

Glossary of terms

ABET	Adult Basic Education and Training
AISC	All-in sustaining costs. AISC comprises on-site mining costs (on a sales basis); on-site general and administrative costs; royalties and production taxes; realised gains/losses on hedges due to operating costs; community costs related to current operations; permitting costs related to current operations; third-party smelting, refining and transport costs; non-cash remuneration (site-based); stock-piles/product inventory write-down; operational stripping costs; by-product credits; corporate general and administrative costs (including share-based remuneration); reclamation and remediation – accretion and amortisation (operating sites); exploration and study costs (sustaining); and capital exploration (sustaining)
AIC	All-in costs. AIC is AISC plus community costs not related to current operations; community costs not related to current operations; reclamation and remediation costs not related to current operations; exploration and study costs (non-sustaining); capital exploration (non-sustaining); capitalised stripping & underground mine development (non-sustaining); and capital expenditure (non-sustaining)
AS/NZ 4801	Australian occupational health and safety management standards
Backfill	Material generally sourced from processing plant mine residues and utilised for the filling of mined voids, to ensure long-term stability of excavations and minimise the effects of seismic activity
BEE	Black Economic Empowerment. BEE seeks to ensure that black persons within South Africa gain a significant degree of control in the economy through the possession of equity stakes and the holding of management positions within an institution
Blasthole	The hole into which a blasting charge is inserted in order to blast loose a quantity of rock
Borehole or drill hole	Hole bored or drilled in rock, usually to obtain representative samples (see diamond drill)
Box-hole	A cross raise, normally from the access cross-cut to the reef horizon, for the purpose of drawing broken rock and ore from the reef horizon into a conveyance in the cross-cut
Bulk mining	Any large-scale, mechanised method of mining involving many thousands of tonnes of ore being blasted or caved and transported to a processing plant
BVQI	Bureau Veritas Qualite International is a leading global and independent certification body that audits and certifies whether company systems meet the requirements of ISO standards
Carbon-in-leach (“CIL”)	The recovery process in which gold is leached from gold ore pulp by cyanide and simultaneously adsorbed onto activated carbon granules in the same vessel. The loaded carbon is then separated from the pulp for subsequent gold removal by elution. The process is typically employed where there is a naturally occurring gold adsorbent in the ore
Capital expenditure (or capex)	Specific project or ongoing expenditure for replacement or additional equipment, materials or infrastructure
Carbon-in-pulp (“CIP”)	The recovery process in which gold is first leached from gold ore pulp by cyanide and then adsorbed onto activated carbon granules in separate vessels. The loaded carbon is then separated from the pulp for subsequent gold removal by elution
Channel	Historic water course into which sediments consisting of gravel and sand are/have been deposited
Collective Bargaining Agreement	Collective Bargaining Agreement means a written agreement concerning terms and conditions of employment or any other matter of mutual interest concluded by a trade union(s) and the Company

Glossary of terms (continued)

Comminution	The term used to describe the process by which ore is reduced in size in order to liberate the desired mineral from the gangue material in preparation for further processing
Co-morbidity	Medical term for diseases that commonly co-exist, which increase the risk of morbidity
Concentrate	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore
Conglomerate	Sedimentary rocks comprising eroded subangular to rounded pebbles within a finer-grained matrix
Cross-cut	A horizontal underground drive developed perpendicular to the strike direction of the stratigraphy and reef
Cut-off grade	The lowest grade of mineralised ore, which determines whether or not it is economic to mine and send to the processing plant
Decline	An excavation from surface or subsurface, in the form of a tunnel, which is developed downwards
Depletion	The decrease in quantity of ore, in a deposit or property resulting from extraction or mining
Development	Is any tunnelling operation that is developed for either exploration, exploitation or both
Diamond drill	A rotary type of rock drill that cuts a core of rock by diamond bits and is recovered in long cylindrical sections
Dilution	Waste or material below the cut-off grade that contaminates the ore during the course of mining operations and thereby reduces the average grade mined
Dip	Angle of inclination (of a geological feature/rock) from the horizontal
Dyke	Tabular, vertical or near vertical body of igneous rock formed by the intrusion of magma generally into planar structural zones of weakness
Elution	The chemical process of desorbing gold from activated carbon
Facies	The characteristics of a rock unit defined by its composition, lithology, physical properties and geochemical parameters, usually reflecting the conditions of its origin
Fatality rate	Number of deaths normally expressed as a ratio per million man-hours worked
Fault	The surface or plane of a fracture along which movement has occurred
Feasibility study	A comprehensive design and costing study of the selected option for the development of a mineral project in which appropriate assessments have been made of realistically assumed geological, mining, metallurgical, economic, marketing, legal, environmental, social, governmental, engineering, operational and all other modifying factors, which are considered in sufficient detail to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable) and the factors reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The overall confidence of the study should be stated
Filtration	Process of separating usually valuable solid material from a liquid

