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The Mining Investment Experts

**Company Review**

5 September 2018

Analyst: Mike Harrowell

## Pacific American Coal Limited (ASX:PAK)

***“Coal junior set for rerating on back of exploration success, strong sector performance and corporate trading activity in coal assets”***

Share Price	4.7	¢ at 5/09/18
12 Mth High/Low	2.5-7.0	¢
Market Cap'n	\$7.80	mill. undiluted
Issued Shares	165.3	mill. Ordinary
Total Issued	165.3	shares + options
Cash Balance 30 June 18	\$4.4	mill.
Debt	Nil	

### Largest Shareholders 31 July 2018

Gregorach Group	12.3%
HFT Nominees	13.0%
John Wardmann & Assoc	4.9%
Dovido Pty Limited	3.6%
Robert Ashley Pearce	2.9%



Source: ASX

### Investment Perspective:

The coking coal price recovery has been sustained by solid global and Chinese economic growth. The market is concerned about the impact of the US trade tariffs, but China is responding with monetary policy easing, which is positive for steel demand in particular. Fears that Chinese growth has ended are likely to be misplaced, as China demonstrated during the GFC.

PAK has a 257Mt resource of PCI and hard coking coal. A 2Mtpa hard coking coal mine located at Elko with a cash operating cost of US\$65-90/t, a pre-production capital cost of US\$235M and a 10 year initial life would have an NPV after tax of around A\$229M (Discount 10%, coking coal price US\$140/t), giving an idea of the potential upside if PAK can deliver a project like this. Our risked valuation of PAK is A\$50M or A\$0.30/sh.

PAK was sold down over the last two years on project inactivity, but that is about to change dramatically. The company has spent its time selling non-core assets to raise cash and seeking approvals. PAK is now in the field drilling an up to 8500m program, that will likely extend and clarify its hard coking coal resources, and may allow reporting of a maiden reserve.

The market has seen some impressive coal asset deals in the last 12 months. Of most relevance to PAK is the Jameson-Bathurst deal, which would price PAK at A\$33M capitalisation, or 3x the current figure, on just the 13.5Mt of surface coal mined to prepare the flat ground required for the underground support facilities identified by the 2016 Hatch Study.

### Price Catalysts:

- Flow through from a return in positive growth sentiment
- Progress on project delivery in the next 12 months
  - Additional resource drilling
  - Maiden reserve statement early CY19
  - Progressing approvals
  - Possible project development partner and corporate developments

### Directors and Management

Geoffrey Hill	Non-Exec Chairman
Mark Sykes	Exec Director & CEO
Simon Bird	Non-Exec Director
Simon Klimt	GM Investor Relations
Dom Hill	Business Development

### Company Description

Pacific American Coal (PAK) holds Canadian coking coal leases through its 100% owned subsidiary TOCC Canada.

PAK is leveraged to the seaborne coking coal price and to the delivery of its 100% owned Elko Project. The project has a 257Mt metallurgical coal resource, within 20km of rail infrastructure.

### Compelling Points

- Producers in coking coal sector booking significant profits, and will, like Bathurst, looking to reinvest in new growth projects.
- Elko potential value of A\$266M depending on prices & costs
- Assumed hard coking coal price US\$140/t vs spot >US\$180/t
- Chinese economy to sustain its strong growth. Electricity consumption +6% yoy, steel production +4% yoy

Figure 1 Basis for valuation of A\$0.30/sh

Valuation	A\$M	A\$/sh	Shares
Unrisked value of target project	229	\$1.39	165.3M
Risk Factor	20%		
Risked value of target project	45.9	0.28	165.3M
Cash	4.4	0.02	
PAK Valuation	50.3	0.30	165.3M

Source: FEC estimates

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## Trading In Coking Coal Assets Is Heating Up

While coal may be unfashionable in an era of concern over climate change, that has not stopped the sector from being one of the best performers in the Australian equity market. While some major corporates like Rio Tinto may be exiting the industry, other major corporates like Glencore are paying substantial prices to grow larger in the sector.

Activity Includes:

- Riversdale Resources (Grassy Mountain 4Mtpa hard coking coal in Canada) attempted an A\$130M institutional IPO giving a reported market capitalisation of A\$532M (AFR Street Talk 23 March 2018) that may have become an A\$50M private placement to high net worth and PE funds valuing the company at around A\$400M (AFR Street Talk 29 June 2018). This is not a confirmed transaction, but of interest because it is a more advanced version of PAK's Elko project.
- T2 bid for the 13% of Realm Resources (RRP) that it does not own at A\$0.90/sh valuing 100% of the 3Mtpa Foxleigh mine at A\$240M.
- Wesfarmers sold Curragh for A\$700M plus 25% of any export revenue at prices over US\$145/t for the next two years to US based Coronado Coal Group (22 December 2017 WES release)
- Rio Tinto has sold a number of coal properties to Glencore, including Hail Creek and Kestrel for a combined US\$3950M in March 2018.

Among the smaller transactions:

- Atrum (ATU) agreed that JOGMEC could earn 21% of its Panorama South project by contributing A\$3.1M, valuing Panorama South at A\$11.7M (ATU release 17 August 2018).

### Coal producers one of the best performing sectors

Figure 2 Coal stocks share price outperformance relative to SP200 since 1 Jan 2018

Promoters		Producers	
KRL	557%	IEC	137%
AKM	81%	TER	112%
PAK	49%	NHC	39%
AHQ	40%	SMR	21%
WEC	29%	WHC	13%
JAL	18%	TIG	-11%
ATU	-55%	BRL	-14%
		MCM	-59%

Source: Yahoo Finance

The larger coal producers (WHC, NHC) have outperformed the SP200 since the start of the year, and also over the last 3 years. The emerging producers (TER, SMR) have been stellar outperformers.

Some of the producers have struggled, either due to court actions (BRL) or production or margin issues.

The project promoters have been a mixed bag, but in general have performed very well in the last six months. ATU is changing focus from an advanced anthracite project to a less advanced coking coal project, impacting its share price performance.

At the other end of the spectrum, thermal project promoter Kangaroo Resources is being acquired by 56% shareholder PT Bayan, in another corporate roll-up.

