

21 December 2009

HARGREAVES - THE WEEK IN MINING

The Week in Mining...and the next few weeks December 21, 2009-January 4, 2010

Not if, but Wen.

As predicted with clinical – perhaps cynical – accuracy in this column two weeks ago, the Copenhagen climate change conference ended in a fudge not far short of farce. It was the biggest roadshow since Michael Jackson's funeral, and attended by leaders of 192 nations, from Afghanistan to Zimbabwe. There was a lot of point-scoring attempted. In the end, the only two people who mattered, Barack Obama and Wen Jiabao, extended their stays and locked horns. There may be 192 dots on the map, but only two really matter: the USA and China.

If, indeed, climate change is human-induced (and the jury is still out on that if one considers geological history), the facts are these: it is about the energy we consume which comes in five varieties of feedstock: oil, coal, natural gas, hydro and nuclear, in that order of millions of tonnes of oil equivalent or m.t.o.e. It goes like this:

Annual Consumption of Energy by Source (mtoe) ¹					
Energy Source	World	USA		China	
Oil	3928	884	22.5%	375	9.5%
Coal	3304	565	17.1%	1406	42.6%
Natural Gas	2726	601	22.0%	73	2.7%
Hydro-Electricity	718	57	7.9%	132	18.3%
Nuclear	620	192	31.0%	15	2.4%
Total	11,296	2299	20.4%	2001	17.7%

¹ BP, 2008 statistics

To put this into perspective, Japan is the third largest consumer with 2% of the world's population and an annual consumption of about 4.5% of the world's total. Now the USA has about 5% of the world's population and China maybe 25%. So, the numbers speak for themselves. If the USA does not stop polluting, there is no point in the rest of us trying. Yet if China really does aspire to take over the world, it had better get pedalling. At a 5 to 1 population advantage, it needs to burn an enormous amount more oil, gas and nuclear if it wishes to top the pollution league. Or does it?

Not everyone understands what energy is about. It divides itself into electricity, which you can generate from all five major sources and transport fuel which is cars, planes, ships and railroads. The added benefit of hydrocarbons is that they also produce feedstocks for plastics. Hydro and nuclear do not do that. But back to pollution, convenience and cost.

Nuclear Power. Tops for cleanliness, since all it does is throw out steam. Unless you spill a bit in which case it lands up on the naughty step. The USA has not built a new plant since Three-Mile Island and there are still people with three heads running around Chernobyl (application for poetic licence still pending). Also, it only does electricity, space heating and bombs. But then there is the storage of nuclear waste.

Hydroelectricity. Cleanest by far, but it needs the right geography and the choice sites have mostly gone.

Oil. Speaks for itself. As a liquid, you can pump it, tanker it or take it home in a jerry can. There will never be a coal, nuclear or hydro propelled car, ship or aeroplane, now will there? But it is now much too expensive to fire power station boilers, so rule it out for electricity generation.

Natural Gas. Lovely stuff. Delivered in pipes into your front room, no ash, no smell. Still cheap enough to fire boilers and, in a pinch, you can liquefy and ship it. But it is selective about where it occurs. Like in the USA, Libya and the Middle East, but not much in China so far.

Then coal. Nasty stuff. It kills the people mining it, but there is an awful lot of it, at least four times as much as there is oil. It throws out most of the sulphur, unburnt carbon and ash the world produces. So if you were China, with 14% of the world's reserves, but a dearth of oil and gas, what would you do?

Not a word was said in Copenhagen about population control and we all know that the GDP aspiration candles will burn brightly this week. A Merry Christmas to us all. Have a humbug. Then don't be caught short of coal shares.

Exchange Traded Metals

As the tables below show, exchange traded metal stocks rose massively in 2009 (See Metal Stocks in LME Warehouses) in all bar copper, up 37%. Yet prices, too, went upwards and onwards:

Metal Price Movements (\$/tonne)			
Metal	20 Dec 2008	20 Dec 2009	% Change
Aluminium	1480	2214	+50%
Copper	2870	6840	+138%
Lead	892	2314	+159%
Nickel	9838	17045	+73%
Tin	10415	15775	+51%
Zinc	1105	2395	+117%

None of these prices represent 12-month highs, although they are close. Rather, belief in recovery, some restraint in output and, in the case of the bellwether copper, unrelated production problems across the board. On balance, we cannot expect the pace of recovery to continue. 2010 forecasts trend towards US\$6,750/tonne. Australia's copper production is forecast to drop to a decade-low of 408kt, mostly as a result of the major shaft accident at BHP's Olympic Dam mine. But the odds are shortening on zinc. It has drawn level with its stablemate, lead, again, staged a huge recovery, but much capacity still needs nearer to \$3,000 to be comfortable.