Flotation	The process by which the surface chemistry of the desired mineral particles is chemically modified such that they preferentially attach themselves to bubbles and float to the surface of the pulp in specially designed vessels. The gangue or waste minerals are chemically depressed and do not float, thus allowing the valuable minerals to be concentrated and separated from the undesired material
Footwall	The underlying side of an ore body or stope
Free cash flow margin	The free cash flow ("FCF") margin is revenue less cash outflow divided by revenue expressed as a percentage
Gold equivalent	A quantity of metal (such as copper) converted to an amount of gold in ounces, based on accepted gold and other metal prices, ie the accepted total value of the metal based on its weight and value thereof divided by the accepted value of one troy ounce of gold
Grade	The quantity of gold or other metal contained within a unit weight of one metric tonne, generally expressed in grams per metric tonne ("g/t") or percent metal per metric tonne (%)
Hanging wall	The overlying side of an ore body or slope
Haulage	A horizontal underground excavation which is used to transport mined ore
Head grade	The grade of the material delivered to the processing facility (such as heap leach pad, mill, etc.) The Mineral Reserve declaration is for material as delivered to the processing facility
Hedging	Taking a buy or sell position in futures market opposite to a position held in the cash/spot market to minimise the risk of financial loss from an adverse price change
Hydrothermal	Process of injection of hot, aqueous, generally mineral-rich solutions into existing rocks or geological features
ICVCT	Informed Consented Voluntary Counselling and Testing
Indicated Mineral Resources	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 exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
Inferred Mineral Resource	That part of a Mineral Resource for which tonnage, grade 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 locations such as outcrops, trenches, pits, workings and drill-holes which may be limited or of uncertain quality and reliability
ISO 14000	International standards for organisations to implement sound environmental management systems

Glossary of terms (continued)

Lock-up gold	Gold trapped as a temporary inventory within a processing plant, or sections thereof, typically milling circuits
LTIFR	Lost-Time Injury Frequency Rate, expressed in million man-hours worked
Measured Mineral Resource	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 exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity
Milling	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product
Mine Health and Safety Act ("MHSA")	The South African Mine Health and Safety Act, No 29 of 1996
Mineralised	Rock in which minerals have been introduced
Mineral Reserve	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
Mineral Resource	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 subdivided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories
Mining Face	The end of a development end, drift, cross-cut or stope at which work is taking place
Net cash flow	Cash flow from operating activities less net capital expenditure and environmental payments
Normal fault	Fault in which the hanging wall moves downward relative to the footwall, under extensional tectonic conditions
Nugget effect	A measure of the randomness of the grade distribution within a mineralised zone
NUM	National Union of Mine Workers
OHSAS	Management system standards, developed in order to facilitate the integration of quality and occupational health and safety management systems by organisations
Payshoot	Linear to sublinear zone within a reef for which gold grades or accumulations are predominantly above the cut-off grade
Pillar	Rock left behind to help support the excavations in an underground mine
Probable Mineral Reserve	The economically mineable material derived from a Measured and/or Indicated Mineral Resource. It is estimated with a lower level of confidence than a Proved Mineral Reserve. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, to a minimum of a pre-feasibility study for a project, have been carried out, including 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 is reasonably justified

