



# Your guide in Africa Plan your journey with Deloitte

AFRICAN MINING INDABA SPECIAL EDITION - WESTERN AUSTRALIAN STOCK EXCHANGE INDEX

A review of Western Australian listed mining companies on the  
Australian Securities Exchange with significant operations in Africa

FEBRUARY 2014



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## Executive summary

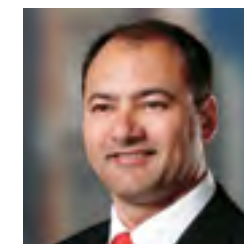
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Welcome to the second African Mining Indaba special edition of the Deloitte WA Stock Exchange Index

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*2014 marks the 20th anniversary of the Investing in African Mining Indaba conference, an event that has grown significantly over the years to become the world's largest mining investment event and Africa's largest mining event. Even after a challenging year, many Australian companies will attend Indaba in what has become a fixture in many people's diaries.*

Australian mining companies have invested in Africa for decades, and continue to do so, in what has been a challenging year.

The market capitalisation of WA listed companies with operations in Africa, that comprise the Deloitte WA (Africa) Index, fell 44.5% over the 12 month period ended 31 December 2013, to close at AU\$7.60bn. As at 31 December 2013, these companies comprised 4.8% of the total Deloitte WA Index (in terms of market capitalisation contribution), compared to 9.2% at 31 December 2012.

Meanwhile, the market capitalisation of WA listed companies which comprise the Deloitte WA Index rose 4.8% over the 12 months to 31 December 2013, to close the year out at AU\$155.6bn. The Deloitte WA Index hit a four year low during the year of AU\$125.6bn at 30 June 2013. However a recovering iron ore price and the falling Australian dollar kick-started the recovery during the second half of the year, with momentum building following the Federal election in September.

Growth over the last year had been sporadic, in what has been a challenging year for the Deloitte WA Index as a whole, and as illustrated by the performance of the Deloitte WA (Africa) Index, even more so for mining companies, largely as a result of global economic concerns and volatility in commodity prices. Gold explorers and producers were the hardest hit, affected by plummeting gold prices and productivity issues driven by maturing operations transitioning to deeper mines and marginal lower grade ore deposits.

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## Congratulations to the top percentage movers in this African Mining Indaba special edition of the Deloitte WA Index

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Continuing structural weaknesses in commodity markets and persistently high operating costs prices have had a significant impact on WA listed companies, particularly those operating in Africa. With one or two exceptions, the majority of commodity prices fell during the 2013 calendar year.

Gold prices continued to decline in the second half of the year, supporting speculation that we are now at the end of the extended bull market for gold. Silver prices also continued on a downwards trend, closing 34.9% down year on year.

Persistent supply-side bottlenecks in South Africa, the world's biggest producer of platinum, have failed to lift the price of platinum, which fell 11.1% over the 2013 calendar year. Palladium prices however bucked the trend, thanks to a sizable structural deficit and a recovering global automotive sector, up 1.7% from last year.

In this special edition of the Deloitte WA Index, we highlight a number of emerging issues and areas of interest for those currently operating in or planning to enter the African market:

- **Africa: The fast maturing continent**  
We take a look at the complications of operating in Africa, including a focus on returns, obtaining funding, corruption, resource nationalism and local community involvement
- **Modular plants: For smarter mining in Africa**  
We consider the introduction and use of smaller, scalable and modular plants over the traditional large-scale end-to-end processing methodology historically adopted by miners.

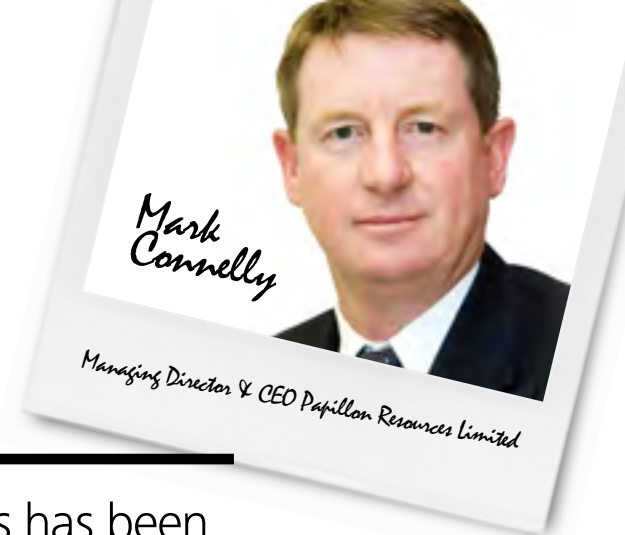
In addition, we speak to Mark Connelly, Managing Director and CEO of Papillon Resources Limited (Papillon), about the challenges of developing a significant project in Africa.

We also recognise those companies operating in Africa that have achieved significant growth over the past 12 months. These were:

- **Base Resources Limited:** Market capitalisation increased by 81.3% from AU\$132m to AU\$239m
- **Tiger Resources Limited:** Market capitalisation increased by 39.4% from AU\$199m to AU\$277m.

The success of these two companies to overcome volatile markets and record growth in market capitalisation is certainly an achievement to be celebrated, and is a testament to the perceived quality of their projects.

## Interview with Mark Connelly



Since listing on the ASX in March 2007, Papillon's focus has been the development of gold exploration projects in Mali, West Africa

*Papillon's strategy has centred around the continued exploration, appraisal and development of their flagship Fekola Project, where they have developed a quality resource portfolio with excellent production potential and the aim of becoming a gold producer in the near term.*

Mark Connelly was appointed Managing Director and CEO of Papillon in late 2012, having previously held executive positions in major gold producers in West Africa, and whose experience includes the development, construction and operation of mining projects. His experience of over 25 years covers a variety of commodities (including gold, base metals and other resources) across a number of geographic regions (including West Africa, Australia, North America and Europe).

### QUESTION:

*Papillon has been seen as one of the major Australian players in Africa. From your perspective, what does the African Journey mean to you and Papillon?*

From a personal perspective, I have had a long history and background working in the continent, having previously worked in West Africa for a number of years with Newmont Mining Limited and Adamus Resources Limited, bringing the Nzema project into production and then overseeing the corporate transaction with Endeavour Mining Corporation.

The African Journey as far as Papillon is concerned really began when the company discovered the Fekola project in late 2010, followed by early stage drilling in January 2011. Africa remains an untapped continent, still rich in

resources but in need of investment in infrastructure. Mali is very eager for foreign investment, and is taking a proactive approach in seeking investment. Papillon's experienced management team has established strong relationships in Mali, which is the 3rd largest gold producer in Africa and has a good jurisdictional pedigree, as evidenced through the large number of mining companies working in country, including AngloGold Ashanti Ltd, Endeavour Mining Corporation and Randgold Resources Ltd.

Papillon has also been committed to effective community relations, playing an active role within the local community as part of its social responsibility obligations. The company is committed to developing the use of local employment through local procurement and training, including the establishment of a community vocations training centre.

**QUESTION:**

*Africa continues to be in the lime light as a mining destination, but why did Papillon choose to invest in Africa rather than Australia?*

The board's previous experience in bringing projects into production in Africa was a strong factor in determining the direction of the company, but most significant is our perception of the continent as a mineral-rich region, largely underexplored and holding significant greenfield opportunities.

In addition, we saw significant benefits in investing in a country with a proactive government who supports direct foreign investment.

**QUESTION:**

*We often hear about the challenges of operating in Africa, challenges such as cultural diversity, political volatility and infrastructure challenges. How has Papillon overcome many of these challenges?*

One of the major challenges we have faced is the negative international sentiment towards Mali and the perception of political unrest. While there has been conflict in the north of the country from the uprising of Islamist forces, Papillon has overcome this by enhancing the awareness of investors, media and the broader public regarding that the south-western region of Mali, where our project is situated, which has been untouched by the conflict.

The next most significant challenge we have faced relates to the new mining code; that is, a new mining act is currently being implemented by the Malian government. However, Papillon has worked closely with the government with its mining licence submission, and does not foresee any regulatory issues that are likely to delay the progress of our project.

**QUESTION:**

*How has the drop in commodity prices affected the way that Papillon operates?*

Fortunately, the recent drop in commodity prices has not impacted the way Papillon operates, with gold currently trading at around US\$1,250/oz. Based on the price sensitivity analysis as part of the Fekola PFS released last year, even at a low end gold price of US\$1,100/oz., the company will produce average annual revenue (net of royalties) of US\$320m, and average annual operating cash flow of US\$130m. Therefore, there would have to be a very significant fall in the gold price for Fekola to become economically unviable.

**QUESTION:**

*Where do you see the future of funding for mining opportunities in Africa coming from?*

For Papillon specifically, there has been considerable interest from banks in terms of debt financing for the Fekola project. As far as other companies, I believe it all comes down to the asset and the geology – if the project has proven itself to be economically robust, close to infrastructure and has a clear pathway to development, then it is likely that it will receive interest from a range of sources, including project financing, cornerstone investors with offtake agreements and traditional equity financing.

**QUESTION:**

*When do you believe that community engagement should start? And how important is this in running a successful mining operation?*

Proactive community engagement is important right from the start, and is fundamental to running a successful mining operation. You may often hear about companies who generate revenue from a country's mineral wealth without investing back into the community, however that is not the route that we have taken. Papillon has worked very hard to engage with the local community, especially in terms of enhancing employment, which is likely to increase as the project ramps up to development.

From previous experience with Adamus and Endeavour, I am proud of my achievements regarding community engagement, having resettled approximately 2,500 people whilst building the Nzema mine in Ghana. In my view, developing a mining operation that can succeed in the long term, you need to engage with the local community early, so they can see the benefits that the project can bring to their local communities as well as the company itself.

