



# DIGGERS AND DRILLERS

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## A World with No Oil

By Al Robinson

A sharp sound pierces your ear-drums. For a brief moment everything is blurry. Then you reach over and slam your alarm clock.

It's a bright sunny morning in November... 2032. You get up and cook your toast to a crunchy, golden texture. Then you check the pile of mail on the kitchen table.

The electricity bill is on the bottom. You open it, without cringing, and reflect on the figure.

You actually smile.

You're excited as you drive to work. Summer is near. You swing through the city, gliding past attractive high-rise towers that stretch up to the clear smog-free, sky.

Steel is a thing of the past. These towers are made of petroleum-based plastics.

As cheap and clean as it is, the eerie silence of your battery-powered car still gets on your nerves a little. So you flick on the radio. It's the business news, read in a deep, smooth tone.

"Saudi Arabian government officials are yet again lobbying for a global energy watchdog after the premier of Western Australia announced a third production cut for the year..."

In your mind, the voice trails off. You've heard this story before.

### Ten-Fold Gains from the Rarest Kind of Opportunity

This world may seem like a far-off place. But right now you can invest in the energy trend with potential to transform entire city-scapes, or make petroleum fuel obsolete. It's the kind of event that has only taken place a handful of times in human history. We may be on the cusp of one of the all-time great investing moments.

It's not a new idea either. It's credible and it's real. And thanks to the recent crash in Aussie shares, it's incredibly cheap.

Being Australian, you probably already know quite a bit about it. This single idea could trigger huge profits in the world's most unpopular mining business.

I'm talking about a commodity that could multiply ten-fold in the years to come. One thousand per cent - the same way oil has in the last decade.

And right now the best producer in Australia is selling at an absurdly cheap price.

### The New Oil

But before we get to that, let's briefly go back to our vision for

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a moment.

There's only one difference in this future world. The global energy economy's centre of gravity has shifted. In this scenario, our lives no longer revolve around petroleum.

They revolve around uranium.

In this scenario, your kids have never asked you why you're always frustrated when you pull into the petrol station. They've never even heard of a petrol station. You fill up your car with base-load electricity at your house each night.

Cooking your toast in the morning didn't belch any pollution into the air at a nearby coal-fired power plant. There is no nearby coal-fired power plant.

Saudi Arabian oil producers are no longer targets for Western scorn. On the contrary. The fresh-water shortage in the Middle East became chronic in 2023. To power its desalination plants, the Arabs resorted to underground nuclear generators.

They buy uranium from Australia now.

And every time Rio Billiton raises or lowers production from Olympic Dam, the world takes a keen interest. No one cares about Saudi Arabia. They're more interested in Saudi Australia.

Is this a fantasy? No. It's just one possibility of many. I'm not saying all these things will happen. But there's a pretty compelling reason why they just became possible.

## A Nuclear Plant the Size of Your Garden Shed

Earlier this month John Deal sat down with a reporter and told him something remarkable. He said he could power 20,000 homes for five years - with a box the size of a small garden shed.

Deal is the CEO of Hyperion, a small technology company from Santa Fe, California. What he's talking about is a nuclear battery. A miniature power plant. His company makes them. And he's already

### A Nuclear Plant the Size of Your Garden Shed



received 100 orders from industrial customers.

This is a safe, nuclear power plant the size of your bathroom. One that can be mass produced to generate the same power as a reactor at two-thirds the capital cost. One that doesn't take ten years to build.

Think about the implications of that for nuclear power. It solves many of the problems holding the industry back right now. But all power comes from one kind of fuel or another. And nuclear power needs nuclear fuel. If there IS a big breakthrough in safe, clean, and distributed nuclear power...

*It accelerates a shortage of uranium.*

Maybe you think it sounds fanciful. Earth-shattering ideas usually do sound like bunk at first. They only seem like genius years later.

Deal isn't even the only one competing in this market-space. Technology heavyweight Toshiba is right on his tail with a viable, competing model. Others are following. And they'll need more uranium to power up homes, factories, mines and machinery.

These prototypes for a nuclear economy are not perfect yet, of course. Don't get me wrong - I don't have my head in the clouds. There will doubtless be some kinks to iron out. But the fact is, "nuclear batteries" - the company's own term for this reliable, compact source of energy - are at the edge of a brand new phase in nuclear development. A phase that will accelerate the industry, make an oil-free scenario possible, and multiply future uranium demand.

