COAL CRASH

What it means for Australia

BY PAUL CLEARY
It's raining cats and dogs in the gentrified Southern Highlands, two hours' drive south of Sydney, and even though flood warnings abound and school pick-up time approaches, more than 300 locals file into the Moss Vale RSL to respond to a presentation about a proposed coalmine. Hume Coal, a subsidiary of South Korean steel giant POSCO, has plans to build an underground mine to extract 3 million tonnes of coking coal a year, amid rolling green hills and the extensive aquifers that form part of Sydney's water catchment. The well-heeled locals have used legal channels to challenge POSCO, and so far this has slowed but not stopped the company's drilling of exploration bores. Despite the gloomy outlook for coal, and the formidable community opposition, POSCO is pressing on with its plans.

This is the sixth community meeting POSCO has held in the lead-up to submitting its environmental impact statement to the New South Wales government, and most of them have been unruly affairs. Musicians Jimmy Barnes and Leo Sayer are two of the high-profile locals who have braved the elements to attend today, and the community can also count on a few billionaires, many more millionaires, and possibly Nicole Kidman to lend support.

Hume Coal project director Greig Duncan gives a series of cast-iron assurances about the mine's supposed minimal impact. He explains how Hume will cover the railway wagons to limit the spread of coaldust, a first for Australia. And this modest mine will use a “pine feather” extraction technique that will leave behind 65% of the coal reserves. The presentation, and the comments and questions that follow, underscores the extent to which coalmining is a risky business when located near water resources and population centres.

“You are not going to have subsidence impacts on surface water such as dams and streams,” says Duncan, referring to shifts in the landscape caused by mining. He adds emphatically that there will be “no subsidence impacts now or at any time in the future”.

The potential loss of water resources is a big concern, and Duncan promises that the company will “work with landholders to address any impacts on bore water before they occur”. On the issue of dust, he says the company will use “best practice dust management techniques”, including “computerised water-spraying” to minimise the spread of dust from a coal stockpile near the village of Berrima. This prompts a question about how much water the mine will use.

In the questions that follow, a man who declares he’s a former miner holds up the front page of a local newspaper that carries a headline about the coal industry’s demise. He tells the executives that they have “supreme optimism to be starting a mine now”. Another man predicts that the falling coal price will force POSCO to dispense with its covered
wagons and other impact-reducing commitments in order to keep the project viable. It won’t be leaving behind 65% of the coal, he asserts. But one member of the audience, a regular at these meetings whom the locals regard as a company plant, tells the crowd that the community needs jobs for young people who leave school in Year 10, and that cok-

Australia’s most productive farming regions – even though it could buy an existing mine to produce the same amount of coal for a fraction of the development cost, as noted by federal agriculture minister Barnaby Joyce. Further south, Korea’s KEPCO wants to open up the Bylong Valley, a thriving horse-breeding area, for thermal coal, and

DEMAND FOR COOKING COAL WON’T BE AFFECTED BY THE SHIFT TOWARDS RENEWABLE ENERGY

ing coal is used to make the steel that goes into wind farms and Land Rovers.

Ian Wiskin, the meeting’s moderator who is also a legal adviser for Chinese mining company Yancoal, reinforces the optimism that underpins the project. “We expect by the time this mine comes on stream the coal price will have recovered significantly,” he explains.

Jimmy Barnes, who has had a home in Berrima for decades, is “flabbergasted” by the presentation. “I couldn’t believe how it was set up. How they smarmed the audience, their attitudes, the plant in the audience, doing it when people are picking up their kids from school. It was just a joke.”

He adds: “It’s ridiculous, it’s a dying industry. Coal should not be coming out of the ground.”

Barnes’ view is no glib statement. Coal is responsible for around 30% of global CO2 emissions, and as the world’s major economies move towards an agreement to cut greenhouse gas emissions at the Paris climate-change summit later this year, leaving it in the ground is indeed becoming a central part of this strategy. But coal producers do not share this view. And many still think there’s money to be made.

A
t a time when the outlook for the global trade in coal looks increasingly uncertain, multinational and Australian coal companies alike have continued to climb on board what looks like a slow-moving train wreck, stoically pressing ahead with plans to expand existing mines and build greenfield operations. As China and India switch to clean power alternatives with great gusto, and as the divestment movement tightens the financial screws on this dirty industry, old king coal thinks it’s business as usual.