**QUESTION:**

*How much time is spent managing stakeholder engagement these days versus ten years ago?*

Early positive stakeholder engagement is crucial to a successful project, and it takes time and effort to work together for long term benefits. I believe there has certainly been a general increase in the level of stakeholder engagement over the last ten years in general; however it obviously varies on a project by project basis.

**QUESTION:**

*In recent years we have seen a lot of Australian companies investing into Africa, from your perspective and the experience you've gained, what's the best advice you could give a company going into Africa?*

Firstly, make the effort to be in the country as often as you can and not in your head office back in Perth. It is important that executives and management take the time to set up strong relationships with the government and the local community.

It also helps to have an experienced board and management team, especially with a current background in working in Africa, and be willing to bring their relationships and networks to the company.

Finally, those wishing to invest in Africa will have to ensure that they work with the local community and invest back into the local community, especially by providing skills and training, therefore providing benefits to the local community long after the project in question has ceased.



## Deloitte WA (Africa) Index Movers and Shakers

The Deloitte WA (Africa) Index Movers and Shakers recognise the success of mining companies within the Deloitte WA Index Top 100 who have operations in Africa

*The ability of these companies to overcome the struggles of operating in a volatile environment and buck the trend to post positive growth is to be highly commended.*

The mining industry faces considerable challenges in the face of continuing structural weaknesses in commodity markets and persistently high operating costs. The need to drive internal efficiencies is supplanting a focus on volume, and companies are looking to enhance their cost strategy, technology innovation, operational excellence and management capabilities.

### THE TOP PERCENTAGE (%) MOVERS FOR THE YEAR ENDED 31 DECEMBER 2013 WERE:

RANK	ASX	CONSTITUENT NAME	INDUSTRY SECTOR	MKT CAP 31 DEC 2013	MKT CAP 31 DEC 2012	MOVEMENT %
				AU\$M	AU\$M	
1	BSE	Base Resources Limited	Materials	239	132	81.3%
2	TGS	Tiger Resources Limited	Materials	277	199	39.4%

Source: Australian Securities Exchange and Capital IQ

The increasing demand from shareholders for companies to deliver shareholder value is forcing players to readjust strategic focus, in order to attain their “ticket to play.” With commodity prices subdued and margins under pressure, productivity, cost reduction and operational efficiency are strategic priorities across the mining sector.

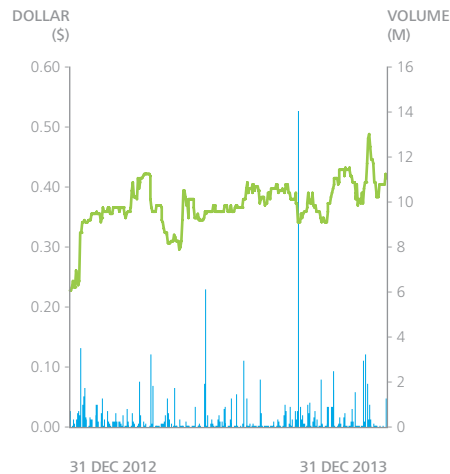
Companies with strategic operations in Africa need to mitigate these risks in addition to the above-the-ground risks of operating in a region with political instability and corruption, opaque regulations and poor enforcement capacity. This forces mining companies looking to do business in Africa to consider not only the needs of the companies themselves, but also the needs of the relevant governments and communities in which they operate.

Growth over the last year has been sporadic, in what has been a challenging year for the Deloitte WA Index as a whole, and even more so for those mining companies operating in Africa, largely as a result of global economic concerns and volatility in commodity prices.

Given these factors, and the general malaise experienced by resource dominated equity markets both domestically as well as internationally, the success of Base Resources Limited and Tiger Resources Limited to overcome these factors and record growth in market capitalisation is certainly an achievement to be celebrated, and is a testament to the perceived quality of their projects.



**Figure 1.0 - Base Resources Limited**



**LEGEND:**

Share price

Volume

Source: Australian Securities Exchange and Capital IQ

*Base Resources Limited (Base) has increased its market capitalisation by 81.3% from AU\$132m to AU\$239m over the year ended 31 December 2013. As at 31 December 2013, Base was ranked 53rd in the Deloitte WA Index.*

**BACKGROUND**

Base listed on the ASX in October 2008 and on AIM in January 2013, and is focussed on developing its flagship Kwale Mineral Sands Project in Kenya, whilst also holding a number of other early stage exploration permits.

**REVIEW OF OPERATIONS**

Base acquired the Kwale Project from Vaaldiam Mining Inc. in 2010, and has since driven its rapid development from feasibility analysis through to production. Base celebrated the first processing of concentrate through its Mineral Separation Plant (MSP) and production of ilmenite and rutile in early December 2013. The construction work on the zircon circuit of the MSP was also in its final stage in December 2013 with commissioning expected to commence in January 2014, with the majority of supporting infrastructure and utilities completed.

The Kwale project is expected to have a significant impact on the economy in Kenya, with the project expected to expand mineral sectors export earnings three-fold and encourage further future investment in the Kenyan resources industry. The project currently employs a 370-strong workforce, with 60% from Kwale County and 90% of the workforce being Kenyan.

In December 2013, Base succeeded in extending its project finance facility by US\$25m as well as completing an AU\$40m capital raising. These funds will enhance the company's working capital during the ramp up phase of the Kwale project.

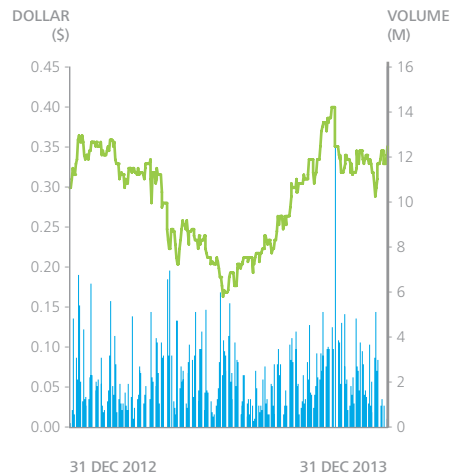
**GOING FORWARD**

Base's transformation from explorer to mineral sands producer is the first milestone reached in the company's goal to become a global resources company. The first planned bulk shipments of its minerals are scheduled for early 2014.

Base's portfolio of off-take agreements is expected to cover up to six years of production and approximately 86% of project revenue in the first three years of production. The project has an expected annualised production rate of 360,000, 77,000 and 25,000 tonnes of ilmenite, rutile and zircon respectively, with an estimated Life of Mine Surplus (after repayment of debt facilities) of approximately US\$700m, US\$350m of which is expected in the first five full years of operation.

Following full commissioning of the Kwale Project, Base will look to reinvest profits of the project into the acquisition of assets at an advanced stage of exploration or development in Africa, with a focus on potential copper and gold deposits.

**Figure 2.0 - Tiger Resources Limited**



**LEGEND:**

Share price

Volume

Source: Australian Securities Exchange and Capital IQ

*Tiger Resources Limited (Tiger) has increased its market capitalisation by 39.4% from AU\$199m to AU\$277m over the year ended 31 December 2013. As at 31 December 2013, Tiger was ranked 52nd in the Deloitte WA Index.*

**BACKGROUND**

Tiger has been listed on the ASX since May 1997 and is focused on mineral exploration and development, specifically copper and cobalt, with operations located at the Katanga Copper belt in the Democratic Republic of the Congo.

**REVIEW OF OPERATIONS**

Tiger has projects covering 1,500km<sup>2</sup>, including a 60% ownership in flagship project Kipoi, which comprises five known copper deposits. Tiger also holds interests in Lupoto (100% interest) and La Patience (100% interest). Tiger are currently constructing Kipoi in stages, with the first stage Heavy Media Separation (HMS) completed and expected to produce 132,000 tonnes of copper during the course of its 42 month lifespan. The project has recently had positive results, currently producing higher-than-expected concentrate grades.

The second stage, the Solvent Extraction & Electro winning plant (SXEW) is currently under construction where it will have the potential production capacity of 50,000tpa of copper. The plant is expected to produce 25,000 tonnes of copper cathode in its first full 12 months of operation, and has been heralded as having low cost and high margin attributes.

In October 2013, Tiger announced a substantial off-take agreement for 100,000 tonnes of copper cathode with Gerald Metals SA, with a \$50m advance payment facility aiding the SXEW project, and confirming Tiger's confidence and high expectations of its Kipoi project.

In addition to the Kipoi project, Tiger has a 19.9% interest in Zambian copper explorer Chrysalis Resources Limited (Chrysalis). Tiger consider this a strategic alliance, with the explorer looking to undertake a high-potential copper project.

**GOING FORWARD**

Tiger is well placed with regards to available funding, achieving better than expected results from the HMS, and is on track to meet the SXEW project's scheduled completion of Q2 2014. The company expects ore from the deposits at Lupoto and Kipoi will increase the mineral resources available at stage 2 which in turn, will provide additional returns.

In addition, after a prominent copper anomaly was found in La Patience, Tiger will continue to explore the area in 2014, aiming to underpin future expansion.