**Jameson/Bathurst Deal a potential model for Elko funding***Figure 3 Details of Bathurst Resources buy in to Jameson's Crown Mountain*

C\$M	Base Case	Alternative	Equity Earned	C\$M/1%
<b>Bathurst Contribution to Crown Mountain Project</b>				
2018 Exploration C\$M	4.0	4.0	8%	0.50
Sole Fund BFS C\$M	7.5	12.5	12%	0.63
Sole Fund Construction C\$M	55.0	50.0	30%	1.83
Total C\$M	66.5	66.5	50%	1.33
Bathurst Additional Funding				
Subscription for JAL Shares C\$M	55.0			
Assuming CADUSD=AUDUSD	Crown Mountain	Elko	Elko	
Resources Mt	99	257.5	3.4	
Value A\$/t resource	1.34	1.34	1.34	
Valuation 100% A\$M	133	346	4.5	
Reserves/Mine Plan Mt Saleable	27.2	13.5	20.0	
Value A\$/t saleable	2.44	2.44	2.44	
Valuation 100% A\$M	133	33	49	

Source: JAL release 29 June 2018

The Bathurst–Jameson transaction is highly relevant to PAK, because it demonstrates that mid-sized producers can be funding sources for juniors in the absence of equity or debt market support. In the figure above, we separate the Bathurst payment into the project from the payment for Jameson shares. Bathurst is potentially paying C\$66.5M for 50% of the project, valuing Grassy Mountain at C\$133M or a similar amount in A\$. That translates to A\$1.34/t resource or A\$2.44/t saleable product.

At A\$1.34/t, Elko is worth A\$33M on the 13.5Mt of open pit potential identified by Hatch in 2016, and A\$49M if it can demonstrate the 20Mt in our model (Figure 9).

PAK has a EV/t of measured and indicated resource of A\$0.05/t (Fig 40) compared to recent transactions for producers typically of A\$1.29/t to A\$4.60/t (Fig 4).

**Corporates paying seriously large valuations***Figure 4 Recent large corporate transactions in Australia*

	Curragh	Hail Creek	Foxleigh	Kestrel	Cook
Seller	Wesfarmers	Rio Tinto	Realm TO	Rio Tinto	
Buyer	Coronado	Glencore	T2 Fund	Glencore	Bounty
Completion	Mar-18	Mar-18	Bidding	Mar-18	Aug-17
Acquisition Price A\$M	700	2267	237	3000	39
Less Net Cash Acquired A\$M			-69		
Acquisition of Mine A\$M	700	2267	168	3000	39
Interest Purchased	100%	82.0%	70.0%	80.0%	100.0%
Price for 100% A\$M	700	2764	240	3750	39
Revenue Participation A\$M	200				
Acquisition + Rev. Part. A\$M	900	2764	240	3750	39
Saleable Reserves Mt		142	49.1	146	
ROM Reserves Mt	252	216	69.6	181	
Resources Mt	696	601	154.3	241	649.7
<b>Price A\$/t</b>					
Saleable Reserves		19.47	4.89	25.68	
ROM Reserves	3.57	12.80	3.45	20.72	
Resource	1.29	4.60	1.55	15.56	0.06
Prodn A\$/tpa	74	291	81	750	55
Saleable Production Mtpa	12.2	9.5	3.0	5.0	0.7
HCC	8.4	5.3		4.2	0.6
LV PCI			3.0		
Thermal	3.8	4.2		0.8	0.1

Source: Company announcements

## Recent PAK Activities

PAK's story over the last 18 months can be told by highlighting a series of releases. In that period, it has confirmed the potential of the flagship Elko Coking Coal Project, cashed up from sale of non-core assets, obtained the permits required to commence drilling, commenced the process of seeking development approval, and commenced drilling, with an updated resource expected in early 2019.

### Palaris Study Report (19 May 2017)

Experienced coal industry consultants Palaris conducted a benchmarking exercise which reached the following conclusions regarding the Elko project:

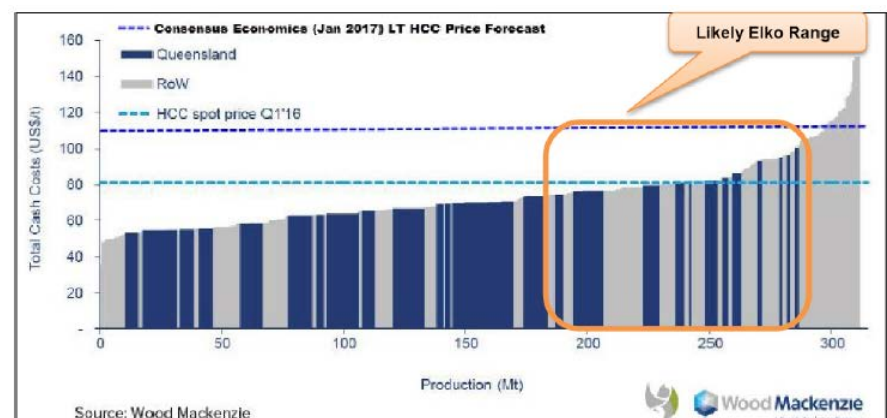
- Capital intensity was likely to be in the lower half of proposed projects
- Operating costs were likely to be competitive with other Canadian projects, in the upper half of the global cost curve, but still offering considerable margin relative to current and consensus forecasts of future prices. Since Figure 6 was published, the spot coking coal price has risen to US\$175/t and consensus to US\$140/t.
- Coal product would be mid volatile Hard coking coal comparable to what was typically exported from British Columbia, and low volatile PCI coal.
- The outcropping nature of the deposit would allow multiple pits over a 10Km strike able to quickly ramp up to take advantage of high coal prices.

Figure 5 Capital intensity of proposed coking coal projects



Source: PAK release 19 May 2017

Figure 6 Global coking coal cost curve



Source: PAK release 19 May 2017

**Palaris Strategic Review (10 August 2017)**

- Focus on 100% owned coking coal assets, particularly the Elko Project
- Proceed to obtain approval for a major drilling program at Elko
- Raise cash by selling non-core assets to fund the drilling

**Site activity suspended due to wildfires (30 October 2017)**

- Wildfire activity that came to within 2Km of the Elko tenements and the related state of emergency. Evacuation orders caused the suspension of activities.

**Asset sales (30 October 2017)**

- Shares in Intelligent Minerals sold for A\$1.9M.
- Final payment of A\$0.4M from GCI received

**Sale of South Hazell (28 March 2018)**

- Sold to North Coal for C\$1M
- Privately owned North Coal owns the adjacent Michel Coal Project
- South Hazell has not been drilled to resource status. In PAK's prospectus of 1 October 2014, South Hazell had an exploration target of 57.2-85.8Mt at Ash of 5.7% to 13.3%, Volatile Matter 25/6% to 29.6%, and CSN of 3.5 to 5.0.

**Drilling permit received (24 April 2018)**

- The approval will allow drilling over multiple years
- 8500m of drilling planned in current year's program

**Environmental GAP analysis started (6 June 2018)**

- Collection of baseline data on the Elko Coking Coal Project
- Starting point for the process of seeking environmental approval

**Exploration commences (13 August 2018)**

- Elko Coking Coal Project drill rig has been mobilized to site
- High value coal seams SM7 and SM5/6 to be focus
- Access roads and bridges have been completed
- Updated resource statement is due for release early 2019

**Purpose of drilling – Proving up the high value 5-7 Seams**

The following page includes the detailed outcrop and drill location plan and the current resources. The focus of the drilling is in seams 5 to 7, in the Western Zone, where the coal is known to be washable to a hard coking coal specification.