Despite the well-publicised troubles of the proposed mega mines in Queensland’s Galilee Basin, there are many more projects inching forward, even though they involve considerable expense to build infrastructure or to overcome community opposition and regulatory hurdles. In New South Wales, China’s energy giant Shenhua remains determined to build a 10 million-tonne-per-year, predominantly coking coalmine on the Liverpool Plains, one of

in the Hunter Valley, Anglo American has made a second application to expand its Drayton South mine after being knocked back by the state government as a result of opposition from nearby horse studs. The US coal giant Peabody Energy and China’s Yancoal both want to expand existing thermal coalmines near the vineyards of Mudgee, while in nearby Lithgow, Australia’s Centennial Coal is expanding its Springvale thermal mine. In Queensland, Australia’s New Hope Group, owned partly by the Washington H Soul Pattinson company that also owns the pharmacy chain, has won over the state Labor government to approve the expansion of the Acland thermal mine in the Darling Downs. It’s a big win for Pattinson, which had donated more than $700,000 to the Liberal National Party over the past four years. But the prize for gritty corporate determination should go to British-Australian giant Rio Tinto, which is still pushing for an extension of its Mount Thorley Warkworth mine into a conservation zone close to the village of Bulga, despite being twice knocked back by the NSW Land and Environment Court in the face of massive community opposition. Final hearings by the state’s Planning Assessment Commission are underway.

These efforts are being made despite the darkening storm clouds hanging over the industry’s future. Not only are coal prices down by around two-thirds from their peak in late 2011, but the financial underpinnings of the entire industry are crumbling. Investors in Australia and around the world have been stampeding out of coal stocks for both financial and ethical reasons. Dedicated coal producers in Australia like New Hope and Whitehaven have seen their market valuation slashed by 70-80% over the past five years, making them some of the worst-performing shares in the entire market. While these are relatively small companies, giants like America’s largest coal producer Peabody have also been brought to their knees. Peabody has posted a string of massive losses, including US$1 billion in one quarter alone, and its share price has slumped to around US$2 from a high of US$72 four years ago.

While the shares are dirt cheap, so are some of the mines.
In July this year, the Japanese conglomerate Sumitomo and Brazil’s Vale sold their Isaac Plains coalmine in Queensland for just $1, only four years after Sumitomo had bought its 50% stake for $430 million. In August, Vale offloaded a second mine for an undisclosed sum, leaving it with just one in Australia, a coking coal operation in Queensland.

The industry’s persistence in the face of such adversity reflects several contentions. First, coal company executives are convinced that the recent price plunge is a cyclical downturn rather than a long-term structural shift away from coal. The industry’s optimism is underscored to some degree by the International Energy Agency (IEA), an organisation formed in the wake of the 1973 oil crisis. Its latest forecasts show that demand for coal will continue to increase over the next four years, and prices will recover too. If this is the case, a modest recovery in prices will make some of Australia’s low-cost, open-cut mines supremely lucrative, especially given the absence of a super-profits tax. Second, even if prices stay low, the expansion of existing mines will make them more profitable by boosting short-run capacity utilisation and revenue, even though increasing the supply in a depressed market may drive down prices even further. Third, some of these projects will mine coking coal, which is used for metallurgical production, including steel-making. Demand for coking coal will not be affected by the shift towards renewable energy and other low-carbon sources.

Highly experienced equity analyst Tim Buckley argues that the IEA is relying on 2013 data and that its peer-review group is influenced strongly by the coal industry. Buckley is now a director at the Institute for Energy Economics and Financial Analysis (IEEFA), a privately funded research centre dedicated to accelerating the shift towards sustainable energy. He contends that the IEA is missing “the biggest structural turning point in coal we have seen”.

For some companies, such as Shenhua and POSCO that have already shelled out massive sums on securing licences, proceeding with projects might be about saving face for high-ranking executives. The Australia Institute’s chief economist, Richard Denniss, suggests that there isn’t much economic rationalism in these moves, and that in fact they are beyond any logical explanation. “The left think the right are all about the economy, but these people are not economic rationalists, they are values-based,” he says.

