009
kg	Kilograms
KPIs	Key performance indicators
Land disturbed and land available for rehabilitation (ha)	Total land footprint disturbed less the land footprint used for on-going or future mining activities, where the footprint of disturbed area includes all buildings, roads and mining area that needs to be rehabilitated according to the Environmental Management Programme Report (EMPR); the area rehabilitated meets the required standard of the EMPR, final land use plans and only maintenance and monitoring is needed; and the land available for rehabilitation is the area used for on-going or future mining activities
LED	Local economic development
Local economic development (LED) spend/community spend (South African rands) ¹	Local economic development project spend linked to the licence of each mine. The following categories qualify as LED spend: bursary students bursary graduates training bridging school



Term	Definition
	 training mining training engineering costs related to: mine community projects labour-sending areas – community projects that are unrelated to mine employees conversion of hostels into family units procurement spend related to: contractor compliance BEE procurement corporate social responsibility
LOM	Life of mine: the number of years an operation is scheduled to mine and treat ore, based on the current mine plan
LPG	Liquefied petroleum gas
LTIFR ¹	Lost-time injury frequency rate: a lost-time injury is a work-related injury that calls for medication, treatment, medical checks, reviews and subsequent days off work. This injury or illness incapacitates injured employees from performing their normal occupation on the next scheduled work day or shift. The calculation for the lost-time injury frequency rate (LTIFR): Actual lost-time injuries x 1 000 000/hours worked The calculation for hours: Actual shifts worked x 9 hours (for consistency, it is assumed that throughout Harmony each person works 9 hours)
m²/TEC	Square metres per total employee costed
MBOD	Medical Bureau of Occupational Diseases
MDR TB	Multidrug-resistant tuberculosis
Measured mineral resource	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 exploration, sampling and testing information gathered through appropriate techniques from outcrops, trenches, pits, workings and drill holes. Locations are spaced closely enough to confirm geological and grade continuity
MHSC	Mine Health and Safety Council
MHSA	Mine Health and Safety Act (No 29 of 1996)



Term	Definition
Mine call factor	The ratio, expressed as a percentage, of the total quantity of recovered and unrecovered mineral product after processing with the amount estimated in the ore based on sampling
Mineral resource	A concentration or occurrence of material of intrinsic economic interest in/on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are sub-divided, in order of increasing geological confidence, into inferred, indicated and measured categories
Mining Charter	Broad-based social-economic empowerment charter for the South African mining industry. The goal is to create an industry that reflects the promise of a non-racial South Africa
MMJV	Morobe Mining Joint Ventures
Мо	Molybdenum
MOSH	Mining Industry Occupational Safety and Health
Moz	Million ounces
MPRDA	Mineral and Petroleum Resources Development Act (No 28 of 2002)
MQA	Mining Qualifications Authority, a sector education training authority for the mining and minerals sector facilitating human resources development
MW	Megawatt
MWh	Megawatt hour
NEMA	National Environmental Management Act
NERSA	National Energy Regulator of South Africa
NGO	Non-governmental organisation
NIHL	Noise-induced hearing loss reported as the number of new cases identified and submitted for compensation during the reporting period
NNR	National Nuclear Regulator
NQF	National Qualifications Framework
NUM	National Union of Mineworkers
NWA	National Water Act
NYSE	New York Stock Exchange



Term	Definition
OHSAS 18001	Occupational health and safety assessment specification
On-going capital	Capital expenditure to maintain existing production assets. This includes replacement of vehicles, plant and machinery, ore reserve development and capital expenditure related to safety, health and the environment
Operating margin	Revenue less production costs expressed as a percentage of revenue
Pay limit	The grade of a unit of ore at which revenue from the recovered mineral content of the ore is equal to the total cash cost, including ore reserve development and stay-in-business capital. This grade is expressed as an in-situ value in grams per tonne or ounces per short ton (before dilution and mineral losses)
PNG	Papua New Guinea
POPCRU	Police and Prisons Civil Rights Union
Preferential procurement – BEE total spend (ZAR) ¹	Procurement spend collected from the Harmony enterprise resource planning system's payment register, which is only the discretionary spend value spent with suppliers that hold a valid black economic empowerment certificate, and comply with the minimum historically disadvantaged South Africans ownership of 25%, or more. The reporting period for this key performance indicator is 26 June 2015 to 25 June 2016, and spend throughout the period is reported regardless of invoice date. Reporting is aligned with the requirement of the revised Mining Charter of September 2010
Probable mineral reserve	Economically mineable part of an indicated, and in some cases, a measured mineral resource. It includes diluting materials and allowances for losses that may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Productivity	An expression of labour productivity based on the ratio of grams of gold produced per month to the total number of employees in underground mining operations
Project capital	Capital expenditure to either bring a new operation into production; to materially increase production capacity; or to materially extend the productive life of an asset
Proved reserve	Economically mineable part of a measured mineral resource. It includes diluting materials and allowances for losses that may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.



