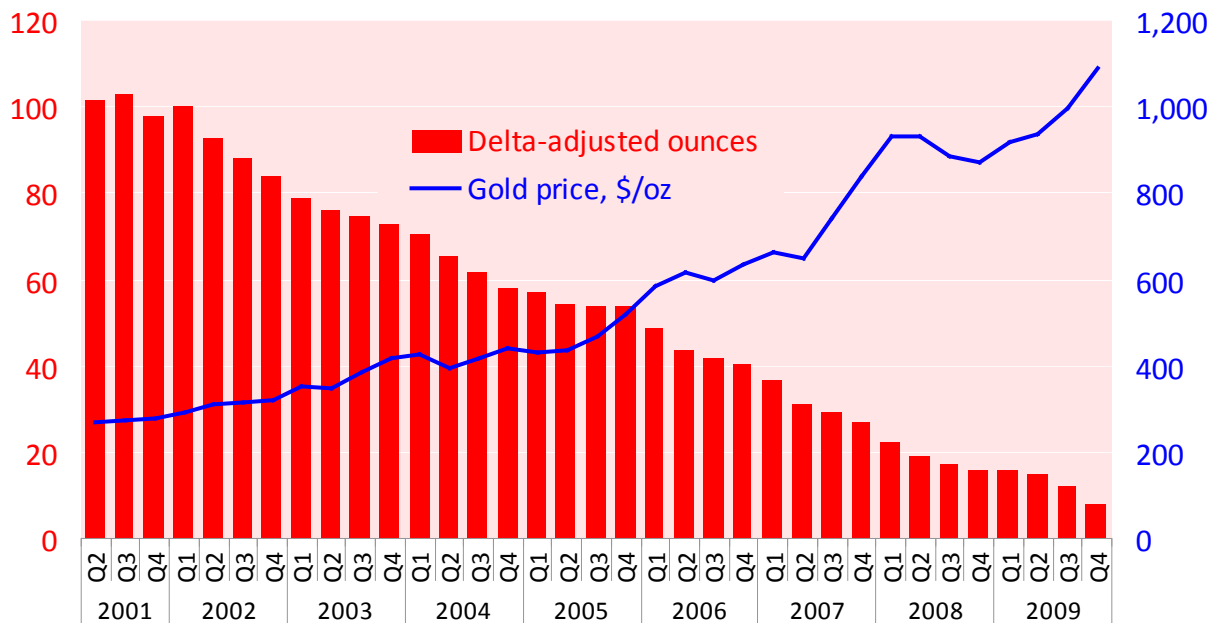


# Gold Hedging Report – Q4 2009

February 2010

**Fortis Bank** Nederland

## Q4 09 global gold hedging declines by 4.0 Moz to 7.9 Moz



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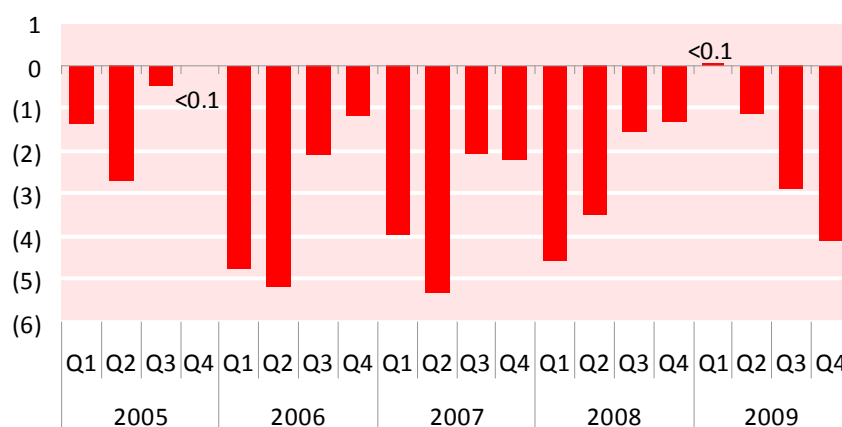
The **Gold Hedging Report** is produced as part of a joint venture between Fortis Bank Nederland and VM Group/Haliburton Mineral Services. It surveys the hedging activities of 118 gold mining companies.

# Q4 2009 hedge activity

## Global hedging falls 4.0 Moz to 7.9 Moz as Barrick closes out its book

Outstanding global gold hedging (delta-adjusted) fell sharply by 4.0 Moz (126t) to 7.9 Moz (245t) in Q4 2009 as Barrick Gold closed out the remaining 2.9 Moz (90t) of their hedge book, once the industry's largest. The decline brought the full-year 2009 fall to 8.0 Moz (250t) and left global hedging more than 90% lower than its peak of 102.8 Moz (3,198t) in Q3 01.

### Quarterly change in gold hedging, delta-adjusted, Moz



Source: VM Group

The quarterly decline in hedging of 4.0 Moz on a delta-adjusted basis was a slightly larger 4.1 Moz when measured using committed ounces. On both measures it was the largest quarterly change since the first half of 2008 and in percentage terms the largest ever. In terms of product the fall was concentrated in the net forwards category (unsurprisingly given that the majority of the dehedging was due to Barrick, which had only forwards), which saw a reduction of 3.8 Moz (on a delta-adjusted basis), while net calls shed 0.1 Moz and net puts 0.2 Moz.

