
GLOSSARY

This glossary contains explanations of certain technical terms used in this Information Pack in connection with our Company and our business. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

“863 Program”	the State High-Tech Development Plan, a technology program funded by the PRC Government. It mainly focuses on advanced technologies and certain key areas set forth in the Outline of the National Mid-Term and Long-Term Science and Technology Development Plan from 2006 to 2020, which was promulgated by the State Council in February 2006, including, but not limited to, biotechnology, information technology, new material technology, advanced manufacturing technology, advanced energy, marine technology, laser technology and spaceflight technology
“apparent consumption”	the sum of total national production output and net imports
“blast furnace”	a vertical furnace with a round cross-section widely used for smelting iron
“BOT”	Build-Operate-Transfer, a business model in which the proprietor grants the rights to a contracted enterprise by concession agreement to undertake the financing, design, construction, operation and maintenance of a project (mainly infrastructure projects), which enterprise can charge users a fee during the concession period to cover its costs of investment, operations and maintenance as well as reasonable returns, and, upon expiration of the concession period, the relevant facilities will be transferred back to the proprietor
“BT”	Build-Transfer, a business model in which the contractor undertakes the financing of construction expenditures and transfers the project back to the proprietor upon completion and inspection for acceptance and the proprietor will pay the contractor for such construction expenditures, financing costs and return on project in installments pursuant to relevant agreements
“casting”	pouring liquid metal into a mould to form a solid casting part
“China Civil Engineering Zhan Tianyou Award”	a civil engineering award in the PRC recognizing technical innovation, which is assessed once every two years by the China Civil Engineering Society and the Zhan Tianyou Civil Engineering Technology Development Fund Committee; the scope of the award includes buildings and civil construction projects, bridges, infrastructure projects, ports, tunnels and subterranean work, geotechnical work, municipal works and special projects such as maintenance works, hydropower and nuclear power facilities, and towers and masts

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“coking”	the process of producing coke and coal-based chemical products using coal as a raw material through a series of coke oven, gas purification and refining procedures
“concentrate”	a powdery product containing higher concentrations of minerals resulting from ore grinding, magnetic separation, flotation or other processing techniques, which as a semi-finished product would need to be further processed, such as by smelting, to effect recovery of metal
“construction contracting”	a method of contracting a part or the whole of the project, by which the contractor is not responsible for the entire project and is generally only responsible for the construction work it is engaged to perform
“consulting”	the full process of provision of consulting services, based on independent, scientific and equitable principles, applying multidisciplinary knowledge and experience as well as modern technology and management, for decision-making in investment and technology and implementation of construction and engineering projects by government departments and investors
“continuous casting”	a technique whereby molten steel is directly cast into steel of specific shapes without cooling, which has significant advantages over traditional casting techniques and increases yield and casting quality and saves energy
“converter furnace”	a furnace with a rotary body that is used for making steel or other metals with the heat generated through a chemical reaction instead of external heat
“crude steel”	steel product formed upon the earliest stage of solidification, including intermediary products of steel ingots and continuously cast steel slabs
“deposit” or “mineral deposit”	a body of mineralization containing a sufficient average grade of metal or metals to warrant further exploration and/or development expenditure
“design”	application of engineering theories and techno-economic approaches, based on the prevailing technical standards, for conducting all-round design (including requisite non-standardized equipment design) and techno-economic analysis on newly constructed, expansion and reconstruction projects in respect of their technical process, land construction, civil works and environmental works; provision of design papers and blueprints as the basis for construction work
“electric furnace”	a furnace that is generally used for smelting, heating or heat-treating steel, steel alloys and non-ferrous metal with high-temperature heat generated by an electric arc

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“ENR”	Engineering News-Record magazine, a publication that provides news, analyses, commentary and data about the global construction industry
“engineering, procurement and construction,” “EPC” or “turnkey contracting”	commissioned by the owner to contract such project work as design, procurement, construction and trial operations pursuant to the contract and be responsible for the quality, safety, timely delivery and cost of the project
“equipment integration”	the installation and assembly of a series of stand-alone equipment that is capable of operating independently into a set of integrated industrial equipment
“exploration”	activity to prove the location, volume and quality of a mineral occurrence
“exploration right”	the licensed right to prove the location, volume and quality of a mineral occurrence
“GFA”	gross floor area
“grade,” “grading” or “ore grade”	any physical or chemical measurement of the characteristics of the material of interest in samples or product. The unit of measurement should be stated when figures are reported
“In Situ Quantities”	estimates of total in ground tons and grades which meet the requirements of the PRC Code or other international codes for reserves but do not meet either NI 43-101 or JORC’s recommendations
“indicated mineral resource(s)” or “indicated resource(s)”	the 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
“inferred mineral resource(s)” or “inferred resource(s)”	the part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a low level of confidence and is inferred from geological evidence and assumed but not verified geological and/or grade continuity
“iron making”	the process to extract metallic iron from iron-containing minerals (mainly ferrous oxide), including the blast furnace process, direct reduction process, smelt reduction process and plasma process
“ISO 9001, 14001 and 18001”	standards for quality management systems maintained by the International Organization for Standardization (ISO) and is administered by accreditation and certification bodies
“JORC”	the Australasian Joint Ore Reserves Committee, which is sponsored by the Australian mining industry and its professional organizations