Project capital	Capital expenditure that is associated with specific projects
Proved Mineral Reserve	The economically mineable material derived from a Measured Mineral Resource. It is estimated with a high level of confidence. It is inclusive of diluting materials and allows for losses that may occur when the material is mined. Appropriate assessments, to a minimum of a pre-feasibility study for a project, have been carried out, including 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 is reasonably justified
Reef	A general term for metalliferous mineral deposit (gold) within a geological zone or unit
Remuneration Report	<p>The term Executive Directors refers to the CEO and the CFO, who are members of the Board of Gold Fields Limited</p> <p>The term Executive Committee or Executives refers to the Gold Fields Limited Executive Committee, which for purposes of King IV™ is the executive management of the Company. The Executive Committee is made up of the CEO, CFO, the Corporate Executive Vice Presidents (“EVPs”) and the Regional EVPs</p> <p>Corporate EVPs refers to those members of the Executive Committee who are based at the Corporate Office of the Company based in Sandton, Johannesburg, South Africa</p> <p>Regional EVPs are those members of the Executive Committee who are heads of their respective regions, namely South Africa, West Africa, Americas and Australia</p> <p>LTIP – Long-Term Incentive Plan LTI – Long-Term Incentive MSR – Minimum Shareholding Requirements STI – Short Term Incentive Plan RemCo – Remuneration Committee BSC – Balance Scorecard GRP – Gross Remuneration Package BRP – Base Rate of Pay MSR – Minimum Shareholding Requirement RexCo – Regional Executive Committee EVP – Executive Vice President ROE – Rate of exchange CEO – Chief Executive Officer CFO – Chief Financial Officer TSR – Absolute and Relative Total Shareholder Return FCFM – Free Cash-Flow Margin ExCo – Executive Committee NED – Non-Executive Director</p>
SADC	Southern African Development Community
SAMREC Code	The South African code for the Reporting of Exploration results, Mineral Resources and Mineral Reserves (the SAMREC Code) 2016 Edition
Seismic	Earthquake or earth vibration including those artificially induced by mining operations
Shaft	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore and waste
Shear	A deformation resulting from stresses that cause contiguous parts of a body of rock to slide relative to each other in a direction parallel to their plane of contact
Stope	The working area from which ore is extracted in an underground mine
Stripping	The process of removing overburden or waste rock to expose ore
Stripping ratio	The ratio of waste tonnes to ore tonnes mined, calculated as total tonnes mined less ore tonnes mined, divided by ore tonnes mined
Stratigraphy	The science of rock strata, including arrangement according to geographical location lithological composition, geophysical and geochemical and chronological order of sequence
Strike	Direction or trend of geological structures such as bedding or fault planes defined by the intersection with the horizontal plane and is always perpendicular to the dip direction

Glossary of terms (continued)

Subvertical shaft	An opening cut below the surface downwards from an established surface shaft
Surface sources	Ore sources, usually dumps, tailings dams and stockpiles, located at the surface
TEBA	The Employment Bureau of Africa
Tertiary shaft	An opening cut below the surface downwards from an established subvertical shaft
Trade union	An association of employees whose principal purpose is to regulate relations between employees and the Company, which has been registered; whose officials have been elected to represent the interests of employees within the workplace; and which is recognised for collective bargaining by the Company

Abbreviations and units

ABET	Adult Basic Education and Training
ADS	American Depository Shares
AIDS	Acquired Immune Deficiency Syndrome
ARC	Assessment and Rehabilitation Centres
ART	Antiretroviral therapy
A\$	Australian Dollar
CBO	Community-based organisation
CIL	Carbon-in-leach
CIP	Carbon-in-pulp
CIS	Carbon-in-solution
DCF	Discounted cash flow
ETF	Exchange-traded fund
GFHS	Gold Fields Health Service
GFLC	Gold Fields La Cima
GRI	Global Reporting Initiative
HBC	Home-based care
HDSA	Historically disadvantaged South African
HIV	Human immunodeficiency virus
LoM plan	Life-of-mine plan
LTIFR	Lost-Time Injury Frequency Rate, quoted in million man-hours
MCF	Mine Call Factor
NGO	Non-governmental organisation
NUM	National Union of Mineworkers
NYSE	New York Stock Exchange
OHC	Occupational Health Centre
OT	Occupational therapy
PHC	Primary health clinic
PPI	Producer price index
SAMREC	South African code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves