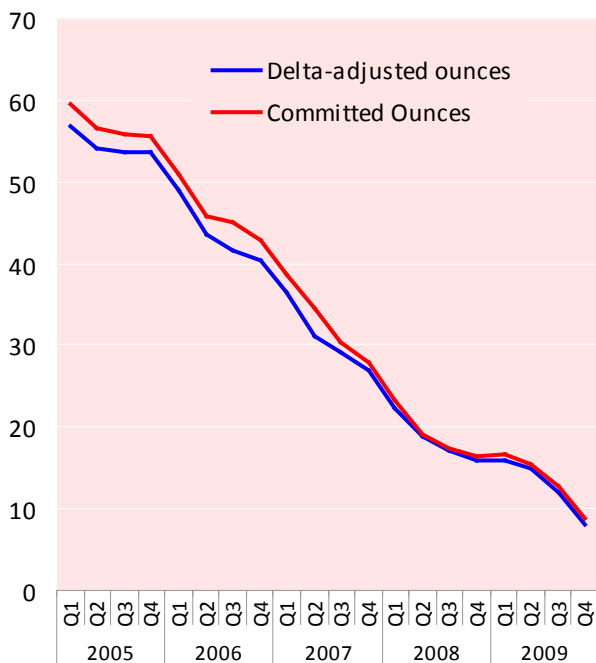
### Global gold hedging, Moz

|                                   | 2007        |             |             |             | 2008        |             |             |             | 2009        |             |             |            |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
|                                   | Q1          | Q2          | Q3          | Q4          | Q1          | Q2          | Q3          | Q4          | Q1          | Q2          | Q3          | Q4         |
| <b>Net delta</b>                  |             |             |             |             |             |             |             |             |             |             |             |            |
| Net Forwards                      | 26.9        | 22.7        | 20.0        | 18.1        | 14.3        | 13.3        | 12.1        | 10.8        | 11.0        | 9.8         | 7.2         | 3.4        |
| Net Calls                         | 8.5         | 7.9         | 8.4         | 8.1         | 7.6         | 4.8         | 4.4         | 4.4         | 4.6         | 4.7         | 4.2         | 4.1        |
| Other Products                    | 0.9         | 0.4         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0        |
| Net Puts                          | 0.1         | 0.1         | 0.5         | 0.5         | 0.3         | 0.6         | 0.7         | 0.6         | 0.4         | 0.3         | 0.5         | 0.3        |
| <b>Total Hedge Impact (delta)</b> | <b>36.4</b> | <b>31.1</b> | <b>29.1</b> | <b>26.9</b> | <b>22.3</b> | <b>18.8</b> | <b>17.2</b> | <b>15.9</b> | <b>15.9</b> | <b>14.8</b> | <b>11.9</b> | <b>7.9</b> |
| Quarterly change                  | (3.9)       | (5.3)       | (2.0)       | (2.2)       | (4.6)       | (3.5)       | (1.6)       | (1.3)       | 0.0         | (1.1)       | (2.9)       | (4.0)      |
| <b>Committed Ounces</b>           |             |             |             |             |             |             |             |             |             |             |             |            |
| Net Forwards                      | 27.4        | 23.6        | 20.4        | 18.5        | 14.6        | 13.6        | 12.3        | 11.0        | 11.2        | 9.9         | 7.3         | 3.4        |
| Net Calls Sold                    | 10.4        | 10.4        | 9.8         | 9.2         | 8.4         | 5.3         | 5.0         | 5.3         | 5.4         | 5.5         | 5.6         | 5.3        |
| Other Products                    | 0.9         | 0.4         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.1         | 0.0         | 0.0         | 0.0         | 0.0        |
| <b>Total Committed</b>            | <b>38.7</b> | <b>34.5</b> | <b>30.3</b> | <b>27.8</b> | <b>23.2</b> | <b>19.0</b> | <b>17.3</b> | <b>16.4</b> | <b>16.6</b> | <b>15.4</b> | <b>12.8</b> | <b>8.7</b> |
| Quarterly change                  | (4.1)       | (4.2)       | (4.1)       | (2.5)       | (4.6)       | (4.2)       | (1.7)       | (1.0)       | 0.3         | (1.2)       | (2.6)       | (4.1)      |
| Puts Bought                       | 5.0         | 4.8         | 7.2         | 6.5         | 6.4         | 6.3         | 4.5         | 3.8         | 3.4         | 3.0         | 3.9         | 3.5        |
| Puts Sold                         | 2.2         | 1.7         | 1.7         | 1.5         | 1.2         | 0.3         | 0.3         | 0.5         | 1.0         | 1.1         | 0.7         | 0.9        |