## Commodity and precious metal prices

COMMODITY	METRIC	31.12.13	31.12.12	MONETARY CHANGE	PERCENTAGE CHANGE
Gold	US\$/troy oz.	1,207.85	1,662.41	(454.56)	-27.3%
Silver	US\$/troy oz.	19.50	29.95	(10.45)	-34.9%
Platinum	US\$/troy oz.	1,357.00	1,527.00	(170.00)	-11.1%
Palladium	US\$/troy oz.	716.00	704.00	12.00	1.7%
LME Copper	US\$/tonne	7,375.75	7,907.00	(531.25)	-6.7%
LME Nickel	US\$/tonne	13,832.00	16,998.00	(3,166.00)	-18.6%
LME Aluminium	US\$/tonne	1,754.75	2,041.00	(286.25)	-14.0%
LME Lead	US\$/tonne	2,190.50	2,316.50	(126.00)	-5.4%
LME Zinc	US\$/tonne	2,053.00	2,049.50	3.50	0.2%
LME Tin	US\$/tonne	22,335.00	23,380.00	(1,045.00)	-4.5%
Crude Oil (Brent)	US\$/bbl.	111.39	110.36	1.03	0.9%
Uranium	US\$/lb.	34.50	43.75	(9.25)	-21.1%
Iron Ore	US\$/tonne	137.00	141.00	(4.00)	-2.8%

Source: Thomson Reuters Datastream Professional

*After a difficult start to 2013, commodity prices recovered somewhat in the second half of the year on the back of stronger demand for industrial metals. Improving global economic sentiment, increased investor risk appetite and an extension of quantitative easing in certain key markets are all providing support for commodity prices.*

*However, excess capacity combined with reduced demand in several commodities is placing a ceiling on prices, and prevented commodity prices from recovering all of the lost ground from the beginning of the year. With one or two exceptions, the majority of commodity prices fell during the 2013 calendar year.*



Resource companies are feeling the effects of subdued commodity prices, with many commodities either currently in global surplus (aluminium, nickel, uranium) or heading into surplus (iron ore and copper). The unattractive supply-demand fundamentals for many commodities is prompting many producers to cut production, slow or delay expansion projects or close operations altogether. For the major resources companies, there is much less focus on growth capital expenditure in the current market. Instead it's all about shareholder return, portfolio simplification, cost reduction, productivity improvement and project deferrals.

However, it is more than just supply and demand imbalances driving commodity prices, part of the weaknesses in commodity prices reflects trends in the global economy, particularly concerns about the economic slowdown in China and the winding-down of the US Federal Reserve's bond-buying programme, with commodities and emerging markets being perceived to be a beneficiary of the liquidity generated by quantitative easing. The stronger U.S. dollar, particularly when compared to emerging-market currencies, has been an additional factor depressing sentiment towards commodities as an asset class.

### PRECIOUS METALS

Gold prices continued to decline in the second half of the year, closing the year at US\$1,208/oz., 27.3% below levels 12 months ago and 36.4% below the all-time price high (US\$1,898/oz.) set in September 2011. The evidence appears overwhelming that we are now at the end of the extended (11 year) bull market for gold. As a result of the depressed gold price and its impact on companies' financial metrics, juniors, mid-caps and major gold producers have reduced and/or delayed spending in order to improve margins and repair balance sheets.

Silver prices continued on a downwards trend, closing the year 34.9% down, year on year. It seems a long time ago, April 2011 to be precise, when the LBM silver cash price was approaching its 20 year high of almost \$50/oz. Silver tends to follow gold – one of the interesting trends we're seeing is the high correlation between silver and gold prices in the past 12 months. Silver has followed the sharp down turn in gold prices, however has often experienced greater price volatility than its more illustrious peer.

Persistent supply-side bottlenecks in South Africa, the world's biggest producer of platinum, have failed to lift the price of platinum, which fell 11.1% over the 2013 calendar year.

Historically, significant movements in gold can generate sympathetic buying or selling in the platinum market. Gold prices have dragged down with them the price of platinum, with the platinum market just 6.0% of the size of the gold market. Capital investment in platinum projects is declining and there's ongoing pressure on marginal production. One of the biggest flashpoints relates to labour with a number of labour disputes impacting production volumes in South Africa. Persistently low prices are landing many South African producers in hot water, making a large amount of production uneconomical for many miners.

Palladium prices bucked the trend, thanks to a sizable structural deficit and a recovering global automotive sector, up 1.7% from last year.

**INDUSTRIAL & ENERGY COMMODITIES**

China's unprecedented period of high GDP growth is coming to an end as the economy transitions to a lower more sustainable growth rate founded on domestic consumption as opposed to export growth. This transition is translating to lower demand for industrial commodities at a time when new supply is hitting the market following the global commodity investment boom.

Nickel and aluminium continue to be weighed down by excess supply inventories. A number of large nickel projects are still to be ramped up to full capacity, Chinese production of nickel pig iron (NPI) is growing rapidly, and nickel exchange inventories are skyrocketing combining to maintain significant downward pressure on nickel pricing. With respect to aluminium, the global primary aluminium sector is still running at a sizable surplus and is expected to remain in surplus until 2017, and net primary aluminium output continues to grow globally, again placing downward pressure on pricing. Until global nickel and aluminium markets cut supply and rebalance, we are unlikely to see much improvement in pricing.

Copper, a bellwether for the global economy has also seen a marked decline in pricing over the past year as bearish sentiment regarding excess supply weighed down on prices.

While the likes of copper, gold and aluminium steal the headlines, tin is one of those commodities that the market tends to forget. As with several of the base metals family, supply is being constrained by a lack of new mines coming

online and new tin discoveries. The impending closure of the world's biggest tin mine in 2017 (the San Rafael mine in Peru which produces 10% of the world's tin output) along with 'conflict minerals' issues in the Congo amplifies this supply constraint. With global refined consumption growth expected to outpace supply growth, the global tin market is set to get tighter still.

After more than five years in net surplus, conditions in the global zinc market are improving. LME zinc prices are slowly trending upwards and the supply-demand profile is becoming more attractive. The short to medium term price outlook for zinc is more compelling than for other base metals. In the longer term, most analysts agree that the lack of investment in new mines, exhaustion of older assets and a gradually recovering global economy will push the market into a pronounced deficit and apply upward pressure to prices.

There has been no joy for uranium where delays in the re-start of Japan's nuclear programme and excess supply continue to be headwinds, and effectively apply a ceiling on uranium spot prices. Uranium prices have been steadily trending downwards since 2010 with spot uranium prices 21% below the levels experienced 12 months ago.

Supply headwinds and weaker emerging market demand translate to deteriorating fundamentals for iron ore. Mine supply is expected to grow more strongly in 2014-18, as projects that were initiated in the mid-2000s during the mining boom will start to become operational. Bearish market sentiment regarding iron ore prices appears to be

overly pessimistic. Delays to new supply hitting the market, improving industrial activity in China, a recovering US manufacturing sector and the continued absence of India's iron ore exports from the market are supporting iron ore prices. The seaborne iron ore market is expected to swing into surplus but the expected timescales for this have been pushed out to 2015.

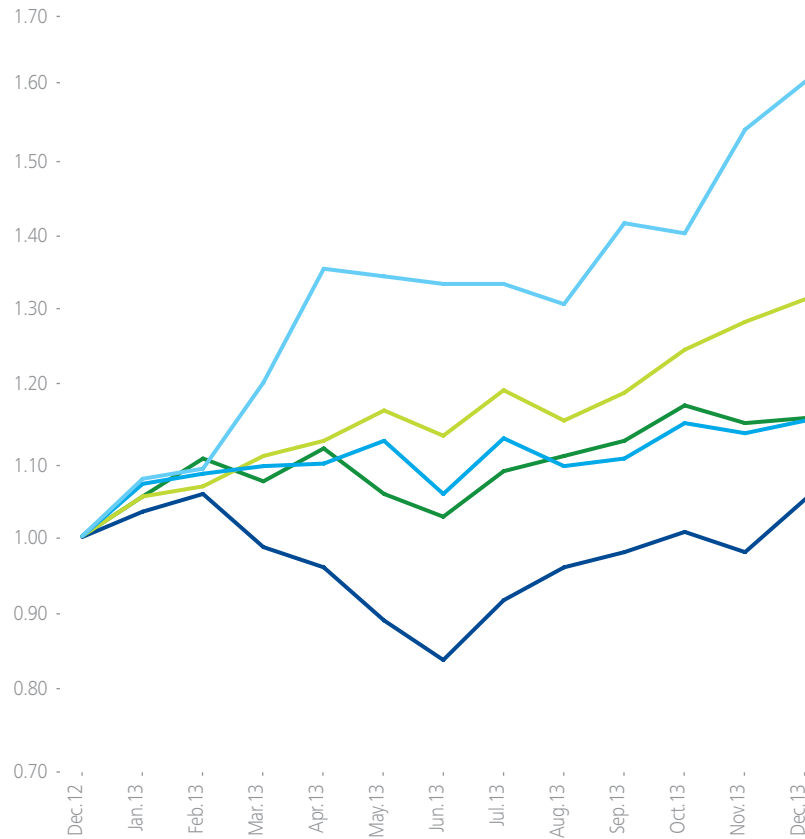
**BETTER NEWS IS EXPECTED IN 2014**

Commodity prices are expected to stabilise in anticipation of modestly stronger demand, particularly in the developed world, in 2014-15. The much talked about US recovery remains on-track, fiscal concerns notwithstanding. Economists point to a sustained recovery in the US construction and auto sectors, and additional stimulus in Japan, as clear positives for metals prices.

The long-term picture for China remains in place, although China's economy is undergoing transition and a number of structural reforms, the market remains confident that the underlying long-term drivers for industrial metals remain in place. Ongoing infrastructure projects and urbanisation will support metals consumption.