## The Nuclear Renaissance

The nuclear story is all about plants - both big and small.

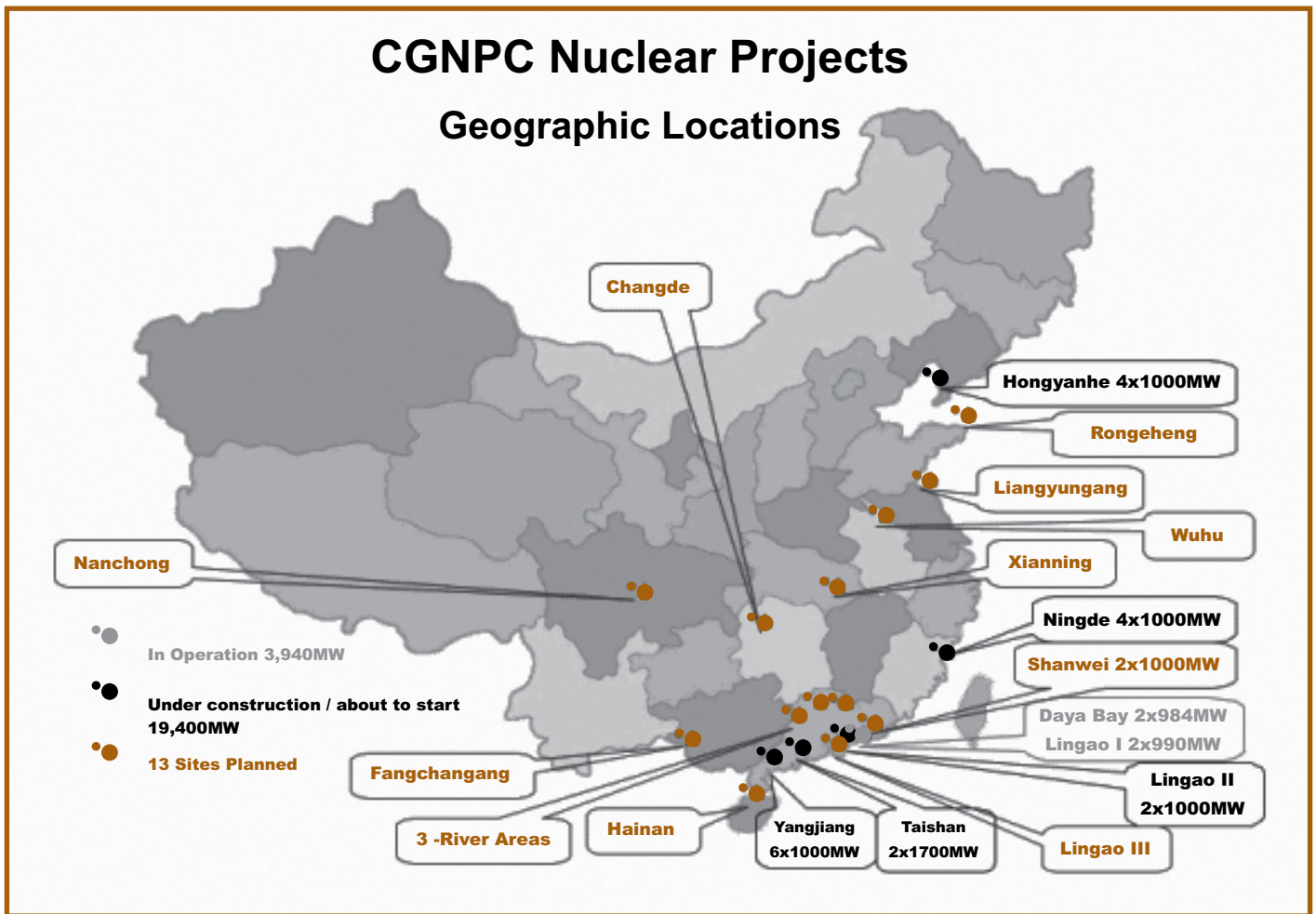
Remember the bust in uranium stocks last year? The false boom in uranium juniors happened back when money was cheap, and a financial crisis was a fairytale you read about in *The Daily Reckoning*.

Last year's uranium boom gave into a vicious bust. But the roots of the original uranium bull market sprouted from facts: nuclear plant facts. And since then, the facts have become even more compelling.