As well as opposition from communities, the coal industry now faces growing resistance from capital markets, and from some other unexpected places. Both NAB and the Commonwealth Bank have ended their relationships with the Adani mega mine in the Galilee Basin, while in Newcastle, home to one of the world’s biggest coal export terminals, the city council voted in August to withdraw more than $200 million in term deposits from the big four banks because of their investment in fossil fuels. Norway’s $1.1 trillion sovereign wealth fund, funded by the country’s oil proceeds, has dumped coal stocks for ethical reasons (and possibly financial ones as well).

But the divestment movement can only have so much effect. A much more powerful force is global demand. Emerging trends in three giant economies – China, India and the United States – now present formidable headwinds for the local coal industry. Together, these three countries consume 72% of the world’s coal, but currently they also produce 66% of all coal, according to IEA data for 2014. China’s demand for imported coal has been falling sharply of late. Both China and India are also investing heavily in renewable energy, while India is expanding its domestic coal production so it can both boost electricity output and end coal imports. And the US is increasing its natural gas and renewable energy output, thereby substantially reducing domestic demand for thermal coal and creating surplus for the export market.

This prospect presents a huge shift for Australia because its economy as a whole, and regional parts of New South Wales and Queensland especially, has relied on coal, perhaps for far too long.

The industry underpins numerous regional economies, especially along the coal seams that run south of Sydney and north-west from Newcastle to Gunnedah in New South Wales, and from Toowoomba north to Moranbah in Queensland. Indeed, of the 110 operating mines in Australia, all but three are located in these two states. (Western Australia, South Australia and Tasmania have one coalmine each, although South Australia’s is being shut down because of that state’s shift towards renewable energy. All of Victoria’s coalmines extract lignite, or brown coal, which is used locally for power generation and cannot be exported at this stage because its high moisture content makes it volatile.)

In Queensland, coal royalties today account for more than 80% of total mining royalties, while in New South Wales the comparable figure is more than 90%. For many decades, coal held pride of place as Australia’s single biggest export earner, and even though it was bumped to second place by the iron-ore industry, it raked in $40 billion last year, or about 12% of export revenue. In 2014, Australia exported a record 380 million tonnes of coal, enough to fill 1.3 million of those big yellow trucks that have become synonymous with Australia’s prosperity. It is the second-biggest exporter of coal in the world. But times are changing.

Recently, Chinese social-media sites have been abuzz with the terms PM10 and PM2.5. They refer to the particulate matter (up to 10 or 2.5 micrometres in
size) produced by the burning of fossil fuel, especially coal, diesel and heavy oil. These particles, also abundant near mines and coal-handling operations, are many times smaller than the width of a human hair, and can enter the bloodstream and cause cancer. China's double-digit economic growth over the past decade has been driven by coal-fired emissions could well peak by 2025, or perhaps even earlier. Tim Buckley supports this analysis, saying that changes underway in China will hasten its shift away from imported coal. “China's growth is now decoupling from energy demand. In 2015 its economy is forecast to grow by 7%, but energy demand has increased by only 1.3% ... Everything

"IN THE NEXT YEAR OR TWO, [INDIA] WILL BE ABLE TO STOP IMPORTS OF THERMAL COAL"

heavy industry, and this has made air pollution so bad that the central government has responded by declaring a “war on pollution”, with a primary focus on thermal coal. In 2012, the central government began measuring levels of PM2.5, which are considered more dangerous than PM10, and the results have been astonishing. In 2013, PM2.5 levels in Beijing reached 900 micrograms per cubic metre; the World Health Organization considers the safe daily level to be 25. The priority given to reducing pollution was so great that Chinese premier Li Keqiang likened it to the fight against poverty over previous decades. A key part of the strategy, he said, involved changing "the way energy is consumed and produced".

China burns a mammoth amount of coal – far more than any other country. With 2836 million tonnes consumed in 2014, China's demand alone represented 50% of all the coal burnt in the world. In a single month, the country burns the equivalent of all of Australia's annual exports of thermal coal. Over the past decade, China's growth has been greatly dependent on imported coal. Its imports rose from around 50 million tonnes in 2007 to more than 300 million tonnes in 2013. But they peaked in 2014, and have since fallen.