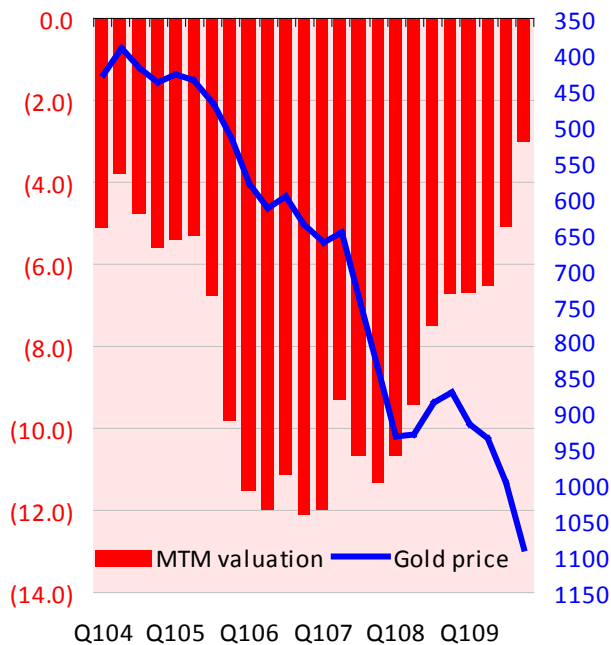
Source: VM Group, Haliburton Mineral Services

Unsurprisingly the hefty cuts in hedge positions meant the mark-to-market valuation of the global book, the cost to mining companies of closing out their hedge positions today, improved to a negative \$3.0bn at the end of 2009 from negative \$5.1bn in Q3 09. This was despite an increase in the gold price of \$91/oz to \$1087.50/oz. The global book would now break even at a gold price of \$720/oz, up from \$553/oz in Q3 09; this improvement reflects largely the removal of all of Barrick's contracts, which on average obtained prices far below the spot price.

**Global gold hedging, both measures, Moz**



**Mark-to-market valuation of global book, \$bn**



**Gold prices, lease rates and exchange rates, end-quarter unless stated**

|                              | 2007 |       |      |      | 2008 |      |      |      | 2009 |      |      |       |
|------------------------------|------|-------|------|------|------|------|------|------|------|------|------|-------|
|                              | Q1   | Q2    | Q3   | Q4   | Q1   | Q2   | Q3   | Q4   | Q1   | Q2   | Q3   | Q4    |
| Gold price, \$/oz            | 663  | 649   | 743  | 837  | 934  | 930  | 885  | 870  | 917  | 935  | 996  | 1,088 |
| Gold price, \$/oz (average)  | 650  | 667   | 680  | 788  | 925  | 896  | 872  | 795  | 908  | 922  | 959  | 1,073 |
| <b>Exchange rates per \$</b> |      |       |      |      |      |      |      |      |      |      |      |       |
| Canadian Dollar              | 1.16 | 1.06  | 1.00 | 1.01 | 1.03 | 1.02 | 1.06 | 1.21 | 1.25 | 1.16 | 1.10 | 1.05  |
| Euro                         | 0.75 | 0.74  | 0.70 | 0.68 | 0.63 | 0.63 | 0.71 | 0.72 | 0.75 | 0.70 | 0.70 | 0.70  |
| South African Rand           | 7.31 | 7.13  | 6.92 | 6.81 | 8.11 | 7.83 | 8.27 | 9.44 | 9.34 | 7.71 | 7.77 | 7.34  |
| Australian Dollar            | 1.23 | 1.18  | 1.13 | 1.13 | 1.09 | 1.04 | 1.26 | 1.39 | 1.43 | 1.24 | 1.20 | 1.12  |
| <b>Lease rates</b>           |      |       |      |      |      |      |      |      |      |      |      |       |
| 5-yr                         | 0.51 | 1.06  | 0.40 | 0.34 | 0.43 | 0.42 | 1.00 | 0.46 | 0.45 | 0.35 | 0.31 | 0.30  |
| 10-yr                        | 0.71 | 1.170 | 0.54 | 0.49 | 0.89 | 0.76 | 1.00 | 0.35 | 0.67 | 0.59 | 0.52 | 0.50  |

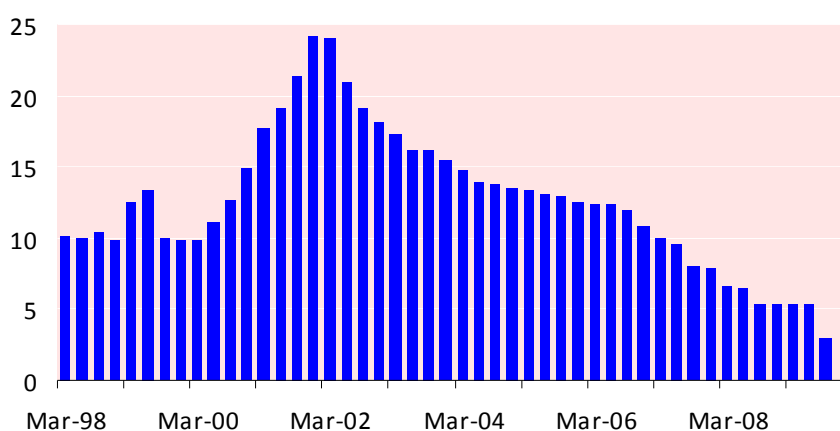
Source: VM Group/Haliburton Mineral Services

# Company roundup

**Barrick Gold** were by far the largest dehedger in Q4 2009, knocking 2.9 Moz off their book and in so doing closing out one of the longest-running and largest hedgebooks in the business. The company announced on 1 December 2009 that it had removed the final 1.9 Moz (59t) of its hedge book. Barrick began Q4 09 with 2.9 Moz but revealed when releasing its 3rd quarter results in early November that it had already closed out 1.0 Moz by 28 October.