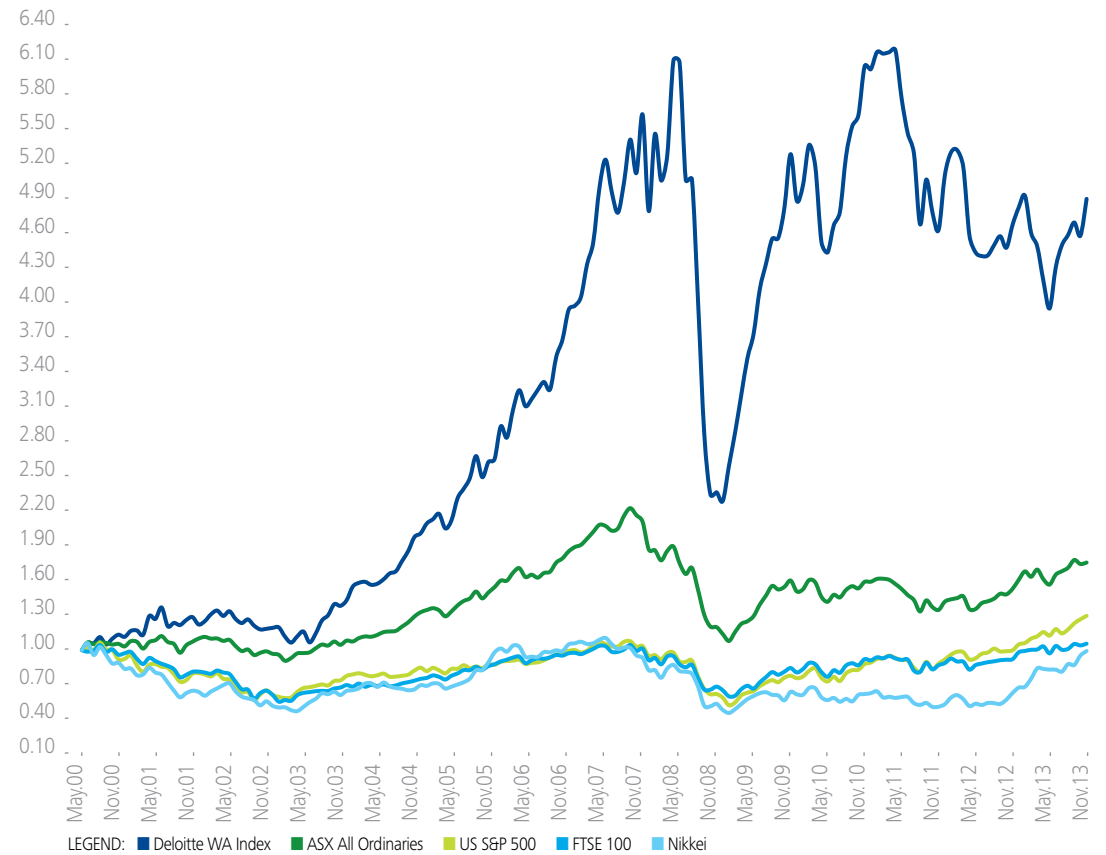
# Performance of global financial markets

OVER THE PAST 12 MONTHS



Source: Australian Securities Exchange and Capital IQ

SINCE MAY 2000 (INCEPTION OF DELOITTE WA INDEX)



LEGEND: ■ Deloitte WA Index ■ ASX All Ordinaries ■ US S&P 500 ■ FTSE 100 ■ Nikkei



## Deloitte WA Index

### DELOITTE WA INDEX PERFORMANCE AGAINST THE ASX ALL ORDINARIES AND OVERSEAS INDICES

	LAST MONTH	LAST THREE MONTHS	LAST SIX MONTHS	LAST 12 MONTHS	LAST FIVE YEARS	SINCE MAY 2000*
Deloitte WA Index	6.9%	6.8%	23.9%	4.8%	106.9%	389.6%
ASX All Ordinaries	0.7%	2.6%	12.1%	14.8%	46.3%	76.1%
US S&P 500	2.4%	9.9%	15.1%	29.6%	107.5%	30.1%
FTSE 100	1.5%	4.4%	8.6%	14.4%	53.6%	6.1%
Nikkei 225	4.0%	12.7%	19.1%	56.7%	83.9%	-0.3%

Source: Capital IQ and ASX websites \* Inception of the Deloitte WA Index

## Australian markets rebounded during the second half of the year, with the Deloitte WA Index able to recover lost ground to close the year 4.8% higher

Equity markets remain highly susceptible to even the slightest tremors in macroeconomic data and investor confidence. The Deloitte WA Index rose just 4.8% in 2013, starting with a strong reporting season in January and February, experiencing a dip leading up to the mid-year mark, and recovering lost ground in the second half of the year. Global markets fared significantly better, with the Nikkei 225 the standout performer, experiencing strong and consistent growth throughout the year.

The US S&P 500 also posted strong gains, as the US economy continues its slow but steady recovery, whilst the ASX All Ordinaries and FTSE 100 posted solid growth over the 12 months ended 31 December 2013 of 14.8% and 14.4% respectively.

The Deloitte WA Index fell rapidly in the first half of the year, with a strong December reporting season not robust enough to mitigate the impacts of falling commodity

prices. Weighted heavily towards the resources sector, the Deloitte WA Index responded strongly to the sharp fall in precious metal prices in the second quarter of 2013, and the generally weak iron ore prices over the first half of the year, driven by a slowdown in Chinese manufacturing and the consequent demand for Western Australian Minerals. The Deloitte WA Index hit a low during the year of AU\$125.6bn at 30 June 2013, its lowest level in four years.



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## The longer term outlook for WA remains positive, with growth for the State expected to surpass that of any other state or territory, and the nation as a whole, for the next decade

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Australian markets rebounded during the second half of the year, with the Deloitte WA Index able to recover lost ground to close the year 4.8% higher, at AU\$155.6bn. A recovering iron ore price and the falling Australian dollar kickstarted the recovery, with momentum building following the Federal election in September. Business and investor confidence improved, largely due to the expectation that the regulatory burden would be reduced following the election of the new federal government. In the end, however, it was primarily non-resource companies who rescued the Deloitte WA Index, with a shift in key economic fundamentals, including a lower Australian Dollar and interest rates remaining at record lows easing pressure faced not only by exporters, but also manufacturing, tourism, international education and retail.

The longer term outlook for WA remains positive, with growth for the State expected to surpass that of any other state or territory, and the nation as a whole, for the next decade. However, WA will need to maintain its global competitiveness in order to be able to achieve growth and prosperity in the long-term by ensuring that it is adaptable to changes in external forces and maintains strong foundations in order to take advantage of the global demand for the state's resources.

The ASX All Ordinaries rose 14.8% during the year, experiencing less volatility than the Deloitte WA Index, as a result of a more diverse portfolio of constituents. The largest gains were experienced by the big four banks, who together posted a combined increase in market capitalisation of AU\$87.7bn in the 12 months ended

31 December 2013. The financial services sector has benefited from the rebounding of Australian consumer sentiment following on from the Reserve Bank of Australia lowering the cash rate to an all-time low of 3.25%, with speculation that any rise would occur during the second half of 2014, if at all. Gold producers fared the worst during the year on the back of lower gold prices, with most gold producers and explorers experiencing cuts to their market capitalisation of at least 50%. Included amongst these was Newcrest Mining Limited, who lost AU\$11.0bn of value during the year, with its share price falling 64.8%.

"Onwards and upwards" was the theme for the US S&P 500, which celebrated a return to pre-GFC levels this year. Despite a number of events which would traditionally send investors scrambling for safety (such as the conflict in Syria, the U.S. government shutdown, the potential Cypriot financial crisis and fears of a tapering fiscal stimulus policy by the Federal Reserve), the US S&P 500 was driven by strong macroeconomic data and the continuance of near-zero interest rates, rising 29.6% during the year. Internet retail and internet software and services companies were amongst the strongest performers, with the likes of Netflix, Inc. and Facebook, Inc. more than doubling, posting increases in market capitalisation of 324.2% and 140.7% respectively. The biotechnology and pharmaceutical industries also posted significant increases as a result of individual successes in R&D and strong profits.

The FTSE 100 rose 14.4% during the year, a strong performance given recent standards, but significantly lower than its global counterparts. The British securities powerhouse was weighed down by its strong representation of resource companies, with mining giants Anglo American plc, BHP Billiton plc and Rio Tinto plc losing a combined value of £23.7bn during the 12 month period. However, the market was propped up by the strong performance of diversified banks, Lloyd Banking Group plc and Barclays plc, posting gains of 67.5% and 36.4% respectively. The combination of positive corporate results, positive economic data and on-going quantitative easing from the European Central Bank also lifted investor confidence in other financial services industries, with asset management and custody banks and the life and health insurance sectors also performing strongly during the year.

The Nikkei 225 appeared to be unfazed by global events throughout the 12 months to 31 December 2013, experiencing a phenomenal return to glory. Japanese markets have struggled over the past few years to recover from the Fukushima disaster in March 2011, but closed out the 2013 year at 16,291 points, a level not seen since October 2007. Financial services, telecommunications and manufacturing were amongst the strongest performing industries, as the Bank of Japan's aggressive strategy in managing the JPY's valuation in order to boost Japanese exports has assisted Japanese products to become competitive in overseas markets, and encouraging funds back into the accounts of Japanese companies. Softbank Corp. was the strongest performer with a rise in market capitalisation of 214.6% during the year. Seeking an increase in dominance in the U.S. telecom market, 2013 was a year of strategic transactions for the company, having successfully acquired control of Sprint Corporation for US\$21.6bn and Brightstar Corp. for US\$1.1bn, it is now eyeing the U.S.'s T-Mobile USA Inc. Automobile manufacturer's Mazda Motor Corporation and Fuji Heavy Industries Ltd (owner of Subaru automobile manufacturing) also experienced significant rises of 212.6% and 180.2% respectively, with exports assisted by a lower JPY.