Metal Stocks in LME Warehouses

Metal	5 December 2009	19 December 2009	% Change
Aluminium	4,539,075	4,637,475	2.17%
Copper	445,400	474,575	6.55%
Lead	139,225	141,925	1.94%
Nickel	141,456	147,690	4.41%
Tin	26,700	26,400	-1.12%
Zinc	458,850	456,525	-0.51%

Precious Metals

There were ups and downs along the way, but none could complain about the 2008-09 performance of portable collateral.

Metal (\$/oz)	27 Dec 08	20 Dec 09	% change
Gold	838	1104	+32%
Silver	10.7	17.21	+61%
Platinum	856	1432	+67%
Pt/Au Ratio	1.02	1.3	+27%

None of these numbers represent the annual extremes but are indicative of the twelve months. All benefitted from the flight into tangibles following the banking crisis. Low inflation and even lower interest rates helped, too. Platinum was the winner in both real and relative terms as its industrial value, coupled with ongoing problems at the South African mines registered. The growth of exchanged traded funds (ETFs) opened the door to the purchase of physical metal by investors whilst the demand for gold coins outstripped the ability of the US mint to supply.

But what of 2010? As we close around US\$1,100 for gold, analysts' estimates vary between \$850 and \$1500 for next year's average. If economic recovery continues there will be more purchasing power but will there be the appetite? With recovery will come inflation and higher interest rates. South Africa's gold output will continue to slide but Australia's will rise. All-in-all, \$1,000-\$1,200 looks like a comfort zone for gold. Yet, if we get back in the habit of buying automobiles, the Pt/Au ratio will surely harden. Let's say to 1.60 which would give a range for platinum of \$1,600-1,900. If **Lonmin** can keep its furnaces running, it could show us good value.

Bulk Commodities

As ever, iron ore and coal monopolised. Iron ore, whose production is dominated by three companies: Vale SA of Brazil, BHPB and Rio Tinto. The export trade is the key feature into China, India, Japan and Korea. The fall in volumes as recession bit was highlighted by the collapse in shipping prices and a free-for-all about annual contract negotiations – both prices and tonnages. The majors offered a 30-35% reduction which was rebuffed, especially by the Chinese and the free-market suddenly became focal. An attempt by the London Metal Exchange to regularise one was shelved, but it can only be a matter of time before benchmarking is established. There is no shortage of massive iron ore deposits waiting to be developed. But the money will go towards those offering the best choices of ore quality, location, infrastructure and a politically/economically-workable formula. Thus, **African Minerals** (AMlq.L: 379.35p; Hi-Lo 399-29p) may battle with its 5,000Mt in Sierra Leone at 30% Fe and **Sundance Resources** (ASX:SDL A\$0.14; Hi-Lo A\$0.22-0.07) with 2,500Mt at 38% in Cameroon. Conversely, the BHPB/Rio Tinto tie-up in iron ore in Western Australia has dollar signs written upon it, as do Vale's expansion plans in Brazil.

Commodity Price Movements

Commodity		5 December 2009	19 December 2009	% Change
Aluminium	\$/tonne	2106	2214	5.13%
Copper	\$/tonne	7025	6840	-2.63%
Lead	\$/tonne	2343	2314	-1.24%
Nickel	\$/tonne	15900	17045	7.20%
Tin	\$/tonne	15040	15775	4.89%
Zinc	\$/tonne	2353	2395	1.78%
Gold	\$/ounce	1170	1104	-5.64%
Silver	\$/ounce	18.52	17.21	-7.07%
Platinum	\$/ounce	1446	1432	-0.97%
Brent Crude Oil	\$/bbl	76.7	72.6	-5.35%
Platinum/Gold	Ratio	1.24	1.3	4.84%