Barrick's actions brought the curtain down on a hedging programme that at its peak in Q4 01 totalled 24.1 Moz (750t). The company had steadily reduced the size of the book since then, accelerating the process in 2007 as the high gold price made the hedges increasingly unprofitable.

## Barrick's hedge book, end-quarter, committed, Moz



Source: VM Group/Haliburton Mineral Services/Barrick reports

## Quarterly changes, Moz

| Company             | Q3 09 | Q4 09 | Change  |
|---------------------|-------|-------|---------|
| Barrick Gold        | 2,900 | 0     | (2,900) |
| AngloGold Ashanti   | 4,304 | 3,896 | (408)   |
| Polymetal*          | 315   | 0     | (315)   |
| Kinross Gold        | 613   | 503   | (110)   |
| Sumitomo            | 1,107 | 1,041 | (67)    |
| Xstrata             | 59    | 0     | (59)    |
| Golden Star Res.    | 50    | 0     | (50)    |
| Coeur d'Alene       | 60    | 28    | (32)    |
| Aurizon Mines       | 92    | 66    | (26)    |
| Boliden             | 131   | 106   | (26)    |
| OceanaGold          | 226   | 204   | (23)    |
| Apollo Gold         | 221   | 200   | (21)    |
| Randgold Res.       | 60    | 42    | (19)    |
| New Gold            | 347   | 330   | (17)    |
| Apex Minerals       | 21    | 6     | (15)    |
| Alamos Gold         | 13    | 0     | (13)    |
| Penoles             | 19    | 6     | (13)    |
| Zijin Mining        | 38    | 26    | (13)    |
| Teck                | 11    | 0     | (11)    |
| Allied Gold         | 48    | 38    | (11)    |
| La Mancha Resources | 14    | 3     | (10)    |
| Dioro Exploration   | 18    | 8     | (10)    |
| Hochschild          | 9     | 0     | (9)     |
| EURO Ressources     | 6     | 0     | (6)     |
| Dominion Mining     | 24    | 19    | (5)     |
| PanAust Limited     | 58    | 54    | (4)     |
| Iberian Minerals    | 7     | 5     | (2)     |
| Focus Minerals      | 1     | 0     | (1)     |
| Heemskirk           | 1     | 0     | (1)     |
| Resolute            | 218   | 219   | 1       |
| Century Mining      | 0     | 61    | 61      |
| Saracen Mineral     | 0     | 103   | 103     |

\* For Q3 09 includes Orsu hedge

Source: VM Group/Haliburton

There were three other large hedgebook reductions during the period under review. **AngloGold Ashanti**, now the largest hedger in the world by far, cut 407,963 oz as Q4 09 positions matured and the company carried out some minor restructuring to their 2010 positions. Russian miner **Polymetal**, who acquired a hedge of 315,000 oz when on 2 November 2009 it purchased the Varvarinskoye gold-copper mine in Northern Kazakhstan from **Orsu Metals Corporation**, the London-based company, announced on 9 November it had closed out the positions, crystallising the losses on the hedgebook of \$166m. **Kinross Gold** announced that it had entered into 109,500 oz of forward contracts in Q4 09 to offset part of the 612,735 oz of forward sales it already had (and in 2010 has already reduced its net position a further 198,470 oz).

**Sumitomo Metals and Mining** who put in place a large collar in Q3 09 saw their position decline by 67,000 oz. Twenty-four other companies made reductions, including a large nine who reduced their positions to zero.

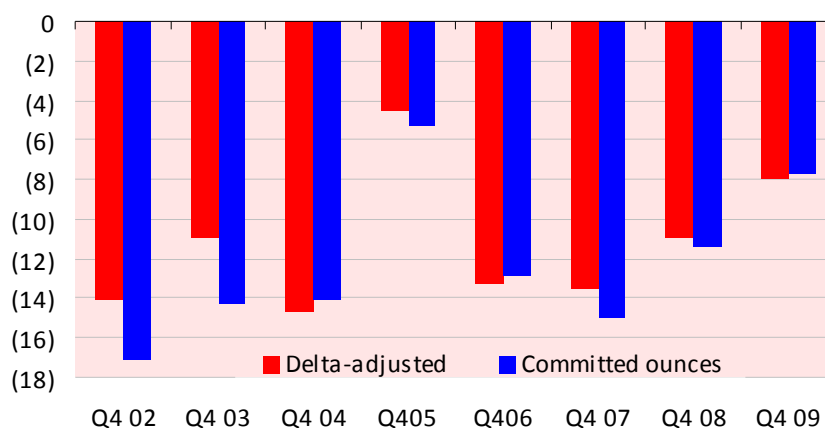
There were three companies who put on positions, two of which are worth noting. **Saracen Mineral Holdings**, an Australia producer whose Carosue Dam project began in Q1 2010, announced on 21 December 2009 that they had purchased 175,908 of put options at A\$1,250/oz, financed by \$7.5m of cash and – which shows up in our committed numbers – 103,494 oz of call options at A\$1,250/oz. The company said these covered 12% of their ore reserves. **Century Mining** announced on 24 December that they had signed a \$33m prepaid gold forward facility as part of the financing of their Lamaque Gold Project in Val d'Or, Quebec, Canada. The deal was first announced on 30 July 2009.