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“JORC Code”	the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves published by the JORC, Australian Institute of Geoscientists and Minerals Council of Australia published in 2004, which contains the minimum standards, recommendations and guidelines for the reporting of exploration results, mineral resources and ore reserves
“Kt”	thousand tons
“leaching”	to dissolve minerals or metals out of ore with chemicals
“Luban Award”	the PRC Construction and Engineering Luban Award (National Excellent Projects), which is the highest award for outstanding quality in engineering work in the construction industry in the PRC under two categories, namely, main contractor and key participants, and is assessed by the China Construction Industry Association annually
“maglev”	magnetic levitation, a technology utilizing the attraction and repelling properties of magnets to float and move vehicles
“measured mineral resource(s)” or “measured resource(s)”	the 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
“Mineable Quantities”	estimates of in ground tons and grades recoverable by mining which do not meet JORC’s recommendations
“Mineral Resources”	mineral resources which have been estimated in accordance with the recommendations of the JORC Code
“mineral resources” or “resource(s)”	a concentration or occurrence of a material of intrinsic economic interest in or on the earth’s crust in such form, quality and quantity such that there are reasonable prospects for eventual economic extraction
“mining interest”	for purposes of this document, mining interest includes the exploration right, the mining right and the leasehold right for exploration and mining
“mining right”	the right granted by relevant government authorities to mine mineral resources and obtain mineral products, subject to the legal requirements of mining permits granted
“Mt”	million tons
“non-ferrous metals”	refers to the group of metals other than ferrous metals (iron, manganese and chromium)
“non-JORC”	refers to reporting standards other than the JORC Code for reporting of mineral resources and ore reserves, which include the Chinese Code, the Russian Resource Code and the USGS Code

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“open pit” or “open pit mining”	mining of a deposit from a pit open to the surface and usually carried out by stripping of overburden materials
“ore”	the portion of a reserve from which a metal or valuable metal can be extracted profitably under current or immediately foreseeable economic conditions
“ore processing”	the process through which physical or chemical properties, such as density, surface reactivity, magnetism and colour, are utilized to separate the useful components of ores from useless stones, which are then concentrated or purified by means of flotation, magnetic selection, electric selection, physical selection, chemical selection, reselection or a combination of these methods
“Ore Reserves”	ore reserves which have been estimated in accordance with the recommendations of the JORC Code
“ore reserve(s)”	the economically mineable part of a measured and/or indicated mineral resource, including diluting materials and allowances for losses which may occur when the material is mined
“overseas contracting”	a method of contracting whereby an international contractor conducts project construction or provides other commercial services for the developer at fees agreed on contract terms upon international bidding or tendering or through other negotiation channels
“owner” or “proprietor”	the person who has ownership rights to a contracted engineering and construction project
“pelletizing”	an important process in the steel making industry to convert ore powder into large pieces whereby ore powder is combined with water and adhesives to produce spheres of appropriate adhesiveness and strength, which are then converted into pellets by drying and thermal treatment followed by oxidized sintering
“pig iron”	the iron material extracted from the sintered ores or other iron ores in the iron smelting process
“probable ore reserve(s)”	the economically mineable part of an indicated resource, and in some circumstances a measured mineral resource, which includes diluting materials and allowances for losses which may occur when the material is mined
“proved ore reserve(s)”	the economically mineable part of a measured mineral resource, which includes diluting materials and allowances for losses which may occur when the material is mined
“Science and Technology Advancement Award”	this award recognizes achievements in various industries involving the development of new products and technologies, promotion of new technology applications, production of advanced technology, reform

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	and enhancement of corporate technology, advancement of technology, key construction work, introduction of key equipment research and development, absorption of new foreign technology, or in-house development of innovative technology at the national and provincial levels; recipients of national Science and Technology Advancement Awards are determined by the relevant departments of the State Council annually, while recipients of provincial Science and Technology Advancement Awards are determined by the Departments of Science and Technology in the respective provinces
“shaft”	a vertical excavation from the surface to provide access to an underground mine
“sintering”	a process whereby iron-bearing materials in the form of powder or grains are evenly mixed with a solvent and burned in a sintering machine to produce ores in certain shapes; the sinter so produced is one of the major raw materials used for iron making in a blast furnace
“smelting”	a pyro-metallurgical process of separating metal by fusion from those impurities with which it is chemically combined or physically mixed in ores
“social welfare housing”	social welfare housing (保障性住房) provided by the government to medium- and low-income households with certain restrictions on the eligibility of applicants, construction standards, selling price or rent standards, including, but not limited to, dually restricted commodity housing (兩限商品住房) (with restrictions on price and size), economically affordable housing (經濟適用住房), policy-based rental housing (政策性租賃住房) and low-rent housing (廉租住房)
“steel making”	the process whereby impurities in pig iron and scrap steel are oxidized and removed to an appropriate degree, followed by the addition of iron alloys, to produce a material with appropriate amounts of carbon and constituent elements of the alloys
“steel rolling”	a process whereby a rolling mill is used to turn billets and slabs into steel products of various kinds
“steel structure”	a structure composed of various steel materials connected with each other through welding or bolted joints, which is widely used in industry, civil construction, railways, highways, bridges, power station structural frames, power transmission tower structures, television broadcasting towers, offshore oil platforms, gas pipes, urban infrastructure, national defense construction, and other areas
“Steel Structures Gold Award”	the Steel Structures Gold Award for China’s steel structure construction projects, which is the highest award for outstanding

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	quality of steel structure projects in China under two categories, namely, main contractor and key participants, and is determined by the Steel Structure Committee of the China Construction Metal Structure Association annually
“supervision”	the overall supervision and management of construction project contracts, quality, delivery and cost estimates, among other things, as delegated or instructed by construction enterprises, by supervision enterprises that have been granted certificates of construction supervision qualifications by the relevant authority
“survey”	survey, explore, test and undertake overall assessment on landscape, geology and water for planning, design, implementation, operations and integrated management of a project; provide feasibility assessment and required information on the exploration results for construction; and carry out exploration, design, management and monitoring activities in rock engineering
“ton”	refers to metric tonne
“underground mine”	openings in the earth accessed via shafts and adits (horizontal entrances) below the land surface to extract minerals