Exchange Rates

Whilst the world economy was booming, we did not over-worry about the significance of competitive exchange rates. When the music stopped, we did. It pivoted, as ever, around the US dollar and cunning Chinese pinning their currency to it. Now the dollar had a torrid time of it on the downside mostly, which hurt a lot of exporters, like South Africa, Australia and Japan. Year-on-year changes showed:

	20 December 08	20 December 09	% Change
£:US\$	1.47	1.61	9.5%
£:€	1.05	1.13	7.6%
£:SARand	14.46	12.19	-15.7%
US\$:SARand	9.7	7.57	-22.0%
US\$:Aus\$	1.46	1.13	-22.6%
US\$:€	1.39	1.43	2.9%
US\$:Br Reale	2.37	1.79	-24.5%
US\$:¥	98.35	90.76	-7.7%
US\$:Yuan	6.85	6.83	-0.3%

So, take South Africa. In 2008, \$1Mt of coal sold for \$1.0=R9.7 would generate R9.7M receipts. The same coal in 2009 would have raised only (\$1.0=R7.57), some R7.57M, 22% less. What's worse, the unit price of coal fell, South Africa's

inflation topped 10% and electricity tariffs shot up 40%. The only wonder is, how can RSA's currency remain so strong in the face of this? Ditto Australia and Brazil. It does not say much for the USA does it? Maybe the Chinese have it right after all. But help could be at hand. At the end of November, the dollar fell to a trade-weighted 16-month low, since which it has risen 5%. Why? There is a rumour the Fed may exit its loose money policy sooner than expected.

	5 December 2009	19 December 2009	% Change/week
£:\$	1.65	1.61	-2.42%
€:£	1.11	1.13	1.80%
£:SA Rand	12.26	12.19	-0.57%
US\$:Aus\$	0.92	0.89	-3.26%
Br Reale:US\$	1.71	1.74	1.75%
€:\$	1.49	1.43	-4.03%
\$.SA Rand	7.43	7.57	1.88%

Share Price Movements, Majors

It falls to the poor analysts this time of year to explain why they got it wrong and how next year will be so different. So, how did we do? We felt the bottom had not been reached in December 2008. Nor had it. We were bulls of gold and platinum. Nothing wrong there. We cautioned of growing raw materials stockpiles but savage cutbacks in production, presaging a major void, but not in 2009. A bit of spread betting that, but not too short of the mark. Bearish on diamonds and sterling, we got that wrong. Here is what really happened:

Stocks	20 Dec 08	19 Dec 09	% Change
FTSE 100	4091.4	5196.81	27.02%
Anglo American	1450	2594	78.90%
Antofagasta	434	905	108.53%
BHPB	1235	1883	52.47%
ENRC	325	860	164.62%
Gem Diamonds	289	198.8	-31.21%
Hargreaves Services	485	699	44.12%
Kazakhmys	254	1250	392.13%
Rio Tinto	1429	3132	119.17%
UK Coal	91.75	59.75	-34.88%
Vedanta	689	2399	248.19%
Xstrata	645	1019	57.98%

They mostly rose significantly, though not to eclipse their early 2008 highs. Yet this was a market-driven, not a demand-driven recovery. So what of exchange stockpiles?

Metal	20 December 2008	19 December 2009	% Change
Aluminium	2,068,925	4,637,475	124.15%
Copper	324,175	474,575	46.39%
Lead	43,850	141,925	223.66%
Nickel	72,936	147,690	102.49%
Tin	7,280	26,400	262.64%
Zinc	233,750	456,525	95.30%

When such major stockpile increases occur in tandem with share and metal price increases, we need to ask, why? It can only be that the consensus is for a major bull market and that has to be China-driven, does it not? This is a time for caution. Most of this bull run may be over for now in metal prices. Whether the heavyweight shares will move up towards their previous, but short-lived peaks may depend, perversely, on interest rate hikes and a resumption of dividend payments. Both are on the cards.