In June this year, the China Electrical Council set a firm target for 2020: raising nuclear capacity by a factor of 7. That would mean China gets just 4% of its electricity from nuclear power. But in China, four percent is a lot in real terms. It would give China enough nuclear power to run the entire economies of all of Australia and New Zealand - with some spare juice left over.

Below you can see China's plans for nuclear expansion over the next few years. The recent global slowdown, which has impacted China's short-

## China's Nuclear Hunger Spreads



term industrial production, has NOT impacted its long-term energy plans. In fact, this year China has beefed up its nuclear goal.

Nuclear reactors need fuel. How much depends on the model and how much electricity it is designed to produce. According to the World Nuclear Association, each new reactor the world builds will require over 180 tonnes of uranium annually. Each dot on that map is a new plant coming into the world soon.

But China's yellowcake hunger illustrates the real uranium situation better than most. More plants will mean higher future uranium demand.

That's the easy way to think about it. The more plants that are built, the more uranium Australia will need to produce to meet global demand, and the higher the price of uranium will go. Given the staggering scale of plant proposals in China, India, Russia, France, the US and the rest of the world – the number has grown to 367 this month - **there's going to be a uranium shortage.**

Now is an ideal time to invest in it, despite negative news you may be hearing about commodities. The market is concentrating on what'll happen to uranium in the next six-months. That short sightedness may even lead to lower uranium prices. But that makes now a great time to invest in

uranium for the ten years and beyond, when prices will boom with demand.

Some experts think we may struggle to supply all our *current* uranium needs in a couple of decades' time. That's just to supply current reactors, and doesn't include the extra 367 plants currently planned, or if shed-sized nuclear batteries prove a reality. A full-blown nuclear economy with plastic condos and silent cars would send uranium demand to unheard-of heights.

### Uranium \$500

How much would people pay for uranium in a nuclear economy?

Well, Kevin Bambrough is one of those experts hyper-bullish on uranium. He's a pro investor. But he's a resource investor. A few months ago – while most pro investors were sprawled on the mat gasping for air – his company was sitting on an extra US\$350 million in cash, all thanks to a well-timed coal investment Kevin had just closed out.

He knows how to make money in resources, even when everyone else is losing it. And he thinks the *real* uranium bull market could reach dizzying heights before it concludes.

Nuclear plants use a small amount of fuel compared to a traditional coal or gas powered plant. Most of

the cost of nuclear power is in building the plant – and even that may not be so costly given what nuclear batteries could contribute.

Because nuke plants use only a little uranium, that leaves scope for a bigger price rise. Where a coal plant uses millions of tonnes of fuel, nuclear plants only use tonnes. That means a big uranium boom before uranium customers can't afford to pay up.

Bambrough crunched the industry numbers. He asked himself this: how far could the price of uranium soar before it hurts demand?

His answer was stunning.

*"North of US\$500 per pound."*

For the record, the uranium price is currently sitting at US\$48 per pound. Bambrough reckons uranium could go up ten-fold before price starts to affect demand. Bambrough qualifies this by saying that the price wouldn't stay above US\$500 for long. It would be temporary. It's the upper limit. The roof. The absolute clouds.

Regardless, imagine what would happen to the share price of a real uranium producer if the price of uranium ballooned by a factor of ten.

Did you think the last uranium stock bubble was crazy? You haven't seen anything yet. If the uranium economy takes off even a little bit, this would be the investment story of the decade. And you're still ahead of it.

### Three Signs the Nuclear Economy Begins Today

The big question: why now? Why is November 2008 the real 'ground-zero' for a decade-long uranium boom?

To be honest, we can't know that it is. But three things have happened – or are happening – in the late stages of 2008. Future investors may look back upon them as the beginning of a seismic shift in world energy.

**Sign #1:** Last week, for the first time in a long time, global traded uranium demand exceeded supply. The price of uranium tumbled from US\$138 per pound last year to US\$46 this month. It ticked up to US\$48 a few days ago, despite fears for commodity demand throughout the world. The uranium price swum a few strokes against the tide – and it made ground.

**Sign #2:** The dying stages of 2008 are significant for another reason. According to the World Nuclear Association, China is scheduled to begin importing Australian uranium late this year. It's the beginning of a relationship that could create yet another huge boom market for Australian commodities.

**Sign #3:** Newspapers screamed last week that **Rio Tinto (ASX:RIO)** is reducing production of iron ore. It is. The steel market has softened for now.