The current resource base for seams 5-7 is 24.8 Mt out of the total 275 Mt resource.

The drilling density may be sufficiently close to allow the company to report a reserve from this round of drilling.

The company reports resources and reserves under the Geological Survey of Canada "Standardized Coal Resource/Reserve Reporting System for Canada" Paper 88-21. This document defines four types of coal domain and sets the drill density with respect to each type sufficient to define measured and indicated reserves.

In the resource statement of 2 November 2015, the Elko geological type was defined as Moderate. For this category, confidence to declare an indicated resource, sufficient to define a probable reserve would require a drilling density of 450-900 metre centres.

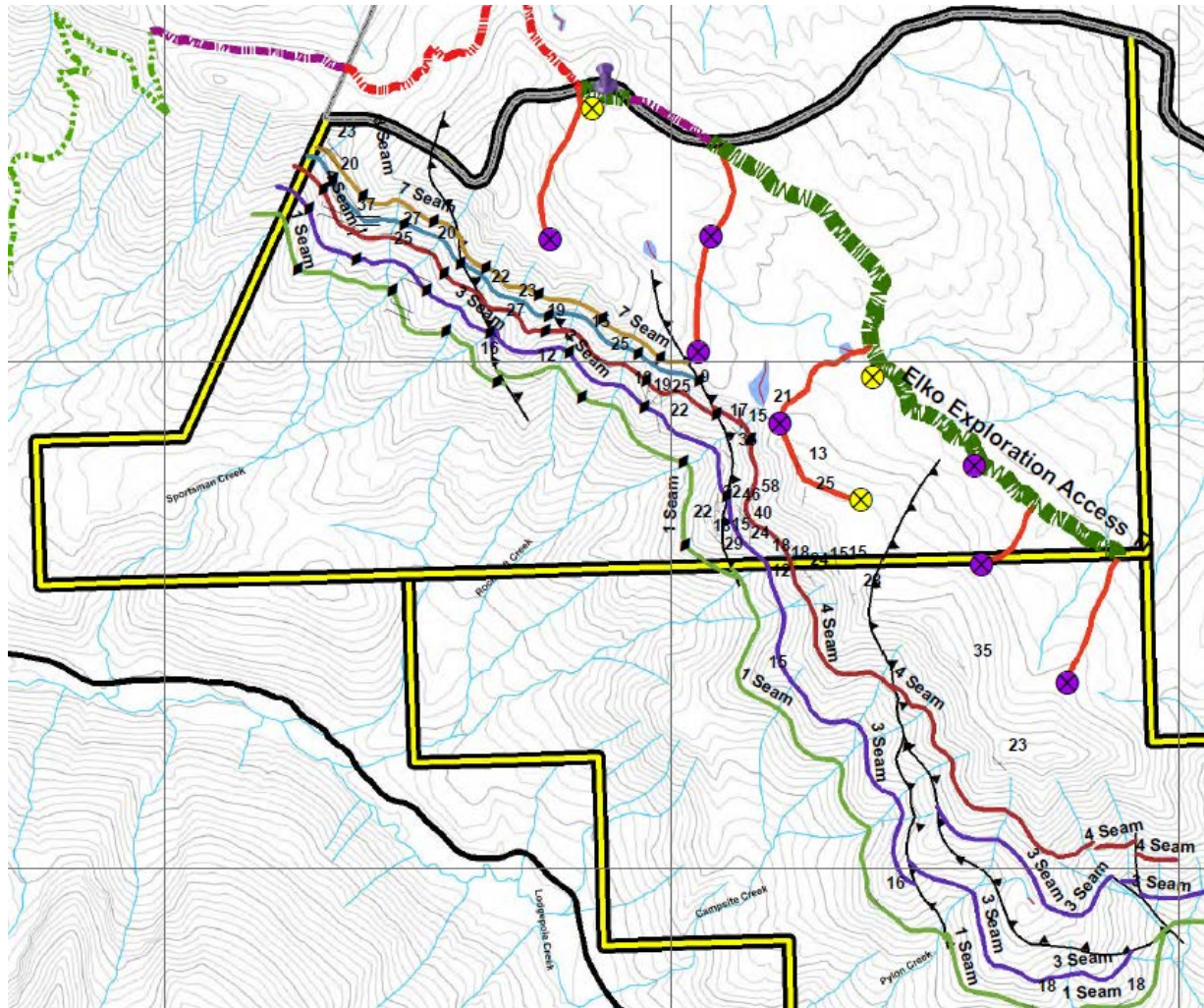
In Figure 7, the map grid lines are 2,500m apart, and the planned holes are generally 500m apart. There is already a 19.5Mt measured resource in the Western Zone. This year's drilling should upgrade the resource, and if it can add reserves, the project could advance to the Preliminary Feasibility stage, substantially de-risking the project for investors.



### Hatch 1-2Mtpa total 13.5Mt of surface mineable coal preparing for UG

The 27 June 2016 PAK release “PAK finalizes initial Elko coking coal project modelling” summarized a Hatch study into a 13.5Mt of surface mineable coal extracted to prepare flat surfaces for the major underground, producing 1-2Mtpa ROM at a strip ratio of 5BCM to 1 tonne ROM coal. The proposed pit is in the region of this years planned drilling, which would feed data directly into the Hatch study.

Figure 7 Planned drilling locations (Yellow and purple circles) - Elko Coking Coal Project



Source: PAK release 13 August 2018

Figure 8 Elko Project Resources (Seams 5-7 are expected to produce Hard coking coal, and the rest PCI - see Fig 14)

Western Zone			Central Zone			Eastern Zone			Total
Seam	M tonnes	Ave Thickness m	Seam	M tonnes	Ave Thickness m	Seam	M tonnes	Ave Thickness m	M tonnes
SM7	11.35	4.13							11.35
SM5/6	13.42	4.44				1.13	3.12		14.55
SM4	18.85	3.76	SM4	4.34	2.57				23.19
SM3	25.17	4.23	SM3	10.04	4.75	SM3	9.59	5.00	44.79
SM1	92.91	5.00	SM1	33.77	5.00	SM1	37.09	5.00	163.77
Total	161.70	4.49	Total	48.14	4.71	Total	47.81	4.89	257.65

Source: PAK Maiden Resource release 2 November 2015

## The Coking Coal Investment Proposition

### Indicative financial model and key elements

The indicative simplified model in Figure 9 shows the Life of Mine (LOM) totals and first four years of financial flows for a 10 year project that Elko has the potential to be, assuming an initial open cut, followed by underground mining. We assume 20Mt of saleable product, or 30Mt ROM can be converted from the resource of 257Mt. Our choice of 10% discount rate is high given it is in real terms, but is considered appropriate for this stage of project. The NPV at a 10% real discount rate is US\$172M, or A\$229M, and gives an indication of the uplift in PAK share price if the market became confident that the company could deliver these cash flows.