## SPOTLIGHT

– DELOITTE WA (AFRICA) INDEX

Supply issues are impacting production economics in a number of African countries, with the industry facing a rising cost curve and a declining productivity profile as a result

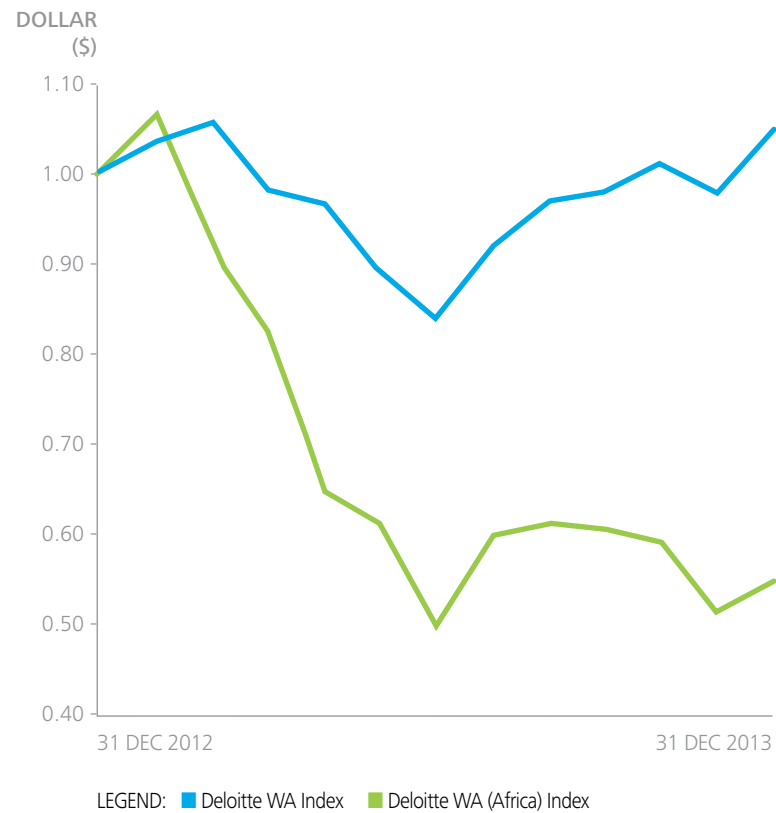
The market capitalisation of WA listed companies with operations in Africa that comprise the Deloitte WA (Africa) Index fell 44.5% over the 12 month period ended 31 December 2013, to close at AU\$7.60bn, and now comprise just 4.8% of the total Deloitte WA Index (in terms of market capitalisation contribution), compared to 9.2% at 31 December 2012.

Gold explorers and producers were the hardest hit, with companies such as Perseus Mining Limited and Resolute Mining Limited having more than 50% of their value wiped out over the year.

Supply issues are impacting production economics in a number of African countries, with the industry facing a rising cost curve and a declining productivity profile as a result. South Africa in particular is experiencing productivity issues, and nowhere more keenly than in the gold sector where labour productivity has been steadily declining at a time when annual wage inflation has been growing at 12%. In addition to labour, electricity and transportation costs have also been increasing.

Between 2005 and 2012, South Africa's gold production declined by 47%, driven largely by maturing operations transitioning to deeper mines and marginal lower grade ore deposits, at the same time as the plummeting price of gold is weighing heavily on gold explorers and producers alike. Companies will need to focus on new technology and its potential role in unlocking deposits and improving productivity in order to remain competitive.

Cash-strapped junior and mid-tier producers and explorers are increasingly becoming takeover targets, where quality resources are potentially available for bargain prices. The South African gold sector, as an example of what is currently occurring across Africa in general, is undergoing restructuring and consolidation, with higher cost assets looking to being sold or closed, and low-cost assets being acquired or developed, as a shortage of management and technical capability creates an ideal dynamic for consolidation. 2013 saw the acquisition of CGA Mining Limited by the TSX's B2Gold Corp and UK based Centamin plc acquiring Ampella Mining Limited for AU\$41m.

**Figure 4.0**

# Africa: The fast maturing continent

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The operating pressures, lack of infrastructure, corruption, resource nationalism, lack of capital, investor expectations, and stakeholder and government requirements are making it increasingly challenging to operate in Africa

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Similar to their global counterparts, Australian mining companies continue to face challenging times locally, with cost escalation, weaker commodity prices and falling productivity among the pressures driving change

With China's economy slowing and undergoing structural change, commodity prices have dropped, yet costs, and especially labour costs, have not necessarily followed this downward trend. Notwithstanding the corresponding decline in profits, governments increasingly want a bigger return from the mining sector, community expectations for job creation, and socio-economic benefits are higher and investors are now asking the hard questions.

The same certainly applies to Australian miners operating in Africa, but with the added complication of operating in foreign jurisdictions, many of which are only now emerging as mining jurisdictions. And, while the continent continues to hold great potential for future growth in mining, the operating pressures, lack of infrastructure, corruption, resource nationalism, lack of capital, investor expectations, and stakeholder and government requirements are making it increasingly challenging to operate in Africa.

In combination, these factors are leading to a seismic shift in the global mining industry and unprecedented challenges for management teams. When the additional challenges of investing in Africa are considered, there is very real potential for significant economic fallout if both governments and companies do not manage these challenges properly.

## KEY TRENDS IN AFRICAN MINING

### 1. FOCUS ON RETURNS

Return on investment has been brought sharply into focus by a number of factors over the past 12 months and will continue to drive investment decisions in 2014 and beyond. Besides the obvious drivers – the fall in commodity prices, rising costs, declining productivity, investor nervousness – investors are demanding a much more disciplined focus on risk adjusted returns.

As a result there were a number of project closures in 2013 as companies have not been able to raise capital to develop marginal projects. This will continue into 2014.

Traditionally certain government backed investments were made with a long term strategic view to secure supply or a strategic foothold in a particular region, but this practice is no longer as common as it was, and return on investment is becoming paramount in driving investment decisions.

## 2. FINDING FUNDING

Traditional capital markets remain tight and the paradigm has shifted – companies will never again be able to rely on traditional sources to fully fund their future developments. Funding models will continue to evolve, which may include royalty and metal streaming, export-import bank funding, the use of derivative/ hybrid instruments provided by hedge funds and joint venturing with offtake partners or other stakeholders.

Infrastructure will also remain a challenge, but the way in which these challenges are met will evolve in the future, and companies will have to find innovative ways of funding infrastructure. Shared infrastructure projects will become the norm, and it will be rare that a single investor will foot the bill for the entire project infrastructure, particularly where the intended infrastructure will open other mining opportunities in the region.

As a result, large investments in 'mega-projects', including mining and infrastructure, are fast becoming the exception and some believe we have seen the end of 'mega-projects' in emerging economies.

Public Private Partnerships (PPPs) and other multi-participation models will dominate, with government participation segmented into national, regional and all the way down to local community involvement.

## 3. RESOURCE NATIONALISM

The traditional view on resource nationalism in Africa has changed and become more complex to navigate. Local participation has become the way that business is done in Africa. Many countries have local participation and local beneficiation requirements which are becoming more sophisticated and complex as governments develop new models in consultation with global specialist service providers.

Requirements for government and local participation vary from country to country and, while local ownership models still increase the sovereign risk in some countries, many of the broader based models are becoming more acceptable to investors. For example, African governments are encouraging international companies to list on local indices and allocate a percentage shareholding to local investors. This model could provide companies with a new source of capital in the future, as the traditional capital markets remain tight.

Governments hope these models will provide investors with additional avenues to use local suppliers and service providers and, in so doing, provide more sustainable economic opportunities for both community and country.

## 4. LOCAL COMMUNITY INVOLVEMENT

As the African continent and individual countries continue to mature, new pressures are being exerted on projects and pure economic benefits are not the only drivers in this discussion.

Local communities play a more central role in a project in Africa than in more developed countries. The focus of environmental impact assessments (including the impact on local communities) has become broader and more stringent, which has affected the viability of certain projects. This is another trend that will continue in 2014 and beyond.

Environmental and community impacts are closely related and need to be treated with respect and diligence by aspirant miners.

## 5. MERGERS & ACQUISITIONS

As a result of the challenges discussed above, we saw cash-strapped companies putting key assets up for sale in order to stay afloat in 2013. In addition, there were a number of mergers and acquisitions (and consequent de-listings) in 2013.

The sale of assets by cash-strapped juniors and explorers, the formation of joint ventures to exploit good opportunities and other consolidation activities are likely to accelerate in 2014.

## 6. CORRUPTION

While corruption remains a concern in a number of jurisdictions, global investment into the African continent has helped to reduce its risk and its incidence. As the 'super majors' bring world's best practices to Africa, greater transparency is a natural evolution. Super-majors cannot suffer the reputational risk associated with being involved in corrupt practices and, as a result, will avoid 'risky' destinations completely irrespective of the potential resource.

Investors are also becoming far less tolerant of corrupt practices and are more inclined to invest in countries that have strong governance and support transparency in transactions.

## 7. THE TALENT GAP

The global skills shortage continues to play a role in hindering project delivery, and more companies will need to focus on human capital strategies, through training and education, to ensure the sustainability of their workforce into the future.

As a result of community expectations, government requirements and the talent gap, skills training and education will remain in high demand in Africa and Australian providers of these services have significant opportunities for growth on the continent. Centres of excellence will spring up, and many top global educational institutions will expand into Africa as they position themselves to take advantage of the fast growing and aspirational youth sector.