Some analysts have called this reversal a turning point, arguing that it represents a profound structural shift rather than a cyclical aberration. Australian academic Fergus Green, who is now with the London School of Economics and Political Science, recently wrote a paper with British economist Nicholas Stern arguing that China is now taking remarkable and unprecedented action to address emissions, and this has already affected coal consumption. Green and Stern pointed out that after coal consumption grew by 9-10% every year in the first decade of this century, it fell in 2014 by nearly 3%, according to data released by the Chinese government, and demand fell even further in the first quarter of 2015. This trend reflects both a shift in the structure of the Chinese economy, away from energy-intensive heavy industry and into services, and a shift towards cleaner sources of energy production.

Green and Stern argue that China's greenhouse gas China has been talking about, moving away from heavy industry, is happening.

"The Chinese government needs to grow energy production to stay in power, but they need to solve the pollution problem ... China is now anything-but-coal. It has a massive install of hydro, wind, solar, gas, plus energy efficiency. It’s adding 20 gigawatts a year each of wind and hydro. Coal is therefore, by definition, a residual. In 2014 it generated 72% of China's power, but by 2020 [we forecast] this will drop to 59%, even though the economy is still growing strongly.”

This shift may not happen fast enough to substantially reduce China's coal burning any time soon, given the considerable demand for energy from the country's growing middle class.

But whether total consumption falls rapidly or not, the growth of Chinese domestic production over the past three decades has affected its imports of coal. The Australian federal government's Office of the Chief Economist (OCE) notes in its latest quarterly brief that China's imports of thermal coal declined by 32% to 54 million tonnes in the first four months of 2015. This reflected not just efforts to transition out of coal and increased local production but also the slowing of the economy in late 2014 and early 2015.

Despite these signs, the OCE seems to share the industry's hope that this is just a cyclical downturn. More Chinese coal-fired power plants are coming on stream, and the OCE optimistically believes that Australian coal will be needed to fire them. China has 96 gigawatts of coal-fired capacity under construction or approved for construction, which is almost twice as much as Australia's total installed capacity.

The OCE is hopeful, too, that Indian demand will be a significant driver. But relying on India also sounds like wishful thinking.

Australia's coal output is divided almost equally between thermal coal, which is used for power generation, and coking coal, which is essential for making steel. Any analysis of coal should distinguish between these very different commodities, given that much of the recent
debate about the end of coal is really about thermal coal.

In 2014 Australia produced 248 million tonnes of thermal coal; 53 million tonnes were used in local power stations, leaving 195 million tonnes for the export market. This was worth 20% of the world trade, earning around US$17 billion in revenue. Thermal coal prices are now plumbing US$5 to a tonne, compared to a 2012 peak of around US$150 a tonne.

As for coking coal, Australia produced and exported 186 million tonnes in 2014, accounting for 60% of the global trade in coking coal. Prices for coking coal are considerably higher than those for thermal coal, and this smaller volume of exports earned $23 billion in export income. Although coking-coal prices have fallen much further, from a high of US$320 a tonne in 2011 to around US$80–90 a tonne at present, the current level of prices is still more than double the five-year average from 1999 to 2004, before the mining boom got underway. This might best explain why coal companies are especially keen to push ahead with coking-coal projects in Australia. The prospect of another price surge, perhaps driven by Indian demand, would make them spectacularly profitable.

The intensive use of steel is one of the more reliable trends to emerge from the process of industrialisation. Steel is a basic input in the goods manufactured by heavy industry in emerging economies, and it is also needed to build the cities – especially for roads and high-rise buildings – that mushroom around industrial centres. Steel-making requires a great deal of coal, about 800 kilograms for every tonne of steel. Data from the 1850s onwards shows that when every major economy has industrialised, the amount of steel consumed relative to the size of the economy has risen sharply before peaking and then falling away as the country developed a services sector. This happened in the US from the late 1800s onwards and in Japan after World War Two. And it has been happening in China over the past 20 years. It took a decade for China’s steel output to rise from 50 million tonnes a year to 100 million tonnes, which it reached in 1995. From 2005, China’s steel production began increasing by 100 million tonnes every 18 to 24 months, before peaking at 820 million tonnes in 2013.

India’s steel production is almost exactly one-tenth of China’s, at 83 million tonnes. India’s rise as an industrial powerhouse has really only just begun, which is why some analysts in the resource industry believe that the so-called resource super-cycle could span decades. This was the thinking within Australia’s federal treasury before the global financial crisis. According to documents released under the Freedom of Information Act, officials believed that the rise in Australia’s terms of trade could be considered “permanent”.

