# Mineral Resources and Ore Reserves

Newcrest Mining Limited updated its Mineral Resource and Ore Reserve estimates for the twelve month period ended 31 December 2012. Mineral Resource and Ore Reserve estimates were previously updated for the year ended 31 December 2011.

Principal changes include updated commodity prices applied when estimating resources and reserves, normal production depletion from operating mines, and other adjustments during the period from January 2012 to December 2012.

Group Mineral Resources, after mining depletion, are estimated at 161.2 million ounces of gold and 20.98 million tonnes of copper. This represents a net increase of 11.5 million ounces of gold (7.7 percent) and 0.94 million tonnes of copper (4.7 percent). Silver Mineral Resources are estimated at 142.2 million ounces, which represents a net increase 25.4 million ounces of silver (21.8 percent).

The increase in Minerals Resources at 31 December 2012 was driven by additions at Lihir (7.6 million ounces of gold), Cadia East Underground (4.4 million ounces of gold, 0.95 million tonnes of copper and 16.8 million ounces of silver) and Wafi-Golpu (1.0 million ounces of gold and 7.8 million tonnes of silver)<sup>(1)</sup>. These increases largely reflect exploration success and the impact of increased metal prices on pit shells and cut-off grades respectively.

Group Ore Reserves, after mining depletion, are estimated at 87.3 million ounces of gold and 12.10 million tonnes of copper. This represents a net increase of 8.1 million ounces of gold (10.3 percent) and 3.64 million tonnes of copper (43.0 percent). Silver Ore Reserves are estimated at 77.2 million ounces, which represents a net increase 17.8 million ounces of silver (30.0 percent). This result is inclusive of the August 2012 Golpu Ore Reserve announcement.

The increase in Ore Reserves as at 31 December 2012 was driven by additions at Wafi-Golpu (5.5 million ounces of gold, 2.32 million tonnes of copper and 9.9 million ounces of silver)<sup>(1)</sup>, Cadia East (1.3 million ounces of gold, 0.55 million tonnes of copper and 11.1 million ounces of silver), Lihir (1.2 million ounces of gold) and Namosi (0.8 million ounces of gold and 0.78 million tonnes of copper)<sup>(2)</sup>. These increases are largely driven by the completion of the Golpu Technical Prefeasibility Study and the impact of increased metal price assumptions.

Mineral Resources are quoted inclusive of Ore Reserves. Metal price assumptions used for all Newcrest Mineral Resources as at 31 December 2012 were US\$1,350/oz for gold, US\$3.10/lb for copper and US\$23/oz for silver. Price assumptions for Ore Reserves are US\$1,250/oz for gold, US\$2.70/lb for copper and US\$20.00/oz for silver. In the case of Gosowong, a gold price of US\$1,400/oz was used to estimate Mineral Resources and Ore Reserves, acknowledging the shorter life of the currently known deposits. Where appropriate, resources were also constrained spatially by a notional pit shell based on US\$1,400/oz for gold, and US\$4.00/lb for copper or for underground mining, by a shape based on the marginal cut-off grade used as a conservative measure to remove non-contiguous mineralisation. Cost assumptions are based on the latest approved study for each deposit.

Mineral Resources and Ore Reserves for the Morobe Mining Joint Ventures are based on Competent Persons statements provided by the Morobe Mining Joint Ventures and Harmony Gold Mining Company Limited, and are quoted as Newcrest's 50 percent interest.

The accompanying statement of Mineral Resources and Ore Reserves conforms to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2004 Edition.

### **CADIA VALLEY (NSW)**

Mineralisation recognised to date in the Cadia Province is porphyry related gold and copper, hosted in rocks of Ordovician age. Ore bodies are typically large tonnage, low-grade gold with strong copper by-product and minor base metal associations. Minor molybdenum and silver mineralisation is also present. Ore is sourced by bulk mining methods from open pit and underground operations. Exploration is ongoing within the Cadia Province, targeting large-scale alteration systems located within the regional tenement package.

#### Cadia Hill Open Pit

Cadia Hill is porphyry related sheeted vein deposit. The Cadia Hill Mineral Resource and Ore Reserve remain unchanged since December 2012. Cadia Hill stockpiles have decreased by 0.09 million ounces and 8.5 kilotonnes of copper.

Open pit mining at Cadia Hill was suspended in June 2012 following completion of pit stage 3.

## **Cadia Extended**

The Cadia Extended underground resource is located to the north-west of Cadia Hill beneath the backfilled Cadia Extended pit. The Cadia Extended Mineral Resource is unchanged since December 2012. No Ore Reserve has been estimated for Cadia Extended.

## **Ridgeway Underground**

Ridgeway Underground is a large-scale underground mine using sub-level cave extraction and block caving (Ridgeway Deeps) below the sub-level cave. Since December 2012, the Mineral Resource has been depleted by 0.18 million ounces of gold and 23.0 kilotonnes of copper and the Ore Reserve has been depleted by 0.18 million ounces of gold and 21.5 kilotonnes of copper.

#### **Big Cadia**

Big Cadia is centred on an area of shallow historic workings located north of the Cadia Hill open pit and east of the Ridgeway Mine cave zone. The mineralisation is skarn style and has been evaluated as a gold and copper bearing Mineral Resource for future development by open pit mining. The Big Cadia Mineral Resource and Ore Reserve are unchanged since December 2012.

# **Cadia East Underground**

Cadia East is a low-grade, porphyry related gold and copper deposit located immediately east of Cadia Hill, with mining based on bulk underground extraction by panel caving methods. Development has been completed for the undercut and extraction levels associated with the initial Panel Cave (PCI), and commercial production commenced in January 2013.

Since December 2012, the Mineral Resource has been depleted by 0.07 million ounces of gold and 4.8 kilotonnes of copper, and the Ore Reserve has been depleted by 0.07 million ounces of gold and 4.7 kilotonnes of copper.

<sup>(1)</sup> Newcrest's 50 percent share.

<sup>(2)</sup> Newcrest's 69.94 percent share.