SEC	United States Securities Exchange Commission
STI	Sexually transmitted infection
TB	Tuberculosis
TEC	Total employees costed
UASA	United Association of South Africa (a labour organisation)
VCT	Voluntary counselling and testing (for HIV)
cm	centimetre
cm.g/t	gold accumulation
g	gram
g/t	grams per metric tonne – gold or silver grade
ha	hectare
kg	kilogram
km	kilometre
koz	thousand ounces
kt	thousand metric tonnes
ktpa	thousand metric tonnes per annum
ktpm	thousand metric tonnes per month
m²	square metre
Moz	million ounces
oz	fine troy ounce equalling 31.10348 grams
R	South African Rand
R/kg	South African Rand per kilogram
Rm	million South African Rand
R/t	South African Rand per metric tonne
t	metric tonne
US\$	United States Dollar
US\$m	million United States Dollar
US\$/oz	United States Dollar per ounce

Glossary of terms – Sustainable Development

SUSTAINABLE DEVELOPMENT

- **United Nations Global Compact** – is a United Nations initiative to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The Global Compact is a principle-based framework for businesses, stating 10 principles in the areas of human rights, labour, the environment and anti-corruption. www.unglobalcompact.org
- **Global Reporting Initiative (“GRI”)** – produces one of the world’s most prevalent standards for sustainability reporting. www.globalreporting.org
- **ICMM (International Council on Mining and Metals)** – CEO-led organisation of mining companies that seeks to continually entrench best practice with regard to sustainable development and to provide a platform for member companies to share experiences. www.icmm.com

HEALTH, SAFETY AND WELLBEING

- **Total Recordable Injury Frequency Rate (“TRIFR”)** TRIFR = (Fatalities + Lost Time Injuries + Restricted Work Injuries + Medically Treated Injuries) x 1,000,000/number of hours worked.
- A **Lost Time Injury (“LTI”)** is a work-related injury resulting in the employee or contractor being unable to attend work for a period of one or more days after the day of the injury. The employee or contractor is unable to perform any of his/her duties.
- A **Restricted Work Injury (“RWI”)** is a work-related injury sustained by an employee or contractor which requires medical treatment and results in the employee or contractor being unable to perform one or more of their routine functions for a full working day, from the day after the injury occurred. The employee or contractor can still perform some of his/her duties.
- A **Medically Treated Injury (“MTI”)** is a work-related injury sustained by an employee or contractor which does not incapacitate that employee and who, after having received medical treatment, is deemed fit to immediately resume his/her normal duties on the next calendar day, immediately following the treatment or re-treatment.
- **OHSAS 18001** – An international voluntary standard for occupational health and safety management systems. As with other standards, it is based on the identification and control of risks and monitoring of business performance against these.
- **Noise-Induced Hearing Loss (“NIHL”)** – is a disorder that results from exposure to high-intensity sound, especially over a long period of time.
- **Silicosis** – is a form of occupational lung disease caused by inhalation of crystalline silica dust, and is marked by inflammation and scarring in the form of nodular lesions in the upper lobes of the lungs.
- **Chronic Obstructive Airway Disease (“COAD”)** – refers to chronic bronchitis and emphysema, a pair of commonly co-existing diseases of the lungs in which the airways become narrowed.
- **Highly active antiretroviral therapy (“HAART”)** – Treatment of people infected with HIV, to suppress the growth of HIV, the retrovirus responsible for AIDS. The standard treatment consists of a combination of at least three drugs.