To do that, the Elko Project must deliver the following:

- A reserve base sufficient to support 2Mtpa for 10 years
- The initial open cut capital cost of US\$235M plus US\$14M to BFS and a underground capex of US\$120M, or lower
- The operating cost of US\$72/t FOB saleable or lower for the open cut
- The operating cost of US\$90/t FOB saleable or lower, for the underground
- The coal must be saleable as hard coking coal
- The hard coking coal price must be US\$140/t in current dollars or more
- There must be either project delivery assuming 60% debt or a monetization event

As PAK delivers on the key investment elements that are under its control we expect the share price to re-rate. The coal prices are discussed later in this report, and we believe our choice of US\$140/t is a solid balance between the unsustainable US\$80/t lows at the start of 2016, and the current spot price of over US\$180/t.

If no further HCC was discovered, the project could revert to an extended period of PCI production, which has not been included in our valuation.

Figure 9 Indicative Financial Model of a Potential Operation at Elko

Year	LOM	0	1	2	3	4
Hard Coking Coal US\$/t		140	140	140	140	140
PCI Coal Price US\$/t		110	110	110	110	110
Hard Coking Coal Sales Mt	100%		2.0	2.0	2.0	2.0
PCI Sales Mt	0%		0.0	0.0	0.0	0.0
Saleable Product Mtpa	20.0		2.0	2.0	2.0	2.0
<b>Financials US\$M</b>						
Revenue	2800	0	280	280	280	280
Costs	-1691	0	-144	-144	-144	-180
Royalty (included in tax)	0	0				
D&A	-415	0	-42	-42	-42	-42
EBIT	694	0	95	95	95	58
Interest Expense	-42	0	-11	-9	-8	-6
PBT	652	0	84	86	87	52
Tax	-254	0	-33	-33	-34	-20
NPAT	398	0	51	52	53	32
<b>Cash Flow</b>						
Cash from Operations	813	0	93	94	95	74
Capex	-415	-249	-4	-4	-120	-5
Debt Drawn/Repaid	0	149	-21	-21	-21	-21
Equity Raised/Dividends	-398	100	-67	-68	47	-47
<b>Cost Structure</b>						
Site Costs US\$/t ROM		20	20	20	20	36
Yield		65.0%	65.0%	65.0%	65.0%	65.0%
Site Costs US\$/t Saleable		31	31	31	31	56
Transport US\$/t Saleable		28	28	28	28	28
Admin US\$/t Saleable		6	6	6	6	6
Cash Cost US\$/t Saleable	85	72	72	72	72	90
NPV US\$M	10%	\$172	\$289	\$251	\$208	\$275
NPV A\$M @ 0.75 AUDUSD		\$229	\$385	\$334	\$277	\$367

Source: FEC estimates (see Figure 7 for supporting data)



## Valuation

At present, the resource base looks more likely to produce a mix of HCC and PCI coals. The current drilling is testing seams 5/6 and 7 in an area in excess of 2000m by 1000m. Given a seam thickness of 20m combined, as noted in Figure 14, there could be 80Mt of HCC resource, which would typically convert to 40Mt of ROM reserve, and recover to 20Mt of saleable product.

Our model assumes 20Mt of saleable HCC over a 10 year life, generating an NPV of A\$229.3M.

Figure 10 Valuation assuming an indicative project and financing

Valuation	A\$M	A\$/sh	Shares M
Theoretical Project value	229.3	\$1.39	165.3
Debt Ratio	60%		
AUDUSD	0.75		
Forecast Spend to PFS	-9.4		
Corporate for 24 Months	-1.8		
Total	-11.2		165.3
Cash on Hand	4.4		
Balance	-6.8	0.10	233.3
Preproduction Capex	-249.0		
Less Debt	149.4		
Equity Needed	-99.6	0.10	996.0
To get this NPV	229.3	0.187	1229.3

Source: FEC estimates

Valuation including financing almost entirely determined by major equity issue price. As a rough rule of thumb, the post financing valuation is double the issue price for the major project funding equity. It is a circular argument.

Figure 11 Impact of major equity issue price on valuation

Issue Price					
A\$/sh	0.05	0.10	0.20	0.30	0.40
NPV A\$/sh	0.10	0.19	0.33	0.44	0.53
NPV premium	100%	87%	64%	47%	33%

Source: FEC estimates

To avoid circularity, we have adopted a risk factor based valuation, generating our valuation of A\$0.30/sh, or a market capitalisation of A\$50.3M. This level of capitalisation is similar to Jameson (EV A\$55M) and a number of other peers that have reported reserves and PFS/BFS numbers similar to what we expect PAK to deliver over the next 12 months.

Figure 12 Risk Factor based valuation

Valuation	A\$M	A\$/sh	Shares M
Unrisked value of target project	229	\$1.39	165.3
Risk Factor	20%		
Risked value of target project	45.9	0.28	165.3
Cash	4.4		
PAK Valuation	50.3	0.30	165.3

Source: FEC estimates

While this is a long stretch from the current market capitalisation of A\$8M, we believe the current capitalisation is a function of two years of what the market perceived to be inaction for various reasons (bushfire, lack of funding, strategic re-assessment, delays in obtaining government approvals and permits). That inactivity is over, and the company is sufficiently funded and permitted to deliver news flow and value creation.

We reiterate that the Bathurst Coal valuation of Jameson Resources points to an Elko valuation of A\$49M if a 20Mt saleable HCC reserve can be proven, which is close to our valuation (see Figure 3).

## Potential to deliver key milestones

### Reserve base starts with a substantial resource of 257Mt

To sustain 2Mtpa of product at a 65% process plant yield for 10 years, 30mt of reserves will be required. PAK has a strong starting position:

- Resource of 257.5Mt at Elko
- The 19.2Mt of measured resource is in the northwest corner of the lease where mining is planned to start, so there is significant density drilling and adits there already, which should reduce the risk of a negative surprise.
- The coal has been sampled from adits on the Elko leases for quality assessment (lab scale) and bulk metallurgical testing of samples from the adjacent Fernie Leases has been conducted by steel makers in Japan.