Stocks	5 Dec 09	19 Dec 09	% Change	12-mo Hi-Lo	% Above Low
FTSE 100	5322	5196.81	-2.35%	6364 – 3530	47.22%
Anglo American	2607	2594	-0.50%	2766 – 906	186.31%
Antofagasta	900.5	905	0.50%	959 – 353	156.37%
BHPB	1890.5	1883	-0.40%	1969 – 1025	83.71%
ENRC	921	860	-6.62%	965 – 295	191.53%
Gem Diamonds	220.5	198.8	-9.84%	282 – 104	91.15%
Hargreaves Services	710	699	-1.55%	768 – 415	68.43%
Kazakhmys	1273	1250	-1.81%	1345 – 187	568.45%
Rio Tinto	3125	3132	0.22%	3335 – 1112	181.65%
UK Coal	67.5	59.75	-11.48%	164 – 59	1.27%
Vedanta	2399	2399	0.00%	2510 – 193	1143.01%
Xstrata	1066	1019	-4.41%	2510 – 289	252.60%

Share Price Movements, Small and Medium Caps

Life will never be easy at the junior end of the market in either exploration or production. It is particularly tricky if you attempt both at once. The juniors across the board were given a torrid time in the crash. For investors, both institutional and private, in tough times the juniors are first to go hungry. In the premier league, Anglo and Rio made some awful mistakes but were protected. As was DeBeers. Not so the tiddlers. Those who survived – and in some cases, relatively prospered – were led by pragmatic management and no little help from mineral prices.

Company	20 Dec 08	20 Dec 09	% Change	Activity
African Cons Res	5.63	15.00	166.43%	Zimbabwe, Minerals
Cape Diamonds	0.63	4.38	595.24%	RSA, Diamonds
Cluff Gold	33.00	60.0	81.82%	Africa, Gold
Gemfields	11.00	5.12	-53.45%	Zambia, Emeralds
Goldplat	10.75	11.75	9.30%	Africa, Gold
Herencia	0.38	0.54	42.11%	Chile, Zinc
Kalahari	40.0	172.00	330.00%	Namibia, uranium
Kefi Minerals	12.0	1.75	-85.42%	Gold & copper exploration
Kopane	1.88	12.25	551.60%	Lesotho, Diamonds
Kryso	3.13	12.75	307.35%	Gold Exploration, Tajikistan
Nyote Minerals	3.13	7.38	135.78%	Africa, Nickel & Gold
Petra	72.5	59.00	-18.62%	Africa, Diamonds
SNR	13.7	14.00	2.19%	RSA, Coal
Tanzanite One	22.5	13.00	-42.22%	Tanzania, Gemstones
Toledo Mining	10.	21.5	115.00%	Philippines, Nickel
Zinc Ox	30.75	49.00	59.35%	Zinc recovery

Singular praise to:

- **Gemstone miners**, whose product appeal dropped to zero in the dark days.
- **African Consolidated** for sticking it out in Zimbabwe. Its market cap is now second only to Zimplats.
- **Nyota** which changed its countries of operation and its minerals, but more than doubled in price.
- **Kopane** doing diamonds in Lesotho where an entrepreneurial group picked it off the floor.
- **Cape Diamonds** which fell to 0.33p before a recovery to 4.38p. The best performer.
- Neck and neck with Kopane, is the still distressed **diamond sector**. Someone, somewhere, is a girl's best friend.

The junior sector will continue to struggle in 2010 but the three Ps will prevail. People. Place. Product.

Small Caps	5 Dec 09	19 Dec 09	% change
African Consolidated Resources	15.25	15	-1.64%
Cape Diamonds	3.88	4.38	12.89%
Cluff Gold	69.25	60	-13.36%
Eurasia Mining	0.88	0.68	-22.73%
Europa Oil & Gas	15.0	14.75	-1.67%
Firestone Diamonds	32.5	33	1.54%
Gemfields	6.0	5.12	-14.67%
Goldplat	11.75	11.75	0.00%
Herencia	0.61	0.54	-11.48%
Kalahari	171.5	172	0.29%
Kefi Minerals	2.0	1.75	-12.50%
Kopane	16.75	12.25	-26.87%
Kryso	13.0	12.75	-1.92%
Northern Petroleum	144	128	-11.11%
Nyota Minerals	6.88	7.38	7.27%
Petra Diamonds	61.75	59	-4.45%
Strategic Nat Res	15.25	14	-8.20%
Tanzanite One	13.0	13.0	0.00%
Toledo Mining	23.75	21.5	-9.47%
Vatukoula Gold	1.43	1.34	-6.29%
Zinc Ox	43.5	49	12.64%

Energy Minerals

Having nailed our colours to the coal mast, we cannot ignore nuclear power nor its feedstock, uranium. Kazakhstan is set to become the world's largest producer, with 13,500t in 2009, up 58% from 2008. In its wake comes Canada with 9,000t, Australia 8,430t, and Namibia 4,400t. What is much less clear is whether uranium will start to be used at a rate which ensures an orderly market. The supply side appears well set, but consumption?