But while demand for steel is taking a break, uranium is a different story.

What you might not have heard is that Rio now wants to raise uranium production at its Rossing mine in Namibia by 38%. It's rare to hear about a miner raising production of something when most people are worried about a global recession.

Uranium may not only be supplanting oil as the world's fuel. It might also be supplanting iron ore as Australia's most lucrative export. In the nuclear economy, whoever holds uranium is rich. And Australia holds 23% of the world's known uranium reserves. That's more than any other country.

It's a profit revolution waiting to happen.

There is a chance this isn't the absolute bottom for uranium, of course. I don't claim to know when the market is at its lowest ebb. But even if it isn't the bottom, there's a very good reason not to wait to invest in the nuclear future.

### How to Not Miss the Real Uranium Bull Market

Consider this. The last bear market in commodities came around the same time as the tech wreck. It wasn't over for years. Eventually, between November 2001 and August 2002, aluminium, copper, lead, nickel, tin, zinc, and oil found long-term bottoms. Many were down 50% or more from their highs. Just like today.

But by mid-2002 it was clear the worst was over. It was the end of one of the more painful periods in recent resource investing history. And surely it was time to go long in commodities again.

Wasn't it?

Well, yes and no. There were good times ahead. But the fast money had gone. Aussie mining investors who weren't in the market by that stage had missed a big portion of the early gains.

You see, **Rio Tinto's (ASX:RIO)** share price had run ahead of hard-asset markets. It bottomed over a year earlier, at \$22.65 on March 14<sup>th</sup>, 2000. If you had waited until November 2001 you would've forfeited the first 40%.

A one-off, perhaps? A freak occurrence?

Nope.

**BHP (ASX:BHP)** did the same. It bottomed in March of 2000 too. It had made double-digit gains by the

***"Even if this isn't the bottom for uranium, there's a very good reason not to wait to invest in the nuclear future."***



time metals markets hit the basement.

The same was true for **Woodside Petroleum (ASX: WPL)**. Australia's biggest oil stock was up 38% before oil turned things around in November. And gold major **Newcrest (ASX:NCM)** was in the black long before bullion had finished sliding.

The worse a bear market in commodities is, the greater and faster the damage finds its way into stock prices. Towards the end of a bear market, diggers and drillers start to get ahead of their commodity counterparts.

Let me be clear: if you want to know when the bull market in a commodity is about to begin, **watch share prices**. Stocks lead the economy. The resource shares will tell you when the rebound in commodity prices is coming.

Of course right now, hardly anyone is thinking of the next cycle. Shares are falling. Commodity prices are falling. Can you think of a worse bear market than right now?

That means there are mining and energy firms whose shares are fully pricing in a global economic disaster. Those are the ones we want to own. Those are assets that have quite possibly had the worst of it already.

Uranium has performed a long, hectic tumble since mid-2007. Its spot price has fallen 65%. Many juniors have crashed over 90%. Now is a great time to return to the uranium mining scene and sift through the rubble for a long-term investment in the nuclear economy.

### Australia's Cheapest Uranium Producer

On the ASX, there are a lot of options to choose from in the uranium sector.

The problem is that lot of them are bad options. There are dozens of tiny outfits that will simply never do anything of note. I like a couple of the quality juniors though.

**Toro Energy (ASX:TOE)** is one. It owns nearly 20 million pounds in West Australian uranium resources. That makes it one of the bigger pure players in WA. Yet it's trading at market cap of a little over \$20 million. Plus it has the support of bigger, diversified player **OZ Metals (ASX:OZL)**. OZ owns nearly 50% of the stock.

But funding over the next three years will be a huge issue. Even Toro didn't fill its recent rights offer. Their shareholders have no appetite for risk right now. And considering the potential upside in uranium alone, I think it's time to pick up a grossly undervalued blue-chip instead.

Outside of Rio and BHP, that leaves the producers **Paladin (ASX:PDN)** and **Energy Resources of Australia (ASX:ERA)**. ERA has lost 43% from its high

### The Market Panics and Dumps Australia's Best Uranium Prospect



last year. Paladin has plummeted 78%.

It's pretty obvious which stock is cheaper.

It becomes more obvious when you look at Paladin's share price in relation to the uranium it's selling. See the chart above.

Up until the September/October sell-off in miners Paladin's stock price was pretty rational. It was actually keeping in step with the uranium price Paladin received for its production. As long as that was the case, I wasn't so keen on it. Paladin's share price still kind of made sense.