Figure 13 Elko Resources (JORC 2012)

	Mt
Measured	19.2
Indicated	57.0
Inferred	181.3
<b>Total</b>	<b>257.5</b>

Source: PAK presentation 19 May 2016

### Initial quality testwork suggests premium hard coking coal

The quality testing reported by PAK to date refers to the extensive test work carried out on the Fernie lease along strike to the north of and adjoining PAK's Elko leases. The Fernie Leases were the southern end of the pink and orange shaded Dominion Coal Block 82 in Figure 21, and sampling from adits driven into outcropping coal on the Elko leases resulting in the data in Figure 14.

The PAK management has mapped the Fernie seams into Elko, and is confident that the Fernie seams are of similar quality to those in the Elko leases.

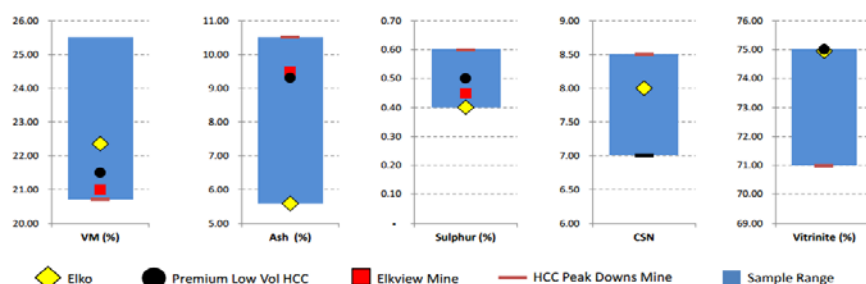
Figure 14 Average Properties of Washed Coal From Test Work on Elko Samples

Adit	Seam	Thickness m	Ash	Volatiles	Fixed Carbon	Sulphur	Swell (FSI)
F-5	7 Seam	5.9	3.9%	21.9%	74.3%	0.5%	7.5
F-6	6 Seam	3.0	6.3%	21.3%	72.4%	0.6%	8.0
F-4	5 Seam	11.2	7.4%	21.5%	71.1%	0.5%	6.0
F-3	4 Seam	6.7	8.4%	19.6%	72.0%	0.4%	5.0
F-2	3 Seam	12.2	11.3%	17.7%	71.0%	0.7%	2.5
F-1	1 Seam	14.0	10.4%	18.0%	71.0%	0.8%	1.0

Source: PAK presentation 19 May 2016

Figure 15 shows the range of results across the different seams, compared to coal specifications from mines regarded as producers of benchmark hard coking coals. Peak Downs coal is regarded as the benchmark for the Australian Hard coking coal Price, and the best coal from Fernie/Elko appears to match that quality.

Figure 15 Washed Coal Quality Range vs Major Producer Benchmark Coals



Source: PAK presentation 19 May 2016

### Initial capital cost estimated from projects in region

PAK has yet to release any data on costs, mine life, or production rates, so we had to look at companies with projects in the same region that have released more detailed information. These include Atrum's Groundhog North underground mine, which is not in the same coal field as Elko but is in British Columbia, Jameson Resources' Crown Mountain, and Riversdale's Grassy Mountain, both in the same general region as Elko. The data from these projects are presented in Figure 17.

On the bottom line of Figure 17, we have calculated the pre-production capex in US\$ per installed tonne of capacity, which ranges from US\$83.6/tpa ROM to US\$100.9/tpa ROM. For PAK's Elko project we have conservatively assumed a combined open cut and underground US\$115.4/tpa ROM or US\$353M for 2Mtpa of finished saleable product. This reflects additional cost for starting both an open cut and an underground operation. Our capex estimate is US\$235M (Fig 17 PAK OC column) plus costs to BFS of US\$14M (Page 13) for a total of US\$249M (Fig 9 Year 0).

Because Elko is expected to have an open cut stage followed by an underground, the pre-production expenditure would be lower (our estimate US\$235M), with the underground development costs being incurred after open cut mining has started. The open cut mine fleet would be supplied by a contractor, given the short open cut life, and so does not show up as capital.

The comparison projects in Figure 17 are similar to Elko in that the transport services are provided by others, and each project needs its preparation plant, train loader, supporting infrastructure and the initial mine development. Atrum's Groundhog North is an underground mine, while the other two are open cut mines.

### Offsite operating costs evidenced by existing mines

The offsite costs include rail transport to port and the port and shipping charges. The Elko rail is provided by Canadian Pacific, shipping through Vancouver. Atrum's Groundhog will ship through Ripley Island, so we have ignored their offsite costs, while all the others would ship through the Vancouver ports of Westshore and Neptune.

We also have the actual transport costs incurred by Teck, which would be comparable to the charges Elko is likely to see. Elko will be 100Km or at least US\$2/t closer to the port than Teck's mines on average, so we would expect to see an off site transport cost around US\$26/t saleable product, to which we add 20Km of truck haul from mine to rail at US\$0.10/t/Km and rehandling to get the US\$28/t we assume in Figure 16.

Figure 16 Summary of British Columbian operating costs

USD/tonne saleable	Teck	Jameson Resources JAL	Riversdale Resources	Atrum ATU	Pacific American PAK	Pacific American PAK
	Various	Crown Mountain	Grassy Mountain	Groundhog North	Elko	Elko
Mine Type	OC	OC	OC	UG	OC	UG
Strip Ratio BCM:t saleable	12.2	9.8	9.4		7.7	
Site Costs	45	49		59	44	62
Transport	28	26		23	28	28
Total OpEx	73	75	72	82	72	90

Source: Figure 14 sources and Teck June 2018 quarterly report

### Onsite operating costs are very specific to each project

Onsite costs are the hardest to estimate, because they depend on the type of mine (open cut or underground) and then the detailed conditions. They will drive the US\$/t ROM or raw coal costs, and the cost of producing a saleable tonne depends on the yield, which we do not know for Teck, but is 62.5% for Groundhog, and in Crown Mountain's case is estimated at between 40% and 60%. We have used 65%, in line with the Fernie test work, and allowing for 5% mining dilution (source: BC Mines & Energy Geological Survey Assessment Report 00356).

Of the three cost elements (Initial Capex, Offsite Opex, Onsite Opex) the Onsite Opex estimate in our indicative model is the most speculative, and could be above or below our estimate by a material amount. We have added to the Crown costs of US\$2.29/t moved, to reflect contract mining, rather than owner operator.