## WHAT DOES THIS MEAN FOR MINING COMPANIES?

The most significant trend we expect to see long into the future is the importance of early stakeholder engagement and the variety and depth of engagement that will be needed to deal with the evolving nature of the sleeping African giant.

As the continent's population becomes increasingly aspirational, community needs and demands are becoming more complex. In the past local communities may have been spoken for by a single tribal leader or local community leader, but this is changing and a company may find that community relations now need to include a wider group of decision makers, such as local women's, religious, environmental and agricultural groups, educators and other stakeholders.

Managing community expectations throughout the project life cycle will be critical to the long term success of the project, and how a company operates in one destination will be seen as a template for the next – something that can work for and against companies in this age of globalisation and transparency.

A company can no longer afford the reputational damage caused by poor community relations and engagement, irrespective of the jurisdiction – a riot related to a project somewhere in Latin America can have an impact on another project in Tanzania.



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The rise of the oil and gas industry in various African countries in the past two years will play a key role alongside the mining industry to ensure the continued development of critically required infrastructure

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Early government engagement – and at all levels, from national to provincial and local – is also critical, and companies need to get closer to their own government agencies – at home as well as in foreign jurisdictions – to assist them in this area. Most African countries have investment boards (or similar) to assist foreign companies to negotiate local requirements for investment into their countries. It is remarkable how few companies use these generally free services.

Government and community relationships should also be direct where possible, and not solely through local partners or agents.

#### PACE OF CHANGE

With urbanisation, growth in middle-class incomes and overall population growth – not dissimilar to what is happening in China and India – African countries need to continue to develop infrastructure such as roads, power, water and sanitation.

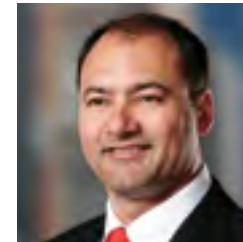
The resource sector has a big part to play in this growth story as African governments are looking to resource projects to underpin the development of social and industrial infrastructure. The rise of the oil and gas industry in various African countries in the past two years will play a key role alongside the mining industry to ensure the continued development of critically required infrastructure.

This will drive the development of manufacturing capability to meet local participation and beneficiation requirements, as well as positively impact the development of other sectors such as agriculture, education, health and tourism.

We expect the pace of development to pick up in 2014 and accelerate beyond 2014 to meet the growing expectations of the African people.

#### IN CONCLUSION

Opportunities and challenges are abundant in this diverse continent, but miners need to do their homework carefully, become more discerning about the varying risk and return profiles of the 54 countries that make up the African continent and adopt business models suitable to local conditions if they want to guarantee rather than take a chance at success.



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# Modular plants: for smarter mining in Africa

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The most important change in the mining environment is that the sector is experiencing some of the lowest commodity prices in years

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## KEY CHALLENGES IN MINERAL PROCESSING

Mining companies in the past have tended to adopt a large-scale end-to-end processing methodology. The timeline to the start of production has typically been up to eight years and would have followed the traditional cycle of exploration, evaluation, project and plant design, and execution and commissioning, with a typical plant having processed a tonnage of 250tph to 1,000tph.

However, the environment has changed and companies are, or should be, fundamentally rethinking the processing methodologies historically adopted.

The most important change in the mining environment is that the sector is experiencing some of the lowest commodity prices in years.

Other challenges include increasing production costs, with the costs of diesel, steel and electricity, among many other costs, all increasing. The cost of mining has also increased as a result of mining projects of acceptable grades being increasingly located in remote areas with little infrastructure. Labour unrest and rising costs have also played a role in making mining more difficult and costly in certain countries.

The problem of accessing capital has also been an acute one for the sector. This has been important for major resources companies, but has been more so for juniors and mid-tier mining companies, which may not have the reputation to attract the required funds and may not have the assets to generate even a small portion of the revenue required for continued exploration or mine development.

## THE VENMYN DELOITTE SOLUTION

Venmyn Deloitte is advocating the introduction and use of smaller, scalable and modular plants because we believe that these are well suited to the current economic environment and that they are particularly suitable to Africa.

The plants recommended are modular to the extent that companies can include various modules that offer downstream processing to the level desired. At a minimum, they would include a base scrubber, but could include various crushing, grinding and concentrating modules that can be added to the plant as and when needed.

The plants are also scalable in that many small plants can be introduced, so that each run in parallel.

The plants would offer mineral companies the opportunity to start their projects quickly through the use of already available processing plant items that can be quickly adjusted to mining companies' needs rather than be purpose made. This would result in lower recoveries than would be typically achieved through a purpose-made plant. However, through the use of available off-the-shelf technologies with some modifications, the typical mine development cycle could be reduced to 14 months rather than the longer timescales that have typically been associated with process plant development.

The development cycle for modular plants typically includes gravity recovery testwork, resource categorisation, plant choice and building, and execution and commissioning of a ready-made plant that can be shipped and then installed on site within 4 days and processes as little as 3tph to as much as 250tph of ore.

The previous processing model that was typically used in the mining industry was one in which ounces were processed for the sake of ounces. With modular plants, this processing philosophy is turned on its head and it becomes important to do a trade-off study to determine the optimal design parameters for the plant to make the biggest margin on the ounces that are recovered. The focus of this trade-off study should be to determine the cost per percentage recovery.

“Conventionally, the aim is to achieve the highest recovery possible, but the capital and operating costs associated with that might make the operation loss making. Recoveries with a modular plant can be 66% compared to the 95% one would expect from a more complex plant, but the total costs might be as low as one fifth.” says Venmyn Deloitte mineral project analyst Iaan Myburgh.

The modular and scalable model of processing plant design also offers mining companies the flexibility to ‘right size’ their projects for adverse market conditions, such as the ones that are currently being experienced. Downstream modules of a processing plant can be shut down as can complete processing streams, where multiple plants have been established alongside one another.

The shutdown of downstream processing units or the shutdown of entire processing streams would enable mining companies to optimise their processing to cover the costs that they need to recover to stay in business during economic or commodity-price downturns. This approach would allow companies only to mine a fraction of their orebodies and resume higher levels of production when commodity prices recover.

#### IN THE FIELD IN AFRICA

Various modular plants have been set up in Africa, including in Nigeria, Cameroon, Zimbabwe and South Africa. The range of processing options allow for the processing of upwards of 3tph and have been proven in diamond, gemstone, tin, gold, chromite and tantalite operations, although remain unproven or appear to be inappropriate for various other commodities.

Minerals that are suitable for processing through modular plants are those with higher grade and lower tonnage outputs rather than bulk commodities. Modular plants are also most suitable for commodities that require physical separation methods, such as gravity separation, rather than chemical processing.

Modular plants allow mining companies to get a return earlier in the project lifecycle with smaller than traditionally required capital outlays. The returns can be used to fund expansion, including the introduction of additional mine infrastructure (including in some cases the development of an underground mine after an initial period of opencast mining), additional end-to-end modular processing plants or overall recovery improvement.

## MODULAR PLANTS...CONTINUED

The ability to self-generate funds is recommended by Venmyn Deloitte as an alternative funding mechanism for junior and mid-tier mining companies, in particular, since this sector of the market is currently finding it difficult to obtain new finance and are forced to finance some of their growth by early production.

Modular plants are also important in a mining environment in which resource nationalism and early-production requirements are becoming important realities for mining companies to consider. This is not unique to the African mining environment, and is true of many mining jurisdictions. Mining companies are uncertain of their long-term mineral tenure in some countries, and judge it prudent to roll-out their mining plans in a phased way that would not expose them to high financial risk in the event of their tenure is compromised. In addition, the redrafting of mining legislation in some countries has reduced the length of time allowed for exploration as well as the legislated time from the granting of a mining right to the required start of mining – another reason why modular plants might be a favoured option.

Politicians in various countries have come out strongly against the high-grading of mines and have seen this as synonymous with the quick-start, low-capital approach to mining. They have argued that it is like picking the eyes out of the orebody and that it risks sterilising an orebody that could potentially be mined for many years to come. Ironically, politicians are also under pressure from their constituencies to show demonstrable economic activity arising from mining as soon as possible, which suggests that they may be more in favour of the quick-start, low-capital mining approach than they would seem at first.



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### ABOUT VENMYN DELOITTE

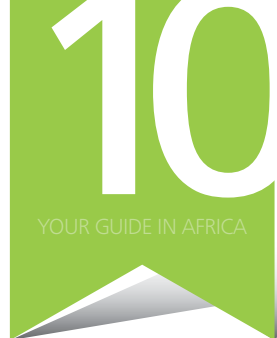
*Venmyn Deloitte is a mining advisory and valuation division of Deloitte South Africa and advocates the use of modular, scalable plants. Venmyn Deloitte believe that these plants offer various advantages including fast delivery and establishment, and low capital and operating costs, and should be considered particularly by junior and mid-tier mining companies that are facing either financing or regulatory challenges.*

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In a climate of volatile commodity prices and shifting demand fundamentals, mining companies are entering a period of structural change. To rectify cost overruns, improve capital efficiency and rebuild investor relationships, companies need to sharpen their focus on productivity, sustainable cost management and enhanced shareholder value.