Usage of Major Fuels, 1998-2008			
Energy Type mtoe	1998	2008	% Change
Coal	2261.7	3303.7	+46
Natural Gas	2049.7	2726.1	+33
Oil	3439.2	3927.9	+14
Nuclear	550.2	619.7	+13

Given that the USA has 29% of the world's known coal reserves and China 14%, Copenhagen never stood a chance, did it?

Gemstones

Gem Diamonds (FTSE: GEMD 198.8p; Hi-Lo 282-104p). At last some action from the sleeping giant, the highest capitalised of the non-conglomerate producers. Positive action, too. It is withdrawing from its direct involvement in the DRC in two of its companies there to be followed, we believe, by the third. But it is backing its horse for a place. Its sale to **Kasai Resource Mining Ltd** (KRM), for \$3.8m give GD the right, at no cost, to an initial 65% interest in any kimberlites that KRM proves plus a 3% royalty. Now that is more like it. The DRC is a desperate place in which to work. Now Gem can concentrate on its Lesotho and Australia properties – both producers – and restore investors' faith. **Buy.**

But it does not end there. **KRM** was bought (8 December 09) by **Namakwa Diamonds** (FTSE:NAD 29p; Hi-Lo 50.5-15p) which goes where angels fear to tread: Angola, DRC, as well as the relative safety of Namibia and South Africa. Let's leave this one.

African Diamonds (AIM:AFD.L 36p; Hi-Lo 56-19p) was given a much needed whiff of oxygen to its AK6 kimberlite development in Botswana recently. DeBeers sold its 70% controlling interest to Lundin-family company **Lucara Diamond Corp** for \$49m. Now Lucara has raised \$110m, presumably to fund not only the purchase but the feasibility and development costs. African Diamonds, holding just under 30% can boost this to 40% for £4.8m. It has secured a loan of \$2m to fund ongoing costs and will need to come to the table with its share of the estimated \$88m to make the mine a 1m carat per year producer. AK6 has been around a tad too long. Time for action.

A seminal event for the diamond industry in 2009 was the failure of the Kimberley Process to grow teeth. KP, vaunted as the watchdog which would rid the industry of its blood diamonds image, has failed. The reasons are clinically simple. Major producers Australia, Botswana, Canada, South Africa, do not need KP. For the rest, mostly in Sub Saharan Africa, corruption is a way of life from top to bottom. What is more, down the chain to the retail customer, nobody cares. Next.

Pointers for the week...and beyond

Monday 21 December:	Cairn Energy AGM. UK Public Sector Net borrowing
Tuesday 22 December:	Baobab Resources AGM Tanzanite One AGM UK RPI y-o-y US Final GDP q/q
Wednesday 23 December:	UK MPC interest rate decision
Thursday 24 December:	UK Retail Sales m/m
Wednesday 30 December:	Cape Diamonds AGM Gemfields Resources Plc

The Watchtower: The Season of Goodwill

Goodwill is defined in the textbooks as "no more than an expectation that the old customers will return to the old place". In 2009, they returned to commodities and mining shares with a vengeance. Will they stay there? Depends which analyst you follow. But before you start saving Christmas cracker jokes, remember you read this one here first:

Q: How many analysts does it take to change a light bulb?

A: None. They form a group called coping with darkness.

Read anyone's predictions this time last year and realise just how dark it can be. One and all were gloomy. In predicting the FTSE Index, then at 4217 (24 Dec 2008) and now around 5200, Morgan Stanley hit bottom with 4300 and UBS topped at 5800. The gold addicts ranged from \$500 (truly) to \$1500 and briefly saw \$1200. But crude oil sorted out the men from the boys. Closing out at \$42, having tested \$160, it took a brave soul to call it back up. But as it recovered, threatening \$100 again. The most sober view, from The London Times, is for house prices, gold, gilts, energy, to fall. Sterling will hold and emerging markets will stagnate. That could bode for most of the developed western world. But it will not hold for China, India, Brazil where the momentum is probably unstoppable. For now.

David Hargreaves
21 December 2009

The next Week-in-Mining will be posted on 4th January 2010. Have a happy holiday season.