Figure 17 Source of Cost Data: Projects in the Region

	Atrum ATU	Jameson Resources JAL	Riversdale Resources	Pacific American PAK	Pacific American PAK
	Groundhog North	Crown Mountain	Grassy Mountain	Elko	Elko
Mine Type	UG	OC	OC	Initial OC	UG
As At	22-Jun-16	26-Apr-17	Nov-15	27-Jun-16	FEC Est
Measured MT	156	68.9			19.2
Indicated MT	453	6.0			57.0
Inferred Mt	407	23.7			181.3
Total Mt	1016	98.6	154	13.5	257.5
Reserves Mt		55.8		13.5	
Total Saleable Mt	24.6	27.1		8.8	
Life Yrs	28	14	24	4	
Waste M BCM/yr	0.00	19.07	37.60	15.38	
Strip Ratio BCM:t ROM		5.15	5.17	5.00	
Production Mtpa ROM	1.41	3.70	7.27	3.08	3.08
Yield	62.5%	52.6%	55.0%	65.0%	65.0%
Saleable Prodn Mtpa	0.88	1.95	4.00	2.00	2.00
Hard Coking Coal		84%		100%	50%
PCI		16%		0%	50%
Currency	USD	USD	USD	USD	USD
CADUSD		0.75	0.75	0.75	0.75
Mining US\$/BCM Moved		0.73			
Mining US\$/t ROM	30.14	2.29		3.00	30.14
Processing US\$/t ROM	6.76	6.20		6.20	6.20
Contingency US\$/t					
Site Costs US\$/t ROM	36.9	8.48		28.43	40.57
Waste US\$/t Saleable		26.47		23.08	
Coal Mining US\$/t Saleable		4.35		4.62	46.37
Processing US\$/t Saleable		11.78		9.53	9.53
Admin US\$/t Saleable	12.21	6.52		6.52	6.52
Mine Costs US\$/t Saleable	59.03	49.12		43.75	62.42
Transport US\$/t Saleable	23.37	25.50		28.00	28.00
Royalties US\$/t Saleable	1.35				
Cash Cost US\$/t Saleable	95.97	74.62	71.54	71.75	90.42
Sustaining Capex US\$/t ROM		3.17			
Capex US\$M					
Mining Fleet & Const'n	72.7	108.7		40.0	120.0
Prestrip		15.6		10.0	
CHPP & Loadout	12.3	63.7		63.7	
Infrastructure	6.9	93.2		93.2	
Power Supply	12.6				
Offsite Infrastructure	32.5				
Contingency		28.1		28.1	
Feasibility & Permitting	5.0				
Total	142.0	309.3	615.4	235.0	120.0
Capex US\$/tpa ROM	100.9	83.6	84.6	76.4	39.0

Source: Atrum PFS 22 June 2016, Jameson PFS 26 April 2017, Riversdale November 2015 Pres  
PAK Hatch Study 27 June 2016, FEC estimates

## Project Delivery/Monetisation Event

### Monetization likely to be closer than development

The Elko Project has the potential to be a particularly attractive asset to other corporate buyers or partners, if it can deliver on the project elements discussed above. This would open the way for:

- Partnering with another (larger) company to contribute equity and share development risk
- Selling the project for cash to a larger developer
- Takeover of PAK by a larger developer

What would make the project particularly attractive is if the coal was demonstrated to be saleable as Hard coking coal, and there was sufficient quality. This is an element that we believe could be demonstrated relatively soon (ie in the next 12 months).

Teck is a Canadian miner which earned C\$739M of its C\$1012M pre tax profit in the June 2018 quarter from mining in the same region as Elko. In the quarter, Teck sold 6.6 Mt of mainly hard coking coal, at an average realized price of US\$183/t, and a gross margin of C\$145/t.

Teck could be a potential partner or acquirer, among others. Its Coal Mountain operation will cease mining in the September Quarter. Selling raw coal to Coal Mountain could be a low capex initial development option for PAK.

### Development schedule - production more likely by late 2021

Figure 18 Development timelines to production

	2016				2017				2018				2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Renewal of Exploration Licence			X																					
BC Mines & Energy Approval																								
First Nation Contact																								
First Nation Consultation																								
Notice of Work Permit																								
Resource Reporting																								
Exploration																								
Concept Studies			X																					
Reserve Reporting																								
Pre Feasibility Study																								
Feasibility Study																								
Funding																								
Project Development																								
Commence Operations																								

Source: FEC estimated time line based on PAK presentation 19 May 2016

### Funding required to stay on schedule

The company has cashed up through asset sales, and is in a stronger position now than it has been for a number of years, with A\$4.4M cash on hand.

Sustaining the corporation is costing A\$0.8M pa. The 27 May 2016 Repositioning of Coal release indicated the following costs, which are probably still relevant.

- Complete concept (scoping) study A\$0.4M
- Pre-Feasibility Study including Resource drill out A\$6.0M
- Feasibility Study A\$4.0M
- Bankable Feasibility Study A\$4.0M



## Description of Assets

### Located in a traditional coking coal export region

Figure 19 Location Map of Lower Western Canadian Coalfields With PAK's Elko

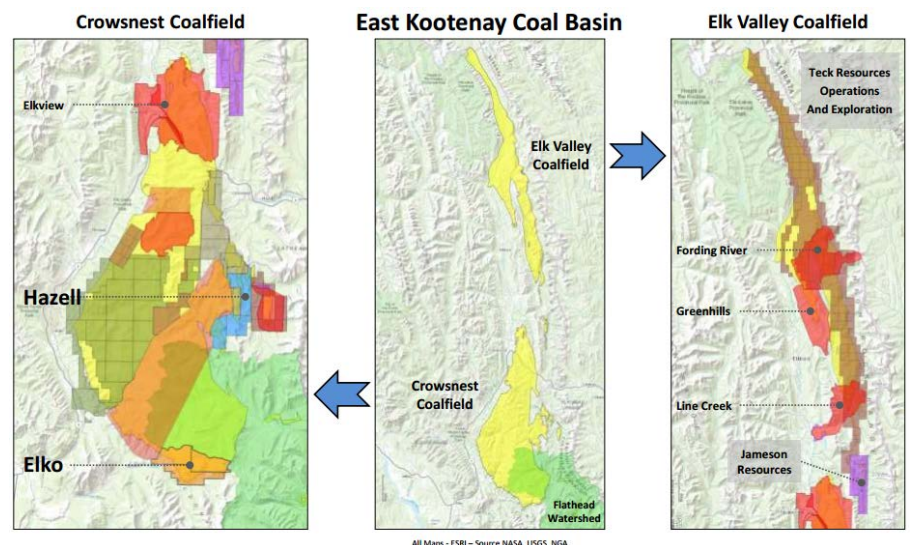


Source: Jameson Resources PFS release 17 April 2013

PAK's Elko leases are located in the Crowsnest Coalfield, which forms the southern limb of the East Kootenay Coal Basin, which in turn hosts major Canadian producers Fording River, Greenhills and Elkview. That basin is connected to the West Shore and Neptune Export Terminals in Vancouver by the Canadian Pacific rail line shown in Figure 9. A detailed review of the British Columbian Coal industry is available at:

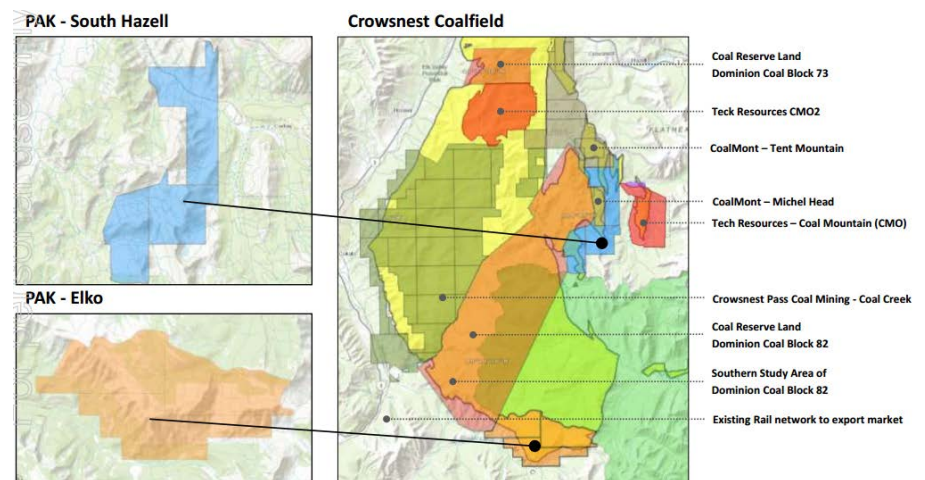
<http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/InformationCirculars/Documents/IC2016-2%20coal.pdf>

Figure 20 Pacific American Coal Lease Locations



Source: PAK presentation 19 May 2016

Figure 21 More Detailed Lease Location and Neighbours



Source: PAK presentation 19 May 2016

PAK has a number of neighbours. Coal Mountain, the Teck operation in the red lease to the right centre of the Crowsnest Coalfield map above, is the location of the nearest rail spur to the South Hazell lease which was recently sold by PAK. Teck will mine its last coal from Coal Mountain in the September 2018 quarter.

The rail line shown near Elko runs up the Elk River Valley to the west of all these leases. Elko is most likely to truck due west to the rail.

Figure 22 Greenhills Open Cut Mine, Elk River Coalfield, BC



Source: <http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/InformationCirculars/Documents/IC2016-2%20coal.pdf>

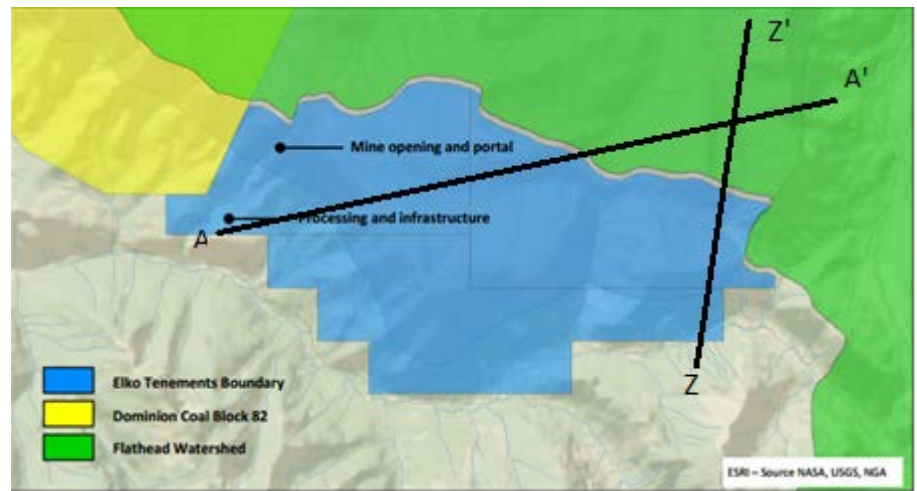
### Mine location and plant design has commenced

The company commissioned Hatch to work on the mine and plant design. The following details have been released to the market (27 June 2016) so far:

- 1-2Mtpa saleable production
- Short term open cut mine to provide initial coal to provide early cash flow
- 5BCM waste to 1 tonne ROM coal stripping ratio
- 13.5Mt resource captured in open pit shells
- Longer term underground production to follow
- Two stages of crushing and screening
- 3 circuit preparation plant
- Product will go to the rail head 20Km to the west of the deposit by truck
- From the flowchart, it looks like a single product

The open cut stage would last up to four years, and the mining would provide flat surfaces on which to construct the surface support infrastructure for the underground.

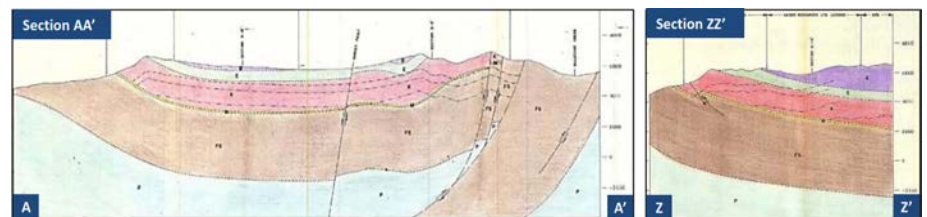
*Figure 23 Location of Mine and Plant*



Source: PAK release 27 June 2016

From the graphic in Figure 25, the open cut is mining the HCC seams (5,6 & 7), and conveying downhill (requiring low fuel consumption) to the processing plant.

*Figure 24 Section through deposit showing flat structure (refer A-A' Z-Z' in Fig 9)*



Source: PAK presentation 19 May 2016

While the strata are shown in Figure 24 as being relatively flat dipping, the underground will depend on the detailed structure, including minor faulting, intrusions, variations in seam thickness that will require detailed drilling to determine the location and amount of mineable coal. The focus appears to be on seams 5/6 and 7, which appear to have the highest quality (72.4-74.3% Fixed Carbon, 3.9-6.3% ash, and 7.5 to 8.0 FSI or Swell Index). At outcrop, those seams are 11.2m, 3m thick, and 5.9m respectively (Figure 14), which may allow selection of the best part of the seam to improve recovery.