**PHIL HOPWOOD** GLOBAL MINING LEADER



# WA's top 100 listed companies

AS AT 31 DECEMBER 2013

RANK:		ASX:	COMPANY:	MARKET CAP AU\$M:		PRICE:			
31 DEC 2013	31 DEC 2012	CODE	LONG NAME	31 DEC 2013	31 DEC 2012	LAST (MTH)	HIGH (YR)	LOW (YR)	EPS (POAB)
1	1	WES	Wesfarmers Limited	50,350	37,096	44.04	44.81	37.12	1.98
2	2	WPL	Woodside Petroleum Ltd.	32,050	27,914	38.90	39.53	33.31	3.71
3	3	FMG	Fortescue Metals Group Limited	18,122	14,479	5.82	5.93	2.87	0.56
4	4	ILU	Iluka Resources Ltd.	3,599	3,764	8.63	12.08	8.05	0.29
5	8	NVT	Navitas Limited	2,414	1,764	6.43	6.47	4.60	0.20
6	9	SWM	Seven West Media Limited	2,348	1,639	2.35	2.60	1.65	-0.07
7	7	MIN	Mineral Resources Ltd	2,209	1,800	11.87	12.35	7.99	0.97
8	6	MND	Monadelphous Group Limited	1,717	2,214	18.60	28.48	14.63	1.73
9	5	RRL	Regis Resources Limited	1,454	2,515	2.92	5.39	2.73	0.30
10	13	BWP	BWP Trust	1,373	1,153	2.19	2.79	2.12	0.21
11	11	AUT	Aurora Oil & Gas Ltd.	1,355	1,626	3.02	3.96	2.63	0.23
12	20	MGX	Mount Gibson Iron Limited	1,107	911	1.02	1.13	0.41	0.14
13	10	AGO	Atlas Iron Limited	1,053	1,628	1.15	1.95	0.69	-0.27
14	28	IIN	iiNet Ltd.	1,050	738	6.51	6.89	4.12	0.38
15	12	SFR	Sandfire Resources NL	1,005	1,325	6.46	9.09	4.92	0.57
16	24	AHE	Automotive Holdings Group Limited	985	860	3.78	4.37	3.05	0.26
17	17	AQA	Aquila Resources Limited	947	1,054	2.30	3.27	1.63	0.77
18	26	MRM	Mermaid Marine Australia Limited	791	763	3.40	4.27	2.98	0.27
19	15	IGO	Independence Group NL	726	1,083	3.11	5.05	2.18	0.08
20	42	BCI	BC Iron Limited	643	425	5.19	5.26	2.87	0.43
21	41	UOS	United Overseas Australia Ltd.	639	428	0.57	0.60	0.41	0.09
22	29	BDR	Beadell Resources Ltd	625	727	0.79	1.09	0.49	0.02
23	36	SIR	Sirius Resources NL	595	481	2.27	5.00	1.56	-0.24
24	50	PPC	Peet Limited	585	358	1.35	1.55	1.01	0.00
25	58	CWP	Cedar Woods Properties Ltd.	563	329	7.64	7.77	4.50	0.50

Source: Australian Securities Exchange and Capital IQ

Earnings per share = company earnings divided by number of shares Price/Earnings ratio = A stock's price divided by its historic earnings per share. N/A — Not Available S — Suspended.

**NB: Deloitte WA Index balances and rankings at 31 December 2011** have been rebalanced to reflect companies that have their registered office in Western Australia.

<sup>1</sup> Registered head office moved to Western Australia subsequent to 31 December 2012. <sup>2</sup> Listed 21 June 2013.

WA'S TOP 100 LISTED COMPANIES...CONTINUED

RANK:		ASX:	COMPANY:	MARKET CAP AU\$M:		PRICE:			
31 DEC 2013	31 DEC 2012	CODE	LONG NAME	31 DEC 2013	31 DEC 2012	LAST (MTH)	HIGH (YR)	LOW (YR)	EPS (POAB)
26	48	AMM	Amcom Telecommunications Ltd.	533	366	2.18	2.20	1.45	0.09
27	31	BRU	Buru Energy Limited	522	657	1.75	2.73	1.18	-0.07
28	49	BCK	Brockman Mining Limited	513	361	0.07	0.07	0.04	-0.06
29	66	RCR	RCR Tomlinson Limited	499	248	3.66	3.90	1.82	0.28
30	23	WSA	Western Areas Limited	467	860	2.37	4.75	1.94	-0.48
31	54	TOX	Tox Free Solutions Ltd.	465	342	3.49	3.65	2.86	0.12
32	55	MLD	MACA Limited	460	341	2.63	3.05	1.68	0.32
33	22	PDN	Paladin Energy Ltd	448	862	0.47	1.27	0.38	-0.47
34	18	MML	Medusa Mining Limited	424	1,026	2.04	5.74	1.27	0.27
35	-	GDO	Gold One International Limited	419	-	0.30	0.37	0.11	-0.07
36	40	DCG	Decmil Group Limited.	418	429	2.48	2.82	1.35	0.38
37	73	PRG	Programmed Maintenance Services Ltd.	414	225	3.50	3.52	1.86	0.27
38	35	CCV	Cash Converters International Limited	414	492	0.97	1.57	0.75	0.08
39	33	NWH	NRW Holdings Limited	382	524	1.37	2.22	0.85	0.27
40	46	AQP	Aquarius Platinum Limited	360	399	0.76	1.20	0.54	-0.59
41	16	RSG	Resolute Mining Limited	356	1,055	0.56	1.81	0.41	0.13
42	68	FRI	Finbar Group Limited	352	247	1.60	1.70	1.12	0.14
43	34	NST	Northern Star Resources Limited	336	524	0.79	1.38	0.53	0.07
44	38	PIR	Papillon Resources Limited	333	463	0.98	1.80	0.56	-0.02
45	21	ASL	Ausdrill Ltd.	322	876	1.03	3.27	0.76	0.30
46	78	ASB	Austal Ltd.	301	197	0.87	0.92	0.55	0.13
47	45	GRR	Grange Resources Limited	295	404	0.26	0.39	0.13	-0.01
48	14	SDL	Sundance Resources Limited	292	1,135	0.10	0.39	0.06	-0.01
49	97	SEH	Sino Gas & Energy Holdings Ltd.	291	147	0.20	0.27	0.09	0.00
50	106	TFC	TFS Corporation Limited	286	126	1.02	1.05	0.36	0.17

Source: Australian Securities Exchange and Capital IQ

Earnings per share = company earnings divided by number of shares Price/Earnings ratio = A stock's price divided by its historic earnings per share. N/A — Not Available S — Suspended.

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WA'S TOP 100 LISTED COMPANIES...CONTINUED

RANK:		ASX:	COMPANY:	MARKET CAP AU\$M:		PRICE:			
31 DEC 2013	31 DEC 2012	CODE	LONG NAME	31 DEC 2013	31 DEC 2012	LAST (MTH)	HIGH (YR)	LOW (YR)	EPS (POAB)
51	69	MLX	Metals X Limited	281	240	0.17	0.19	0.08	0.01
52	77	TGS	Tiger Resources Ltd.	277	199	0.35	0.41	0.16	0.01
53	103	BSE	Base Resources Limited	239	132	0.43	0.50	0.24	-0.01
54	27	SLR	Silver Lake Resources Limited	234	760	0.54	3.47	0.35	-1.04
55	279	ATU	Atrum Coal NL	213	27	1.39	2.10	0.16	-0.11
56	337	AHZ	Admedus Ltd	195	19	0.16	0.19	0.02	0.00
57	32	FWD	Fleetwood Corp. Ltd.	192	588	3.18	10.66	2.26	0.21
58	59	RFE	Red Fork Energy Limited	190	287	0.38	0.81	0.31	-0.01
59	61	APZ	Aspen Group	189	269	1.58	2.33	1.43	-0.28
60	74	JMS	Jupiter Mines Ltd.	183	224	0.08	0.12	0.04	0.00
61	70	MAH	MacMahon Holdings Ltd.	182	227	0.15	0.38	0.09	-0.03
62	98	EZL	Euroz Ltd.	176	144	1.22	1.35	0.95	0.04
63	133	CLX	CTI Logistics Limited	175	87	2.69	2.75	1.46	0.17
64	126	IRD	Iron Road Limited	175	94	0.30	0.37	0.16	-0.02
65	197	LNR	Lonestar Resources Limited	164	47	0.24	0.30	0.14	0.00
66	71	LYL	Lycopodium Ltd.	163	227	4.18	6.76	3.88	0.57
67	101	WIC	Westoz Investment Company Limited	158	138	1.23	1.24	0.96	0.06
68	89	PEA	Pacific Energy Ltd.	153	161	0.42	0.54	0.35	0.04
69	-	BRL	Bathurst Resources Limited	152	-	0.19	0.44	0.11	0.00
70	43	FGE	Forge Group Limited	150	425	1.74	6.98	0.29	0.73
71	53	GBG	Gindalbie Metals Ltd.	149	351	0.10	0.35	0.09	-0.11
72	100	NEN	Neon Energy Limited	149	140	0.27	0.43	0.18	-0.01
73	76	HCH	Hot Chili Limited	148	205	0.43	0.81	0.34	-0.02
74	39	CPL	Coalspur Mines Limited	148	447	0.23	0.90	0.17	-0.03
75	108	IOH	Iron Ore Holdings Limited	145	123	0.90	1.26	0.63	-0.20

Source: Australian Securities Exchange and Capital IQ

Earnings per share = company earnings divided by number of shares Price/Earnings ratio = A stock's price divided by its historic earnings per share. N/A — Not Available S — Suspended.

**NB: Deloitte WA Index balances and rankings at 31 December 2011** have been rebalanced to reflect companies that have their registered office in Western Australia.

<sup>1</sup> Registered head office moved to Western Australia subsequent to 31 December 2012. <sup>2</sup> Listed 21 June 2013.