While China’s demand for imported coking coal fell 17% last year and our government forecasts a further 44% fall this year to 45 million tonnes, India’s demand rose 17% and 18% in each of the past two years, reaching 50 million tonnes in 2014. In fact, India’s imports of coking coal matched those of Japan’s exactly that year, each with 50.7 million tonnes.

When it comes to power generation, however, India tells a very different story. It has the technology and the political will to boost renewable energy generation and end its dependency on imported thermal coal. India plans to address the energy needs of more than 300 million impoverished people and its growing middle class by leapfrogging the century-old, coal-fired power grid and moving directly into locally generated clean energy. Its total power generation is about one-fifth that of China’s, with 60% of it generated through coal. But the government plans to boost renewable energy supply at a cost of US$250 billion by 2022, according to a recent IEEFA report. This involves a tenfold increase in solar generation to 100 gigawatts and a fivefold increase in wind generation to 60 gigawatts, plus biomass and small-scale hydro projects. Last May, India’s energy minister, Piyush Goyal, said he is so confident that these reforms will work that “in the next year or two, we will be able to stop imports of thermal coal”.

India’s strategy is being driven by the realisation that the country has the capacity to develop without following China’s initial path of being massively dependent on imported coal. Even the Indian power giant Adani, behind one of the two mega mines in Queensland’s Galilee Basin, says that future energy will come from domestic coal and renewable energy, not imported coal.

India’s own coal output is growing at double-digit rates, and Minister Goyal has set an ambitious target of boosting production to more than 1 billion tonnes a year, or more than double Australia’s total output. While India’s Supreme Court recently cancelled more than 200 coal licences, the government has been busily auctioning these blocks as part of its strategy to ramp up production. This is bad for the local communities (who are often displaced), for climate change, and for the Australian coal export trade.

Australia also has other export competition now. Indonesia is one example: 15 years ago it exported just 50 million tonnes of coal compared to Australia’s 200 million tonnes, but it now exports 420 million tonnes of coal a year, making it the biggest exporter in the world.

No other country in the world has more coal than the US, and its success as an industrial powerhouse has been built on the supply of this cheap and abundant source of energy. But the shift is on, and US company
Peabody has taken a nosedive in recent years because its fortunes have been smashed on two fronts. Globally, the falling coal price has hit export earnings, while at home the company has faced a dramatic move away from coal-fired power generation. Just five years ago, 50% of power generation in the US was coal-fired, but in April this year, coal generation fell to 30% of the total. For the first time ever, it was surpassed by electricity generated from natural gas, while renewables had risen steadily, albeit from a small base. The US Energy Information Administration (EIA) predicts
In Australia, Peabody has embarked on a massive rationalisation campaign, including this year's sale of its Wilkie Creek mine in Queensland for just $20 million. The company had previously secured an agreement to sell the mine to embattled coal magnate Nathan Tinkler for $150 million, but that fell through when he failed to make payments. Originally, Peabody had hoped to raise $500 million from the sale. It is also looking to sell the Burton mine in central Queensland. Despite Peabody's troubles, the company remains very optimistic about coal mining in Australia, and is pressing ahead with plans to expand its Wilpinjong open-cut mine near Mudgee, in western New South Wales.

Invited to give a presentation to the G20 in Brisbane last year, head of Peabody's Australian operations Charles Meintjes drew on many of the themes of the company's new advertising campaign, "Advanced Energy for Life". One of Meintjes' slides had a picture of an ultrasound of a baby with the words "Energy is vital" printed on it.

Peabody's plans, in the face of extreme financial pressures, underscore one of the key reasons why a significant part of the coal industry in Australia will remain viable for many years to come. Despite its advertising, Peabody mainly focuses on producing and exporting not thermal coal, for energy, but coking coal, for steel.

After more than 150 years of coal mining in Australia, there are around 300 derelict mines scattered around the country. In addition, some of the 110 operating mines are nearing the end of their economic lives, and this demise will be accelerated by the falling prices. Much of the debate about Australia's post-coal future has focused on jobs and regional impacts, but very little has been said about how state governments will be able to manage the holes left behind, literally.

The location of mines in New South Wales and Queensland closely follows the slopes of the Great Dividing Range, which means that they also intersect with fertile farming land and the Great Artesian Basin. Most of Australia's coal mines are open-cut operations, which helps make Australia's industry more efficient. But it also raises the environmental risk of contamination for decades to come.