ENVIRONMENT

- **ISO 14001** – an international voluntary standard for environmental management systems. This is one standard in the ISO 14000 series of international standards on environmental management.
- **Environmental incidents** – these are incidents that are classified in accordance with a system designed by Gold Fields (based on the GRI definition) that classifies the incident based on its severity. Incidents are classified as follows:
 - Not classified – Incidents below the level 1 classification threshold and with no environmental impact: No classification or administrative action required, but it can be logged.
 - Level 1 environmental incident – Incident that involves minor non-conformance that results in minimal or no environmental impact.
 - Level 2 environmental incident – Incident that involves minor non-conformance that results in short-term, limited and non-ongoing adverse environmental impacts.
 - Level 3 environmental incident – Incident that results in limited non-conformance or non-compliance. The non-compliance results in ongoing (as per the timeframes defined in Gold Fields Guidelines), but limited environmental impact.
 - Level 4 environmental incident – Incident resulting in significant non-conformance or non-compliance with significant short-term or medium-term environmental impact. Such events are likely to be operation-threatening in isolation and cumulatively (i.e. if the incidents are repeated) is very likely to threaten a licence to operate or social licence to operate. In addition, such incidents also have the potential to cause reputational damage.
 - Level 5 environmental incident – Incident that results in major non-conformance or non-compliance. The non-compliance or non-conformance results in either catastrophic short-term impact or medium to long-term environmental impact. Company or operation threatening implications and potential major damage to the Company’s reputation are almost inevitable.

WATER MANAGEMENT

- **Water withdrawal:** The sum of all water drawn into Gold Fields' operations from all sources for any use/impact.
- **Recycled water:** Processing used water/waste water through the same or another cycle at the same facility. The water/waste water is treated before being recycled and reused.
- **Reused water:** Water/waste water that is reused without treatment at the same facility or at another of Gold Fields' operations.
- **Percentage of water recycled or reused:** Water recycled/reused/total water used in process 5×100 .
- **Total water used in process:** Water withdrawal + water recycled/reused.
- **Acid mine drainage ("AMD")** or acid rock drainage ("ARD"), collectively called acid drainage ("AD") is formed when certain sulphide minerals in rocks are exposed to oxidising conditions, such as the presence of oxygen, combined with water. AD can occur under natural conditions or as a result of the sulphide minerals that are exposed to oxidation during mining or during storage in waste rock dumps, ore stockpiles or tailings dams. The acidic water that forms usually contains iron and other metals if they are contained in the host rock.

SUPPLY CHAIN MANAGEMENT AND MATERIAL STEWARDSHIP

International Cyanide Management Code ("ICMC") – is a voluntary industry programme for the manufacture, transport and use of cyanide in gold production. It focuses on the safe management of cyanide and cyanidation mill tailings and leach solutions. Companies that adopt the Code must have their mining operations that use cyanide to recover gold audited by an independent third party to determine the status of Code implementation, and must use certified manufacturers and transporters.

SOCIAL RESPONSIBILITIES

Socio-economic development spend ("SED") – Payments made to communities and community investments that are not inherent to the functioning of the operation. This may include payments related to infrastructure, health and well-being, education and training, local environment, scholarships and donations. This definition is aligned to the World Gold Council ("WGC") definition.

Host communities – are identified by each operation for the purpose of securing our mining licences – both legal and social. These communities are directly affected by and have an expectation regarding our activities.

Local Economic Development ("LED") – refers to initiatives and monies disbursed to uplift socio-economic conditions in the communities in which we operate, in particular job creation and enterprise development.

OUR PEOPLE

HDSA – Historically disadvantaged South Africans.

ENERGY AND CARBON MANAGEMENT

Greenhouse gas emission ("GHG emission") – Gas which absorbs outgoing terrestrial radiation, such as methane, CFCs and carbon dioxide.

Scope 1 carbon dioxide equivalent ("CO₂e") emissions – are those directly occurring from sources that are owned or controlled by the institution, including: on-site stationary combustion of fossil fuels; mobile combustion of fossil fuels by company-owned/controlled vehicles; and fugitive emissions. Fugitive emissions result from intentional or unintentional releases of GHGs.

Scope 2 CO₂e emissions – are indirect emissions generated in the production of electricity purchased by the company.

Scope 3 CO₂e emissions – are all the other indirect emissions that are a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution such as commuting, air travel, waste disposal; embodied emissions from extraction, production and transportation of purchased goods; outsourced activities; contractor-owned vehicles; and line loss from electricity transmission and distribution.

Equivalent carbon dioxide ("CO₂e") – measures for describing how much global warming a given type and amount of greenhouse gas may cause, using the functionally equivalent amount or concentration of carbon dioxide ("CO₂") as the reference.