

# **A World with No Oil: The Next Energy Revolution**

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.

## **The New Oil**

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

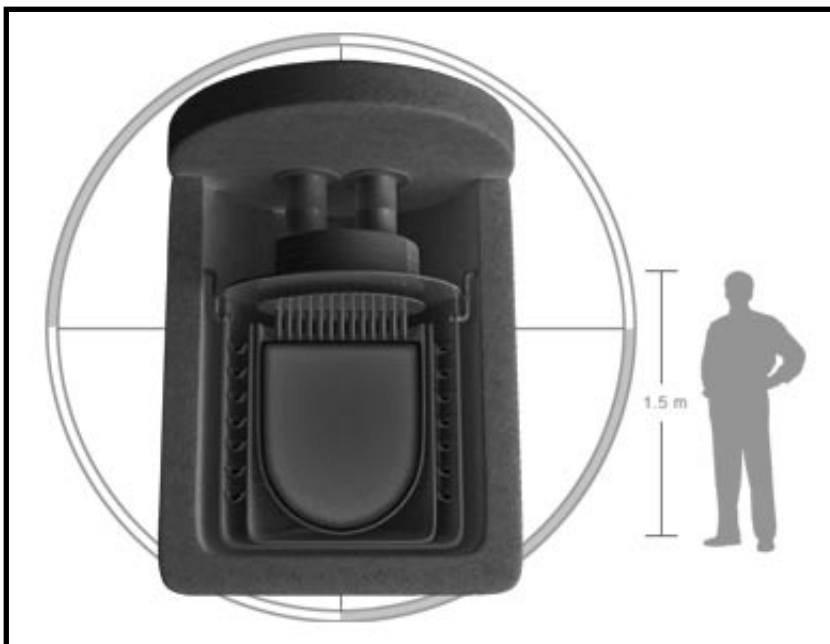
And every time Rio Billiton raises or lowers production from Olympic Dam, the world takes a keen interest. No one cares about Saudi Arabia. They're more interested in Saudi Australia.

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**

In 2008 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.

#### **A Nuclear Plant the Size of Your 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 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. 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.

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.

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

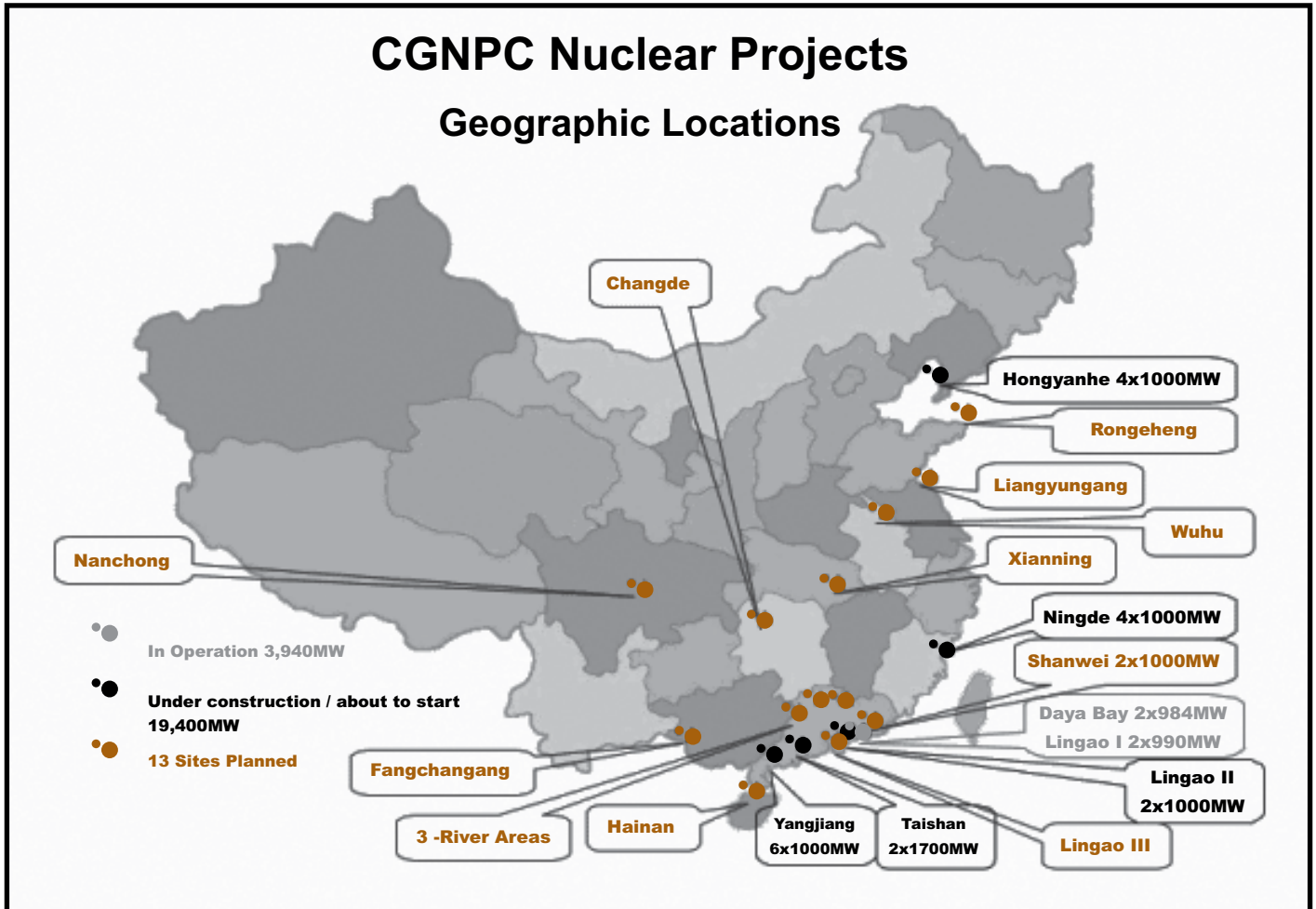
That's the easy way to think about it. The more plants that are built, the more uranium Australia will need to produce to meet global demand, and the higher the price of uranium will go. Given the staggering scale of plant proposals in China, India, Russia, France, the US and the rest of the world – 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 short term. 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.

## China's Nuclear Hunger Spreads



Source: World Nuclear Association

## Uranium \$500

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

Well, Kevin Bambrugh is one of those experts hyper-bullish on uranium. He's a pro investor. But he's a resource investor. At one stage in 2008 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?

The answer was stunning.

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

For the record, the uranium price is currently sitting at a bit over US\$50 per pound. Bambrough reckons uranium could go up ten-fold before price starts to affect demand. He 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, none of us can know that it is. But three things happened 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:** In November, 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. It ticked up to US\$48 in November, despite fears for commodity demand throughout the world. The uranium price swam a few strokes against the tide – and it made ground.

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

**Sign #3:** In the final months of 2008, newspapers screamed that iron mega-producer **Rio Tinto (ASX:RIO)** was reducing production of iron ore. It did. 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. But there's another very good reason not to wait to invest in the nuclear future.

### **Don't 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 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. ■

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