# The year that's gone and the year ahead

## 2009 – a review

At 8.0 Moz, the level of dehedging in 2009 (on a delta-adjusted basis) was the lowest since 2005 (a similar trend applies to the committed-ounces measure). Yet while this slowdown is important to note in terms of the market-impact of dehedging, it reflects simply the fact that at the beginning of 2009 there was 15.9 Moz of hedging outstanding, whereas at the beginning of (say) 2006 there was 53.6 Moz. In percentage terms 2009 saw just more than half of outstanding hedging closed out, the highest ever, beating 2008's 41%, showing that the ardour for dehedging has never been stronger.

### Change in hedging by year, delta-adjusted and committed measures, Moz



Source: VM Group/Haliburton Mineral Services/Barrick reports

Yet it didn't look that way at the halfway stage of the year. In H1 09 only 1.1 Moz had been removed from global positions. Then however the two largest hedgers by far, **Barrick Gold** and **AngloGold Ashanti**, stepped up their dehedging activities. Barrick in particular announced it was closing out its hedge book of 5.4 Moz (which it had increased by 0.1 Moz in Q1 09), and did so by the end of 2009, ahead of schedule, which accounted for three-quarters of the global decline. AngloGold's cuts weren't quite as large but they still ended 2009 more than 2.1 Moz lower, accounting for almost all the remaining net reduction.

It is not that other companies didn't make reductions, or - as in the case of the next largest reduction, **Orsu Metals** (down 0.3 Moz) – their books were closed out by companies who acquired them or their hedgebooks. It is just that these reductions, totalling nearly 2.5 Moz from 29 companies, were nearly offset by the companies who added to their hedge positions or put in place new hedge programmes. First among these was **Sumitomo Metals and Mining**, who put in place a 'collar' of over 1.1 Moz in Q3 09. Four other companies added more than 0.1 Moz and another seven companies increased their positions.

## 2010 – what will happen?

What is likely to happen in hedging in 2010 and further out? It seems clear that we will not have another year of large-scale dehedging. On a delta-adjusted basis the global book is now 7.9 Moz. So if dehedging in 2010 were to repeat 2009's quantity, it would require the entire global book to be closed out during the year. Although of course this is possible, it is not very likely as a large proportion of the remaining hedging has been put on for project-finance reasons, and while this does not mean it *cannot* be closed out, it does make it less likely than if the hedging was there purely for price-protection reasons. For example it would be somewhat surprising if **Sumitomo Metal Mining**, who put in place a 1.1 Moz collar in Q3 09, suddenly decided to close it out in 2010.

### Largest 2009 change in hedging, 000 oz

| Company           | 2008  | 2009  | Change  |
|-------------------|-------|-------|---------|
| Barrick Gold      | 5,300 | 0     | (5,300) |
| AngloGold Ashanti | 5,997 | 3,896 | (2,102) |
| Polymetal/Orsu    | 372   | 0     | (372)   |
| Xstrata (est.)    | 238   | 0     | (238)   |
| OceanaGold        | 342   | 203   | (138)   |
| Saracen Mineral   | 0     | 103   | 103     |
| Avocet Mining     | 280   | 400   | 120     |
| Apollo Gold       | 0     | 200   | 200     |
| Catalpa Resources | 0     | 352   | 352     |
| Sumitomo          | 0     | 1,041 | 1,041   |

Source: VM Group/Haliburton

But there is also no reason to believe that dehedging is going to come to a stop. Hedge positions by their nature mature, and so the global book will decline over time even if companies do nothing. To remain steady or increase their positions companies would have to put in place more new hedges than those which mature, and as the industry and company shareholders remain opposed to price-protection this remains unlikely.