Term	Definition
	These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Reclamation	In South Africa, reclamation describes the process of reclaiming slimes (tailings) dumps using high-pressure water cannons to form a slurry that is pumped back to metallurgical plants for processing
Reef	A gold-bearing sedimentary horizon, normally a conglomerate band that may contain economic levels of gold
REFIT	Renewable energy feed-in tariff
SAMREC	South African Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves
SANS	South African national standard
Scope 1 carbon emissions (tCO ₂ e) ¹	Direct combustion of fuel by the Harmony Group (explosives, diesel and petrol)
Scope 2 carbon emissions (tCO ₂ e) ¹	Scope 2 emissions calculated from electricity purchased (from the power utility excluding use by third parties) multiplied by the appropriate factor as indicated by the electricity supplier
Scope 3 carbon emissions (tCO ₂ e) ¹	Indirect combustion by the Harmony group in line with Scope 3 emissions in the following categories, as indicated by the greenhouse gas Protocol: Purchased goods and services Capital goods Fuel and energy related emissions not included in Scopes 1 and 2 Upstream transportation and distribution Waste generated in operations Business travel Employee commuting Upstream leased assets Downstream transportation and distribution Processing of sold products Use of sold products Downstream leased assets Franchises End of life treatment and Investments
Silicosis – number of new cases certified in FY16 ¹	The number of cases of pure silicosis confirmed by the Medical Bureau of Occupational Diseases (MBOD) in FY16, which includes all cases that have been received by Harmony as confirmed during FY16, regardless of the date of



Term	Definition
	the MBOD letter. Cases where other conditions are present, specifically tuberculosis, are not included in this number
SLPs	Social and labour plans aimed at promoting employment and advancing the social and economic welfare of all South Africans while ensuring economic growth and socio-economic development as stipulated in the MPRDA
SMMEs	Small, medium and micro enterprises
SOX	Sarbanes-Oxley
Tailings	Finely ground rock of low residual value from which valuable minerals have been extracted. Discarded tailings stored in dam facilities
ТВ	Tuberculosis
Total injuries and accidents (TIA) ¹	All work-related injuries. This category is the sum of all dressing cases and lost-time injuries. Dressing cases: a work-related injury that calls for medication, treatment or medical check that is normally administered by a healthcare professional. A dressing case does not result in lost-time from work beyond the date of injury
Tuberculosis – number of cases confirmed in FY16	Tuberculosis (TB). The number of cases of pure tuberculosis confirmed by the Medical Bureau of Occupational Diseases (MBOD) in FY16, which includes all cases that have been received by Harmony as confirmed during FY16, regardless of the date of the MBOD letter. Cases where other conditions are present, specifically silicosis, are not included in this number
Tonne/ton (t)	Metric = 1 000 kilograms / Imperial = 2 000 pounds (1 016 kilograms)
TSF	Tailings storage facility
UASA	United Association of South Africa
US	United States
U ₃ O ₈	Uranium oxide
US\$	United States dollar
Volumes of mineral waste disposed (tonnes) ¹	Mineral waste consists of waste rock and slimes/tailings. Waste rock refers to the amount of waste rock produced and/or hoisted to surface, and placed on a waste rock disposal site during the reporting month. Slimes/tailings refers to the total amount of slimes/tailings produced by the processing plant during the reporting month
Waste	Material with insufficient mineralisation for future treatment and discarded



Term	Definition
Water used for primary activity (kilolitres) ¹	The total make-up or new water drawn into the boundaries of the operation from all sources (including surface water, groundwater and municipal water supply or water utilities) for use for mining and processing-related activities including use by contractors. This definition excludes: internally recycled water, affected fissure water, water discharged to receiving environment and supply to third parties such as communities and businesses
Weighted average number of ordinary shares	Number of ordinary shares in issue at the beginning of the year, increased by shares issued during the year, weighted on a time basis for the period in which they have participated in the income of the company, and increased by share options that are virtually certain to be exercised
WHO	World Health Organization
Yield	Amount of valuable mineral or metal recovered from each unit mass of ore expressed as ounces per short ton or grams per metric tonne

¹ Definitions applied to the Selected Sustainability Indicators which are assured by the independent auditors