WA'S TOP 100 LISTED COMPANIES...CONTINUED

RANK:		ASX:	COMPANY:	MARKET CAP AU\$M:		PRICE:			
31 DEC 2013	31 DEC 2012	CODE	LONG NAME	31 DEC 2013	31 DEC 2012	LAST (MTH)	HIGH (YR)	LOW (YR)	EPS (POAB)
76	88	BGG	Blackgold International Holdings Limited	142	173	0.16	0.21	0.12	0.05
77	104	AZZ	Antares Energy Ltd.	140	127	0.55	0.59	0.27	0.05
78	57	TRY	Troy Resources Limited	132	331	0.79	3.89	0.75	0.20
79	51	EHL	Emeco Holdings Limited	131	355	0.23	0.73	0.17	0.01
80	52	IMD	Imdex Limited	130	355	0.62	1.93	0.45	0.09
81	65	ALK	Alkane Resources Limited	127	253	0.34	0.83	0.25	0.19
82	87	NGF	Norton Gold Fields Limited	126	177	0.14	0.22	0.10	-0.02
83	47	CGH	Calibre Group Limited	123	375	0.39	1.65	0.26	0.07
84	82	SXE	Southern Cross Electrical Engineering Limited	123	186	0.76	1.40	0.72	0.11
85	92	TAP	Tap Oil Ltd.	122	151	0.51	0.73	0.43	-0.08
86	91	GGG	Greenland Minerals and Energy Limited	118	153	0.21	0.46	0.18	-0.03
87	161	TBR	Tribune Resources Ltd	117	66	2.33	3.33	1.26	0.55
88	116	OEL	Otto Energy Limited	115	108	0.10	0.12	0.07	0.01
89	570	PBD	PBD Developments Limited	113	6	0.02	0.03	0.01	0.00
90	67	KRM	Kingsrose Mining Limited	112	248	0.34	0.93	0.28	0.01
91	19	PRU	Perseus Mining Limited	112	962	0.25	2.25	0.21	0.06
92	83	MCR	Mincor Resources NL	112	185	0.60	1.04	0.45	-0.12
93	114	CYG	Coventry Group Ltd.	111	114	2.91	3.36	2.55	0.14
94	72	SAR	Saracen Mineral Holdings Limited	110	226	0.19	0.44	0.10	-0.11
95	81	CZA	Coal of Africa Limited	110	188	0.11	0.39	0.11	-0.17
96	60	FML	Focus Minerals Limited	110	274	0.01	0.04	0.01	-0.02
97	56	SMM	Summit Resources Limited	109	336	0.50	1.60	0.50	0.00
98	62	NFE	Northern Iron Limited	107	262	0.22	0.61	0.05	-0.03
99	93	ABY	Aditya Birla Minerals Limited	107	150	0.34	0.60	0.32	0.00
100	151	AXZ	Amex Resources Limited	103	74	1.30	1.73	0.92	-0.05

Source: Australian Securities Exchange and Capital IQ

Earnings per share = company earnings divided by number of shares Price/Earnings ratio = A stock's price divided by its historic earnings per share. N/A — Not Available S — Suspended.

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# Compilation of the Deloitte WA Index

## COMPILATION OF THE DELOITTE WA INDEX

The monthly Deloitte WA Index is compiled from publicly available information provided by the ASX and Capital IQ on the market capitalisation of each Western Australian listed company.

A company is included as a Western Australian Company where its registered office is listed in Western Australia, regardless of whether the company is dual listed. The information on Western Australian listed companies is extracted and then summarised to provide a cumulative market capitalisation figure for all Western Australian listed companies.

The Deloitte WA (Africa) Index comprises companies with assets located within and/or revenue derived from operations in the continent of Africa, based on geographical segment disclosure in each company's latest publicly released Annual Report.

The base period of the Deloitte WA Index is May 2000 and for the purposes of the Index the month of May 2000 is given a notional value of one. All subsequent monthly cumulative market capitalisation totals are divided by the May 2000 total to then obtain a relative movement. Please note that if a company has been suspended or delisted during a particular period no data will be included for that month and all subsequent months until the company is re-listed or the suspension lifted. Historical information regarding the company's market capitalisation will continue to be included in the calculation of the Index.

Earnings per share (EPS) is a basic EPS calculation, i.e. net profit divided by weighted average number of shares.

## ABOUT DELOITTE PERTH

As one of Australia's leading professional services firms, Deloitte Touche Tohmatsu and its affiliates provide audit, tax, consulting, and financial advisory services through approximately 6,000 people across the country. We have expertise that spans industry sectors including automotive; consumer business; energy and resources; financial services; government services; life sciences and health care; manufacturing; real estate; and technology, media and telecommunications. Focused on the creation of value and growth, and known as an employer of choice for innovative human resources programs, we are dedicated to helping our clients and our people excel. Our professionals are dedicated to strengthening corporate responsibility, building public trust, and making a positive impact in their communities.

Our Perth practice continues to grow with over 500 dedicated personnel including 44 partners. We provide high quality service to our clients throughout Western Australia, delivering seamless solutions and the insights that they need to address their most complex business challenges. The strong performance culture of the Perth office is attributed to Deloitte's seven Signals, representing who we are and how we do business.

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## Recent awards and achievements

### AWARDED IN 2013

#### **Deloitte again named a Tier One tax practice and Tier One transfer pricing practice for 2014 by the International Tax Review**

- Deloitte's recognition as a Tier One tax and transfer pricing practice by the prestigious International Tax Review journal cements our reputation as leading tax advisers to corporate Australia. Our depth of tax and transfer pricing expertise, and the innovative tax and transfer pricing services we provide to a wide range of blue-chip clients across numerous industries, has allowed us to continue to attract some of the most eminent and accomplished Australian practitioners to enhance our growing practice.

#### **AFR CFO Awards 2013**

##### **Deloitte wins the double**

- Deloitte has won both the Accounting Firm of the Year and the Audit Firm of the Year in the Financial Review CFO Awards 2013. This is the first time in the awards' history that any firm has taken out both awards in the same year.

#### **Deloitte Audit Services wins**

##### **Australian International Design Award**

- Recognised for commitment to applying design thinking principles to better understand client needs.

#### **Deloitte was ranked #1**

##### **Globally in Security Consulting**

- The world's largest IT consulting firm, as well as the largest security consulting services firm, with 'the largest and most mature global delivery network compared with the four other top firms.

#### **Deloitte ranked #1**

##### **in Global Financial Services Consulting by Kennedy**

- Measured by capabilities and skills in delivering integrated offerings around restructuring and rebuilding opportunities for its financial services clients.

#### **Deloitte ranks #1**

##### **in 2013 World's Best Outsourcing Advisors List**

- Recognises Deloitte's deep experience and knowledge in Finance, Human Capital, IT and other frequently outsourced functions, as well as its ability to help organisations throughout the outsourcing life cycle.

#### **Deloitte ranked #1**

##### **in Global Consulting by Gartner**

- Deloitte remains the top player in 2012 for consulting services, with a 6.6% market share and consulting services growth rate of 13.8%.

#### **Kennedy names Deloitte as the global leader for Human Capital Strategy Consulting**

- Recognising Deloitte's capability strengths including human capital analytics and a heavy investment in predictive analytics tools for scenario modelling, strategic workforce planning and talent management, as an aging workforce and shortage of qualified talent drove industry spend.

#### **ANZ FastPay, developed by Deloitte Digital, wins two awards**

- Australia's first mobile banking app recognised for 'Innovation in Mobile Payments' at the IDC Financial Insights Innovation Awards in Singapore and a Trailblazer Award for 'Channel Excellence in Mobile Payments' for Asia.

#### **Deloitte named a global leader**

##### **in Change Management by Kennedy**

- The evaluation is based primarily on service capabilities breadth and depth, client satisfaction, and market eminence.

## OUR SIGNALS

### CONTINUOUSLY GROW AND IMPROVE

We have an environment that respects the individual, rewards achievements, welcomes change and encourages a lifetime of learning – with ourselves and our clients.

### HAVE FUN AND CELEBRATE

There is never a wrong time to celebrate and have fun – recognising, appreciating, acknowledging and learning from the experiences and success shared between our client and Deloitte teams.

### AIM TO BE FAMOUS

We aim to reach for the stars – and beyond. To be thought leaders, showcasing our clients and our team's talent and expertise.

### PLAY TO WIN

Think globally – Winning is our stated objective. It is also our state of mind.

### TALK STRAIGHT

When we talk, it's open, regular, honest, constructive two-way communication between our people and our clients.

### EMPOWER AND TRUST

We encourage a sense of ownership and pride by giving responsibility and delegating authority.

### RECRUIT AND RETAIN THE BEST

Our people are talented, enthusiastic, self-starters, team players who are bursting with potential. They are people with whom we have a lifetime association.



## OUR CULTURE

### OUR CULTURE – OUR ESSENCE

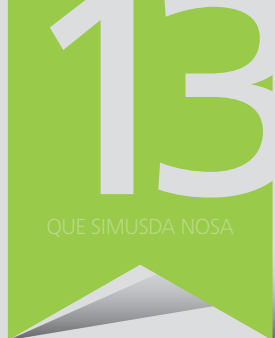
Culture at Deloitte does not just happen – we work at it.

It's the sum total of the actions of our people, it's the way we treat others – it's the way we behave. Our seven Signals embody these values. Our passion for teamwork and exceptional client service is our point of difference.

At Deloitte, we live and breathe our culture.

Our internationally experienced professionals strive to deliver seamless, consistent services wherever our clients operate.

Our mission is to help our clients and our people excel.



## Contact us

PLEASE FEEL FREE TO CONTACT ANY OF THE FOLLOWING TO DISCUSS HOW WE CAN HELP YOU ACHIEVE YOUR GOALS



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