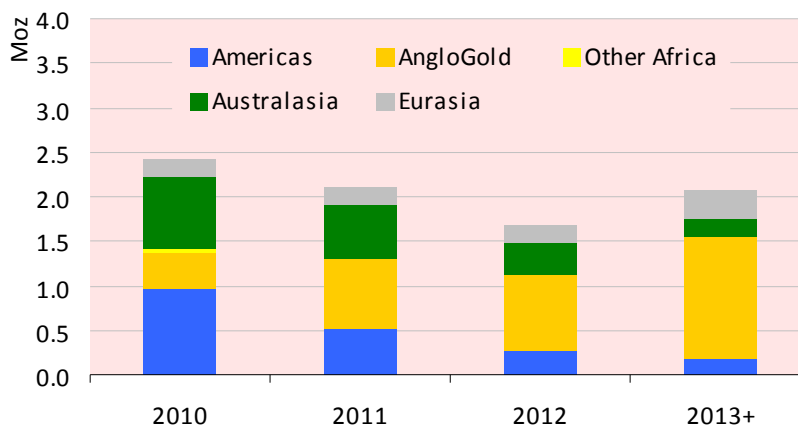
To look at what might happen one has to start with **AngloGold Ashanti**, who account for 49% of the remaining book with 3.9 Moz. They have publicly stated that they will reduce this by 0.8 Moz a year for the next five years, which means by the end of 2014 their hedgebook will be closed out. This schedule is similar to when their hedges are due for delivery, albeit at a slightly faster pace. Next is **Sumitomo Metal Mining** with their collar, now 1.0 Moz. The terms of this are that 0.27 Moz are deliverable in 2010 and 2011, then 0.2 Moz in 2012 and 0.15 Moz in 2013 and also in 2014. So from these two companies, if they stick to their plans, we can expect about 1 Moz per year of dehedging through delivery. If we repeat this exercise for all the other companies in our survey we get what is called the 'delivery schedule', and this is shown in the chart below. It tells us that we can expect about 2.5 Moz of dehedging this year, just over 2.0 Moz next year, 1.6 Moz in 2012 and then the remainder – just over 2.0 Moz, from 2013 onwards.

#### Remaining hedge books, committed, Moz

|                       |           |
|-----------------------|-----------|
| AngloGold Ashanti     | 3,895,548 |
| Sumitomo              | 1,040,881 |
| Kinross Gold          | 503,235   |
| Avocet Mining         | 400,000   |
| Catalpa Resources     | 352,317   |
| New Gold              | 330,000   |
| Mineral Deposits Ltd  | 300,000   |
| Norton Goldfields     | 265,194   |
| Others (24 companies) | 1,644,705 |

Source: VM Group/Haliburton

#### Hedging remaining – the delivery schedule, committed ounces, Moz



Source: VM Group/Haliburton Mineral Services/Barrick reports

The delivery schedule cannot, however, take into account dehedging that is done before the contract matures. This pro-active dehedging has been the main driver of dehedging over the past decade. It is likely that there will be more of this in 2010, given the continued bias against hedging among most mining companies – for example, **Kinross Gold**, the third largest hedger, have already announced that they have made reductions of 0.1 Moz to their 2011 positions – but the greater preponderance of project-finance related hedging now in the global book and the smaller book overall means that the likelihood of huge reductions is now smaller. The main player here is obviously **AngloGold Ashanti** and while that company might reduce its book faster than expected (see above) we don't expect a huge cut.

Finally the delivery schedule cannot take into account new hedging. Q4 2009 saw a smattering of this and over 2010 as a whole there was about 2 Moz (on a committed basis, and it is worth noting that more than half of this was due to **Sumitomo's** collar). We know of a few more project-related hedges in the pipeline and already in Q1 09 Australia's **Adamus Resources**, announced it had hedged half (290,000 oz) of the production from a mine it is developing in Ghana. Overall 2010 might see another 1.0 Moz of new hedging being announced.

Putting this altogether at present we expect full-year dehedging in 2010 to be around 1.5-3.0 Moz.

## Data section

Hedge positions shown are based on a calendar year basis unless otherwise noted. All hedge positions are presented in the currency in which they were disclosed or denominated. These tables constitute summaries of hedge positions reported by individual producers. Such reports often provide additional data and detail such as the duration of hedge positions, information on whether interest rates are fixed or floating, on floor prices on some contracts, on knock-ins and knock-outs etc. For companies where quarterly data is not available, or detail is not provided, the data have either been projected, interpolated, adjusted or repeated from adjacent quarters. In some cases aggregated positions have been allocated over a number of years. Thus we strongly refer the reader to the websites of the various specific companies for a more complete picture than is presented here. **For this report the reader should be aware that in the interests of publishing in a timely fashion we have estimated the December 31, 2009 hedge positions for a large number of companies who have not yet reported, at the time of this report going to press (see notes below).**

### AMERICAS

For Alamos Gold, Anatolia Minerals, Apollo Gold, Aurizon Mines, Coeur d'Alene, Etruscan Resources, EURO Ressources, Century Mining, GlobeStar Mining, IAMGold, Iberian Minerals, La Mancha Resources, New Gold, Penoles, SEMAFO, and SilverCrest Mines: The December 31, 2009 position if any is adjusted from or repeated from September 30, 2009 or prior disclosure.

Etruscan Resources: Company has a November 30 year-end but positions shown if any are based on a calendar year.

### AUSTRALIA

For Allied Gold, Apex Minerals, Avoca Resources, Catalpa Resources, CGA Mining, Crescent Gold, Dominion Mining, Exco Resources, Norton Gold Fields and Resolute: Companies have June 30 year-ends.

For Apex Minerals, Avoca Resources, Catalpa Resources, CGA Mining, Dioro Exploration, Exco Resources, Heemskirk Consolidated, Newcrest, Perseus Mining and PanAust Limited : The December 31, 2009 position if any is adjusted from or repeated from September 30, 2009 or prior disclosure.