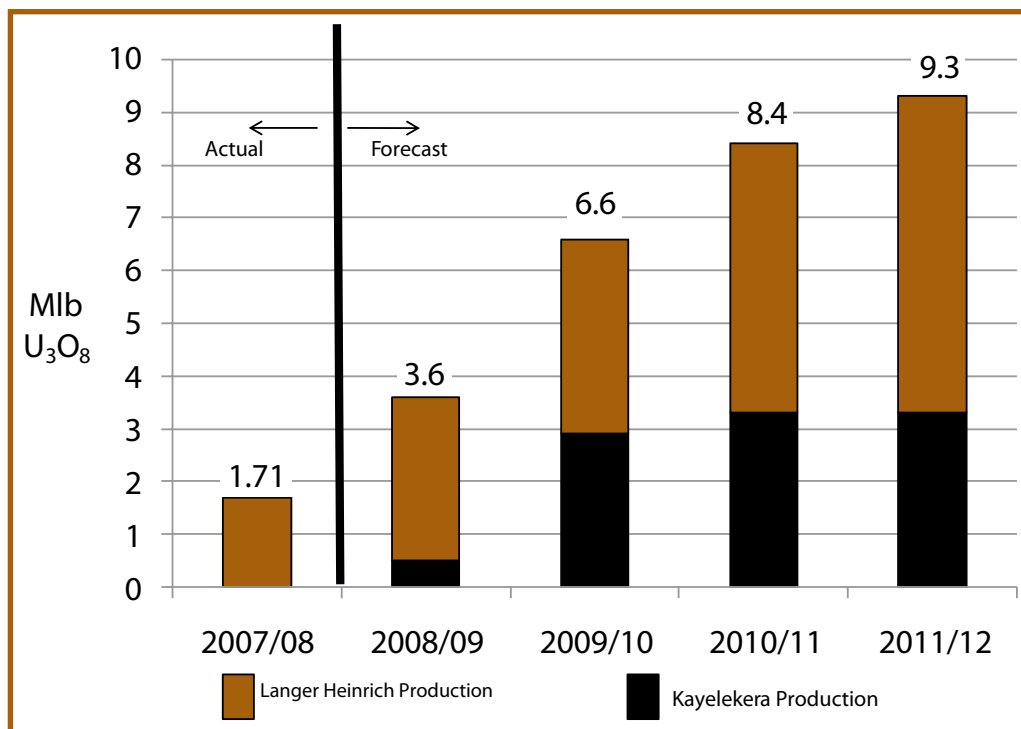
But investors panicked. And Paladin's relationship with its uranium revenues disintegrated. Carnage followed. The stock halved.

(Paladin's received price is higher than the uranium spot price of US\$48, by the way, because it sells a lot of its uranium through contracts.)

It could be that the stock market is simply predicting a further fall in the uranium price. Maybe that will happen. But if it doesn't, Paladin is now leveraged massively to the upside in yellowcake. Look at that graph. The market is pricing in Paladin's production at around US\$15-US\$20 below what the company is actually receiving.

That 'fear gap' is a nice margin of safety to have if there's any further weakness in uranium. It doesn't guarantee anything. But it certainly means the stock is undervalued as a producer today. And that makes it grossly undervalued as a producer in a world that worships yellowcake.

## Paladin's African Production Growth



### The Safety of a Producer, the Upside of a Junior

That's the key to your recommendation this month. Paladin is a producer now, and it should become a bigger producer in the future. A uranium producer in the nuclear economy is something you'll want to own.

Paladin began mining uranium at Langer Heinrich in Namibia mid last year. Last quarter it achieved its first production target at the mine. But Paladin won't stop there. It's also planning to bring the Kayelekera mine in Malawi into serious production early next year. Together these two growing projects are set to churn out 9 million pounds of uranium per year by 2012.

At today's price of US\$48, that's over US\$446 million in revenues. If the uranium price goes to US\$90 next year - like Paladin's managing director John Borshoff thinks it will - well, that production would amount to something closer to US\$800 or US\$900 million in dollar terms.

Of course, I think the uranium price could easily be back over US\$100 by 2012.

But don't think of that production growth as Paladin's big story. It's just a bridge to PDN's slice of a nuclear future. It'll provide cash flow to get the company through the interim. The real, long-term benefit of owning Paladin will be in the currently unrealised value of its Australian properties. That's what gives it the upside of a junior.