For its coalmine on NSW's Liverpool Plains, Shenhua plans to backfill the proposed eastern and southern pits but will leave a western pit covering an area of 100 hectares down to a depth of 60 metres. In its assessment, the federal government's Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development said leaving a large open-cut pit behind and two infilled pits creates significant risk in a region that has abundant underground aquifers. "Both the final void and seepage from backfilled pits present potentially significant long-term environmental hazards,"
which have not been adequately addressed by the proponent.” In fact, the Shenhua mine is atypical of the way coalmines have developed in Australia, as most approvals allow companies to leave a final void for the entire operation. Without the right to inflict such egregious environmental damage, the economics of many mines in Australia would not stack up.

**AUSTRALIA’S RELIANCE ON THIS INDUSTRY NOW LOOKS LIKE A BAD STRATEGY**

State governments, which are responsible for most of the regulatory approvals of mines, knock back very few proposals. They are willing to accept significant environmental risk or, in fact, to impose this on local communities in the form of that big hole left in the ground. Governments have been reluctant to enquire into the health impacts of coalmines on local communities; in New South Wales, there has never been a study into the health of the people living nearby. While dust is a major issue for current operations, the hazards to human health into the future are considerable. According to US group Physicians for Social Responsibility, the disposal of slurry (a by-product of the washing process) in dams or in spent mines presents a risk to groundwater supplies. The washing plants that are an integral part of coalmines leave behind heavy metals such as mercury and chemicals including arsenic.

The risk of environmental damage from abandoned mines is exacerbated by the fact that coal companies have been dragging the chain on rehabilitation. As a community engagement executive from Xstrata (now Glencore) told locals in the Bulga region a few years ago, the company was behind on its rehabilitation because “there has been no push” from the government to do so. In fact, governments aren't terribly interested in rehabilitation, because it may deny them the opportunity to earn royalties in the event of a future price recovery. They are more than happy to leave the pits exposed, even though the resulting dust storms blow across population centres.

A 2014 report by the Queensland auditor-general was highly critical of government practices in regard to data collection on rehabilitation. It said the environment department was relying on paper files that were tucked away in regional offices, and that “staff members do not record information routinely in a consistent, reliable or accessible way”. The same year, the NSW auditor-general reported that there are more than 100 derelict mines located on Crown land in the state, and that the government was “aware that seven large scale derelict mines on Crown land are potentially high risk to the environment and public health”.

In Victoria, the 2014 fire at the Hazelwood mine burned for more than a month, exposing Gippsland residents to toxic smoke and ash, amid accusations its owners had mothballed the mine rather than close it entirely and pay to remediate it.

As Richard Denniss argues, “all of the claims the mining industry makes are massive exaggerations based on looking at one side of the ledger. The mining industry takes full credit for the indirect benefits of mining, but no responsibility for the indirect costs.”

One strategy to help communities in mining regions make the transition away from coal could involve rehabilitation programs for ex-mineworkers, but there are a couple of hurdles that first need to be cleared. Governments would need to acknowledge their own regulatory failure and accept that they need to intervene. And the mineworkers’ union, the CFMEU, would have to accept that its demand for existing high wages to be maintained as part of its “just transition” policy is unrealistic. Without such an aim, and without such a compromise, mining communities, ex-mineworkers and the environment will all lose as the industry abandons coalmines.

While it’s true that the world will burn coal for many years to come, Australia’s reliance on this industry now looks like a bad strategy. Not only is thermal coal under major threat from global action on climate change, but the export market is also undergoing a profound change. An increasing share of the coal burnt in existing and new power plants will be sourced from the US, India, China and Indonesia. Consequently, Australia’s export prospects for thermal coal will be heavily affected.

While the outlook for coking coal presents a very different scenario, the hope that rising steel production in India will somehow offset slowing output in China seems like wishful thinking. Even though multinationals like Rio Tinto say that Chinese steel production will continue to rise and may reach 1 billion tonnes by 2030, this forecast seems hubristic given the vast amount of excess industrial and urban capacity that China’s rise has generated over the past two decades. This overhang is a huge problem in a sluggish global economy. Debate about the future of Australia’s coal industry often hinges on views about whether the recent price slump represents a temporary cyclical slowdown or a long-term structural shift. In fact, the industry will most likely be battered by both trends.