Dioro Exploration: Company has August 30 year end but positions shown if any are based on a calendar year.

CGA Mining, Mineral Deposits Limited, Newcrest Mining, Perseus Mining and Saracen Mineral Holdings: Companies have a June 30 year-end but positions shown if any are based on a calendar year.

Heemskirk Consolidated: Company has a September 30 year-end but positions shown if any are based on a calendar year.

Ok Tedi: Positions shown are calculated from Inmet's disclosed or estimated Ok Tedi hedge position and are based on a calendar year.

### EURASIA

For Avocet, Hochschild, Sumitomo Metal Mining, Xstrata and Zijin Mining: The December 31, 2009 position if any is adjusted from or repeated from September 30, 2009 or prior disclosure.

Avocet Mining: Company has a March 31 year-end but positions shown if any are based on a calendar year.

## Company hedge details

### Hedging commitments (excluding puts) by company by quarter (ozs)

| Americas                 | Q4 08             | Q1 09             | Q2 09             | Q3 09             | Q4 09            | Q-on-Q             | Y-on-Y             |
|--------------------------|-------------------|-------------------|-------------------|-------------------|------------------|--------------------|--------------------|
| Alamos Gold              | 6,911             | 8,437             | 1,000             | 13,310            | 0                | (13,310)           | (6,911)            |
| Apollo Gold              | 0                 | 250,160           | 241,303           | 221,455           | 200,331          | (21,124)           | 200,331            |
| Aurizon Mines            | 150,656           | 130,465           | 112,023           | 91,997            | 65,814           | (26,183)           | (84,842)           |
| Barrick Gold             | 5,300,000         | 5,400,000         | 5,400,000         | 2,900,000         | 0                | (2,900,000)        | (5,300,000)        |
| Century Mining           | 0                 | 0                 | 0                 | 0                 | 61,183           | 61,183             | 61,183             |
| Coeur d'Alene            | 23,529            | 45,439            | 67,689            | 59,769            | 27,620           | (32,149)           | 4,091              |
| Etruscan Resources       | 190,422           | 172,136           | 157,745           | 141,750           | 82,299           | (59,451)           | (108,123)          |
| EURO Ressources          | 8,550             | 8,550             | 8,550             | 5,700             | 0                | (5,700)            | (8,550)            |
| Golden Star              | 45,000            | 67,500            | 22,500            | 50,000            | 0                | (50,000)           | (45,000)           |
| IAMGOLD                  | 43,888            | 24,444            | 4,665             | 0                 | 0                | 0                  | (43,888)           |
| Iberian Minerals         |                   |                   |                   | 7,200             | 4,800            | (2,400)            | 4,800              |
| Inmet Mining             | 12,600            | 12,600            | 12,600            | 12,600            | 12,600           | 0                  | 0                  |
| Kinross Gold             | 612,735           | 612,735           | 612,735           | 612,735           | 503,235          | (109,500)          | (109,500)          |
| La Mancha Resources      | 0                 | 33,880            | 24,570            | 13,650            | 3,413            | (10,237)           | 3,413              |
| New Gold                 | 0                 | 0                 | 363,000           | 346,500           | 330,000          | (16,500)           | 330,000            |
| Penoles                  | 54,000            | 48,100            | 32,067            | 19,138            | 5,870            | (13,268)           | (48,130)           |
| SEMAFO                   | 8,000             | 5,500             | 0                 | 0                 | 0                | 0                  | (8,000)            |
| SilverCrest              |                   |                   | 60,000            | 60,000            | 60,000           | 0                  | 60,000             |
| Teck                     | 43,000            | 33,000            | 22,000            | 11,000            | 0                | (11,000)           | (43,000)           |
| Uruguay Min. Exploration | 25,000            | 10,000            | 0                 | 0                 | 0                | 0                  | (25,000)           |
| <b>Total</b>             | <b>6,920,291</b>  | <b>7,242,446</b>  | <b>7,142,447</b>  | <b>4,566,804</b>  | <b>1,357,165</b> | <b>(3,209,639)</b> | <b>(5,328,275)</b> |
| <b>Africa</b>            | <b>Q4 08</b>      | <b>Q1 09</b>      | <b>Q2 09</b>      | <b>Q3 09</b>      | <b>Q4 09</b>     | <b>Q-on-Q</b>      | <b>Y-on-Y</b>      |
| AngloGold Ashanti        | 5,997,144         | 5,843,322         | 5,192,683         | 4,303,511         | 3,895,548        | (407,963)          | (2,101,596)        |
| Pan African Resources    | 9,000             | 7,875             | 0                 | 0                 | 0                | 0                  | (9,000)            |
| Randgold Resources       | 126,744           | 102,996           | 79,248            | 60,498            | 41,748           | (18,750)           | (84,996)           |
| <b>Total</b>             | <b>6,302,961</b>  | <b>6,053,193</b>  | <b>5,271,931</b>  | <b>4,364,009</b>  | <b>3,937,296</b> | <b>(426,713)</b>   | <b>(2,365,665)</b> |
| <b>Australia</b>         | <b>Q4 08</b>      | <b>Q1 09</b>      | <b>Q2 09</b>      | <b>Q3 09</b>      | <b>Q4 09</b>     | <b>Q-on-Q</b>      | <b>Y-on-Y</b>      |