### Australia's Future: National Uranium Mining

The staggering demand for uranium will naturally

shift Australia's uranium mining policy. It's just a matter of time before new mines are approved by the Federal and state governments.

The prospect of containing pollution and carbon emissions will appeal to politicians. The prospect of bringing billions of exporting dollars into the country will appeal even more.

That's great for Paladin. It owns around 76 million pounds of the uranium reserves at its African mines. But its total suite of uranium resources includes another 90 million pounds throughout Australian states. These

include projects in WA, NT, plus a stake in the mammoth Valhalla deposit in Queensland.

As mining uranium in these states becomes more accepted, Paladin will reap the benefits. Until then, it will enjoy the luxury of two operating mines to keep income growing. It's the full package. And today it's the full package at a huge discount.

Of course, being a miner with all its operations on one continent is a risk, especially when that continent is Africa. There's no getting around this. It's a risk you have to accept before buying into the stock.

But imagine if a nuclear-powered economy was real. Imagine if you could actually wake up in the morning without worrying about petrol prices. An economy where uranium is revered like oil and its price is ten times higher.

That's what Paladin offers: leverage to the upcoming price boom. Just for fun, I calculated the value of Paladin's total resources today at US\$500 per pound. It came to a figure the size of Morocco's economy.

That's not realistic of course. But the case for nuclear energy is real. Right now it's more of an idea in people's minds. There's no doubt Paladin would skyrocket long before the idea becomes reality. Before that happens, I recommend you take advantage of how cheap the stock is today and buy it.

**Action to Take: Buy Paladin Energy (ASX:PDN) at Today's Market Price of Approximately AU\$2.40.**

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# Share Tip Updates

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## Jabiru (ASX:JML) Strikes Zinc and Copper

The number one “pebble” takeover play in Australia (see your September *D&D* for an explanation of the term) got a nice boost this month. **Jabiru Metals (ASX:JML)** went into a brief trading halt before announcing a new zinc and copper deposit.

The new find is near Jaguar, Jabiru’s major base metals project. It christened the new discovery “Bentley”. Bentley is similar in geology to Jaguar and Jabiru’s other upcoming asset, Teutonic Bore.

The company’s share price leapt 32% the day of the announcement.

At this stage there’s a lot of work to do. Jabiru now has to drill further to clarify how much metal Bentley holds. Then it has to figure out whether it can dig the metal up for a profit.

But it’s a potential value-add for the company. Jabiru owns more metal now. The questions are: how much more metal, and is it worth anything to the company?

It’s a plus, but a vague plus. The market won’t know how to value it for some time. It’s the kind of thing that should attract more investment when zinc and base metals players come back into favour.

That was the big announcement. But the company said something even more important in its quarterly report. It was in regards to Jaguar.

Even though base metals prices have fallen, Jaguar is still making money. It’s substantially cash-flow positive.

Put this down to a couple of things. One, hedging contracts. Jabiru has sold metals production from Jaguar ahead of delivery to guard against the situation we have today: lower prices for metals.

Two, it’s a great project. Jaguar has some of the lowest operating costs in the industry for zinc. This financial year JML should rake in \$40 million from operations there. That’s despite a plunge of over 75% in the zinc price.

Jaguar can make \$40 million during the bad times. The good times should be something else. That’s the beauty of cash right now. Jabiru can stand alone as a producer if it’s making cash - that means lower risk. But there are plenty of companies (BHP and Rio Tinto included) interested in buying assets that generate dollars. That means a big potential takeover upside.

## Mirabela (ASX:MBN) Updates Drilling and Financing at Santa Rita

**Mirabela (ASX:MBN)** has one of the best nickel

projects in the world. It might have gotten a little better last week.

MBN is drilling hard to try and define a larger resource underneath the Santa Rita open-pit mine. So far the results have been good – a decent average nickel grade of 0.86% - but it isn’t clear yet whether the new resource will be economical yet. This is something where the company just has to crunch the numbers. I’m hoping to hear a resource figure from MBN later this year.

Like Jabiru, this project is still worth a lot at current metals prices. Even with the nickel price trading at US\$5 per pound, Mirabela makes US\$90 million per year from Santa Rita’s nickel.

If the price of nickel bucks up like I expect it to, this mine will be worth more by the time production begins. That’s a big catalyst for a higher share price. But even good mining projects are at risk in this credit crunch.

