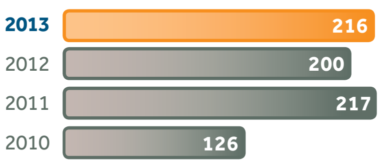
Operational Review
Copper – Zambia

COPPER

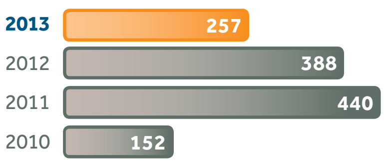
Key achievements
- Integrated production up by 15.5% at 160kt
- Mined metal production increased by 12.0%
- Added 78mt on net basis to R&R

Strategic priorities
- Unlock volume growth potential
- Realise cost efficiency driven by volume growth and other measures
- Ramp-up mine development at Konkola to realise its ore production potential
- Start production in the Nchanga Upper Ore Body mine

Production (kt)



EBITDA (US$m)



Map index
1 Konkola and Nchanga copper mines and Nchanga smelter, Zambia.

CASE STUDY

Quality initiatives drive progress

Total Quality Management ('TQM') projects have been an ongoing feature at the Konkola Copper Mines ('KCM') and two in particular have resulted in major achievements.

A structured review of every step of the tailing leach process to recover oxide-based copper at the Nchanga Tailing Leach plant ('TLP') identified actions that improved copper recovery rates by a substantial 13%. These included improved leach efficiency, improved density management and better overall volume balance, driving up copper production at the plant by 9%.

A TQM initiative at the Nkana Refinery focused on reducing the high rejection rates for copper starter sheets, used in the production of copper cathodes. Improved short circuit monitoring and correcting, a reduction in current losses through weak electrical contacts and better control on the quality of inputs resulted in a substantial reduction in rejection rates to an all time low of 10% – half the rates experienced in previous years.

Operations

Integrated copper production was 15.5% higher at 160kt for the financial year. Total copper cathode production was higher by 8.2% at 216kt for the full year. The increase was driven by production ramp-up at the Konkola mine, following the development of dewatered reserves using the Konkola Deep Mining Project ('KDMP') infrastructure, and by higher primary copper production at the Nchanga Tailings Leach Plant ('TLP').

Mined metal production for the financial year was 159kt, up by 12.0%. This was lower than our internal estimates due to a temporary suspension of mining at the Chingola Open Pit ('COP F&D'), due to non-renewal of third party mining contract.

Unit costs

The unit cost of production was increased at 255.1 US cents per lb in FY 2012–13, up 7.7% compared with FY 2011–12. The cost increased due to higher stripping ratios, lower ore production at the Nchanga open pit, and the impact of changes in wages and currency regulations.

Financial performance

EBITDA in FY 2012–13 was US$257.3 million compared with US$387.9 million in the previous year, impacted by lower metal prices and increases in the cost of production, partially offset by increased volume.

Projects

The new 3mtpa Nchanga West Concentrator was commissioned during the year and at KDMP, the bottom shaft loading was also completed in FY 2012–13, ahead of schedule.

Exploration

The Konkola Copper Mine ('KCM') has substantially increased its R&R during FY 2012–13 following the completion of a revised life of mine plan for the Konkola mine and continued success in its exploration programme. During the year the Company added, on a net basis, 78mt to its R&R. This increase in R&R has contributed 20% increase in contained copper compared to March 2012, with an overall mine life over 30 years.

Outlook

We expect to deliver about 180–190kt integrated production in FY 2013–14 at a cost of around 240 US cents per lb in H1 FY 2013–14 and 200 US cents per lb in H2 FY 2013–14. In view of the temporary suspension of COP F&D, the Company has drawn up an interim plan for an alternate feed of copper ore to the concentrator. The new concentrator for both the East and West mill would provide flexibility to the Nchanga operation and also improve recoveries and output. We expect improved mine output from the Konkola mine.

Production performance

	FY 2012–13	FY 2011–12	% change
Production (kt)			
Mined Metal	**159**	142	12.0%
Cathode:	**216**	200	8.2%
Integrated	**160**	139	15.5%
Custom	**56**	61	(8.6)%

Unit costs

	FY 2012–13	FY 2011–12	% change
Unit costs (US cents per lb)	**255.1**	236.8	7.7%

Financial performance

(In US$ millions, except as stated)	FY 2012–13	FY 2011–12	% change
Revenue	**1,742.8**	1,709.8	1.9%
EBITDA	**257.3**	387.9	(33.7)%
EBITDA margin (%)	**14.8%**	22.7%	–
Depreciation and amortisation	**193.7**	142.6	35.8%
Operating (loss)/profit	**51.9**	220.9	(76.5)%
Share in group operating profit (%)	**2.1**	9.3	–
Capital expenditure	**259.8**	402.9	(35.5)%
Sustaining	**171.4**	158.7	8.0%
Growth	**88.4**	244.2	(63.8)%

Above: Dumper truck at Nchanga open pits, KCM.

Opposite: Conveyor leading to KDMP headgear of shaft #4, KCM.