| Allied Gold              | 70,532            | 70,288            | 54,583            | 48,266            | 37,512           | (10,754)           | (33,020)           |
| Apex Minerals            | 74,595            | 63,985            | 43,985            | 20,604            | 5,700            | (14,904)           | (68,895)           |
| Catalpa Resources        | 0                 | 352,317           | 351,956           | 352,317           | 352,317          | 0                  | 352,317            |
| CGA Mining               | 214,336           | 214,336           | 214,336           | 214,336           | 214,336          | 0                  | 0                  |
| Dioro Exploration        | 38,000            | 38,000            | 28,000            | 18,000            | 8,000            | (10,000)           | (30,000)           |
| Dominion Mining          | 45,000            | 36,276            | 26,138            | 23,500            | 19,000           | (4,500)            | (26,000)           |
| Dragon Mining            | 4,750             | 3,250             | 1,750             | 0                 | 0                | 0                  | (4,750)            |
| Exco                     |                   |                   |                   | 25,000            | 25,000           | 0                  | 25,000             |
| Focus Minerals           | 30,730            | 19,378            | 9,378             | 1,200             | 0                | (1,200)            | (30,730)           |
| Heemskirk                |                   |                   |                   | 500               | 0                | (500)              | 0                  |
| Lihir Gold               | 115,797           | 95,782            | 0                 | 0                 | 0                | 0                  | (115,797)          |
| Mineral Deposits Ltd     | 399,000           | 399,000           | 363,832           | 328,500           | 300,000          | (28,500)           | (99,000)           |
| North Queensland Metals  | 6,480             | 3,240             | 0                 | 0                 | 0                | 0                  | (6,480)            |
| Norton Goldfields        | 265,194           | 265,194           | 265,194           | 265,194           | 265,194          | 0                  | 0                  |
| OceanaGold               | 342,100           | 281,789           | 248,279           | 226,364           | 203,864          | (22,500)           | (138,236)          |
| Ok Tedi                  | 57,400            | 57,400            | 57,400            | 57,400            | 57,400           | 0                  | 0                  |
| PanAust Limited          | 70,000            | 66,000            | 62,000            | 58,037            | 54,148           | (3,889)            | (15,852)           |
| Resolute                 | 312,399           | 285,900           | 259,502           | 218,141           | 219,106          | 965                | (93,293)           |
| Saracen Mineral          |                   |                   |                   |                   | 103,494          | 103,494            | 103,494            |
| <b>Total</b>             | <b>2,046,313</b>  | <b>2,252,135</b>  | <b>1,986,333</b>  | <b>1,857,339</b>  | <b>1,865,071</b> | <b>7,712</b>       | <b>(181,242)</b>   |
| <b>Eurasia</b>           | <b>Q4 08</b>      | <b>Q1 09</b>      | <b>Q2 09</b>      | <b>Q3 09</b>      | <b>Q4 09</b>     | <b>Q-on-Q</b>      | <b>Y-on-Y</b>      |
| Avocet Mining            | 350,000           | 350,000           | 350,000           | 400,000           | 400,000          | 0                  | 50,000             |
| Boliden                  | 207,850           | 182,350           | 156,850           | 131,350           | 105,850          | (25,500)           | (102,000)          |
| Hochschild               | 1,900             | 30,000            | 18,000            | 9,000             | 0                | (9,000)            | (1,900)            |
| Polymetal/Orsu           | 372,468           | 350,468           | 330,160           | 315,160           | 0                | (315,160)          | (372,468)          |
| Sumitomo Metal Mining    |                   |                   |                   | 1,107,392         | 1,040,881        | (66,512)           | 1,040,881          |
| Xstrata                  | 237,800           | 178,350           | 118,900           | 59,450            | 0                | (59,450)           | (237,800)          |
| Zijin Mining             | 15,143            | 15,143            | 51,233            | 38,425            | 25,617           | (12,808)           | 10,474             |
| <b>Total</b>             | <b>1,115,161</b>  | <b>1,106,311</b>  | <b>1,025,143</b>  | <b>2,060,777</b>  | <b>1,572,348</b> | <b>(488,430)</b>   | <b>457,187</b>     |
| <b>Global total</b>      | <b>16,367,226</b> | <b>16,636,585</b> | <b>15,408,715</b> | <b>12,848,949</b> | <b>8,731,880</b> | <b>(4,117,070)</b> | <b>(7,635,346)</b> |







# About the authors

## VM Group

VM Group is a commodities research consultancy that covers not just conventional energy, but also renewable energy, carbon, base and precious metals, and agricommodities. The VM Group comprises a uniquely skilled team that is highly experienced in the analysis of the fundamentals of commodities and their geopolitical impact and contexts.

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Founded in 2002 Haliburton Mineral Services is a private mining research and advisory business based in Toronto, Canada. The company's President, Ted Reeve, has a background as a mining analyst and has published quarterly gold producer hedge surveys since 1990.

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