So you should be aware that Mirabela is delaying the syndication of a large portion of its financing for Santa Rita over the next two months. This doesn’t mean Mirabela is searching for investors. It means US\$280 million in pre-existing financing that was scheduled to take place in December will take place two months later.

It’s a precaution against wild credit markets. The official line from the company is that this action should “allow credit and commodity markets to stabilise”. Regardless of how good the nickel mine is, and how much interest there is in investing in it, I’ll be keeping a close eye on how this situation develops.

## We Say Goodbye to Boart Longyear (ASX:BLY) and Moly Mines (ASX:MOL)

This is just a reminder that we’ve officially closed our positions on **Boart Longyear (ASX:BLY)** and **Moly Mines (ASX:MOL)**. We sold out of each during the month. For full details on why, have a look at your weekly updates from October 2nd, 14th and 15th. If you’re a new subscriber these are posted and archived on the website regularly.

The short story is that each stock was a victim of finance – not poor assets. Boart was simply carrying too much debt, while Moly had a lot of funding still ahead of it. A consolation is that we’ve managed to avoid further losses on the stocks. Each is down over 50% since our sell dates.

There’s a simple lesson here. In a credit crunch, the companies weak on financing are hit the hardest. That’s why I’ll be monitoring Mirabela’s situation. ■

# D&D Recommendations

## What to Buy, Sell and Hold

Please check with your broker for the latest prices.

Australia (AU\$)	Entry /DATE	Entry PRICE	Current PRICE	Gain/ LOSS	STATUS	Open/ Closed
<b>ENERGY</b>						
AGL Energy (AGK: ASX)	21/12/2006	\$16.10	\$14.89	-7.52%	Buy	Open
Paladin Energy (PDN: ASX)	17/11/2008	\$2.40	-	-	Buy	Open
Tap Oil (TAP: ASX)	22/02/2008	\$1.76	\$0.60	-66.19%	Buy	Open
Woodside Petroleum (WPL: ASX)	25/09/2006	\$40.00	\$35.92	-10.20%	Buy	Open
Worley Parsons (WOR: ASX)	23/10/2007	\$44.84	\$13.10	-70.79%	Buy	Open
<b>PRECIOUS METALS</b>						
Citigold (CTO: ASX)	06/06/2007	\$0.41	\$0.20	-51.22%	Buy	Open
Oz Minerals (OZL: ASX)	18/08/2006	\$2.74	\$0.84	-69.53%	Buy	Open
St. Barbara Ltd. (SBM: ASX)	21/12/2007	\$0.65	\$0.27	-59.70%	Buy	Open
<b>BASE METALS, MINERS &amp; MINING SERVICES</b>						
AJ Lucas (AJL:ASX)	28/05/2008	\$5.53	\$4.85	-12.30%	Buy	Open
Incitec Pivot (IPL: ASX)	28/03/2008	\$137.05	\$2.91	-57.53%	Buy	Open
Jabiru Metals (JML: ASX)	15/09/2008	\$0.29	\$0.17	-43.10%	Buy	Open
Macarthur Coal (MCC: ASX)	11/07/2008	\$17.25	\$4.09	-76.29%	Buy	Open
Mineral Resources Ltd (MIN: ASX)	02/01/2006	\$1.68	\$2.27	35.12%	Buy	Open
Mirabela (MBN: ASX)	11/07/2008	\$5.50	\$1.45	-73.64%	Buy	Open
Nufarm (NUF: ASX)	01/02/2008	\$15.02	\$9.33	-37.88%	Buy	Open

**Calculating Your Future Returns:** It's important to remember that investing in shares can lose you some or all of your money. The potential gains in this letter are based on investing in Australian dollars on the Australian Stock Exchange unless otherwise indicated and do not include taxes, brokerage commissions, or associated fees. Please seek independent financial advice regarding your particular situation. Also, while useful for detecting patterns, the past is not a guide to future performance. The value of any investment, and the income derived from it, can go down as well as up. Investments in foreign companies involve risk and may not be suitable for all investors. Specifically, changes in the rates of exchange between currencies may cause a divergence between your nominal gain and your currency-converted gain, making it possible to lose money once your total return is adjusted for currency. For any investment, never invest more than you can afford to lose, and keep in mind the ultimate risk is that you can lose whatever you've invested. If in doubt of the suitability of an investment please seek independent financial advice.

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