Figure 25 Open Cut Mine, Processing Plant and Topography

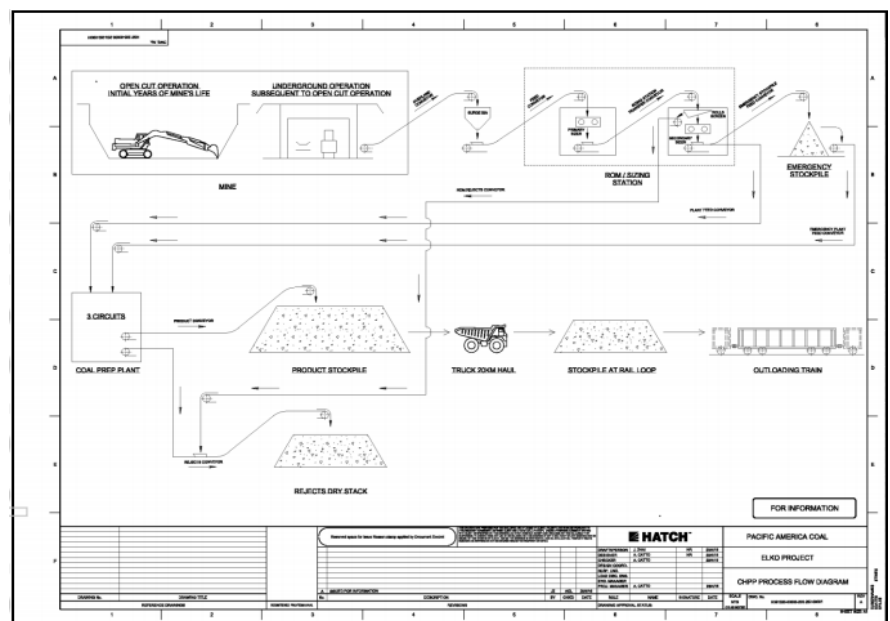


Source: PAK release Hatch Study 27 June 2016

The processing plant has the role of separating the coking coal from the entrained stone and ash. Stone comes from mined roof, floor and stone partings within the coal seam. This tends to separate from the coal and is removed in the initial crushing and screening stages. Ash is finer entrained non carbonaceous material that is removed, at the cost of losing some coal, using dense media separation in the processing plant.

The detailed drilling may reveal that a higher quality part of the seams can be selected at the mining stage, reducing the size of the plant or increasing its product output.

Figure 26 Project Flowsheet



Source: PAK release Hatch Study 27 June 2016

## Infrastructure

### Available port capacity

- West Shore Terminal 29Mtpa capacity
- Neptune Terminal 12.5Mtpa and expanding to 18.5mtpa
- Combined utilization 65%
- Fraser Surry Docks planning to build 4Mtpa of capacity

There is some 17mtpa of spare capacity, with another 10Mtpa planned for construction.

### Rail path to port

Road transport to rail head)	20Km
Rail to Port of Vancouver	1000km

Figure 27 Rail Path to Port



Source: PAK release 27 June 2016

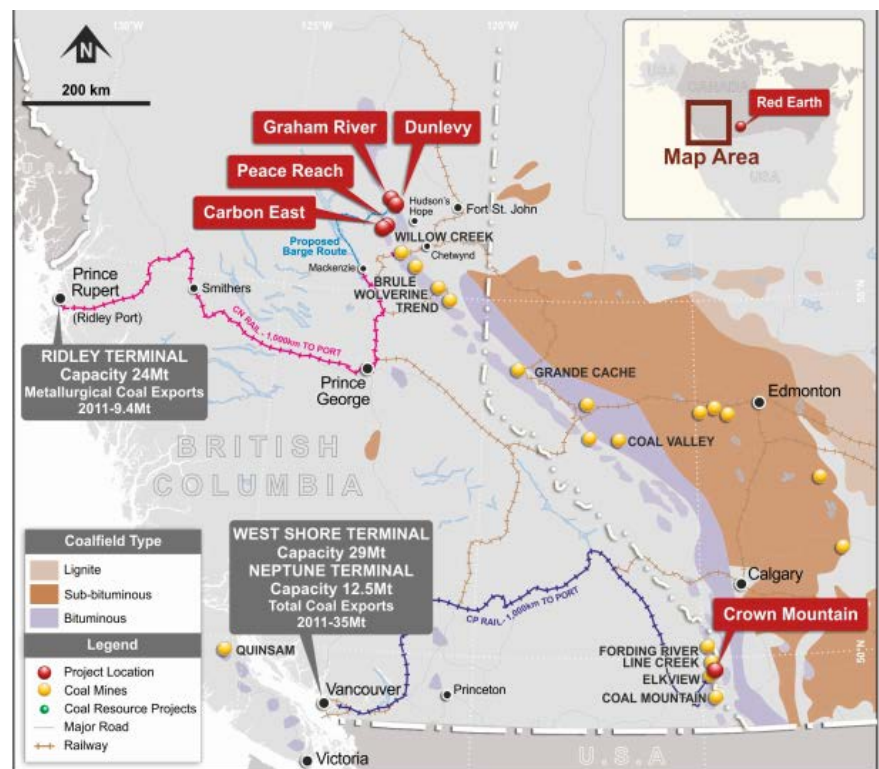
All the other mines or projects are around 100Km further from port than Elko. Based on Google Maps, we estimate the distances as:

• Fording River	1109Km
• Greenhills	1108Km
• Line Creek	1086Km
• Elkview	1068Km
• Coal Mountain	1101Km

Jameson's Crown Mountain is between Elkview and Line Creek

Riversdale's Grassy Mountain is 1106Km plus 20-30Km of truck haul.

Figure 28 Western Canadian Coal Transport Infrastructure



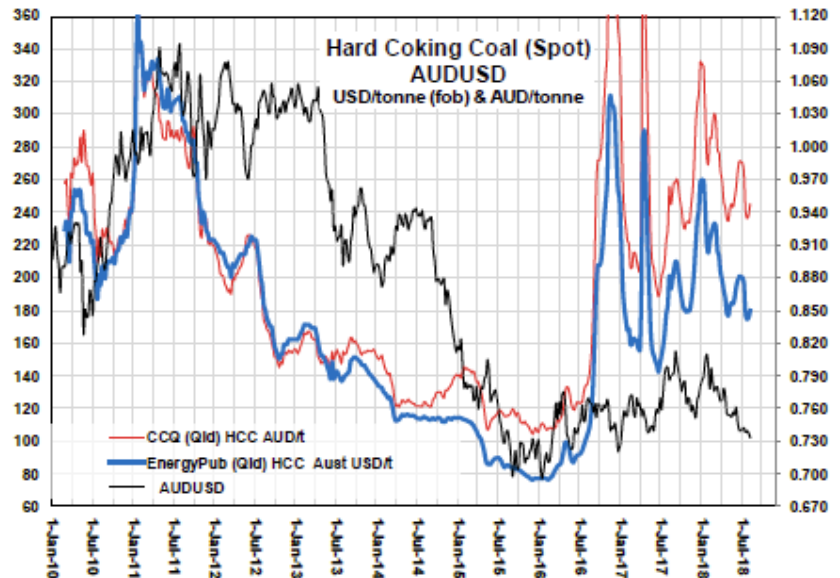
Source: Jameson Resources PFS presentation April 2010



## Coal Market

**Hard coking coal forward curve stabilizing at US\$162/t vs US\$142/t in 2016, while the spot price continued to spike US\$100/t each January**

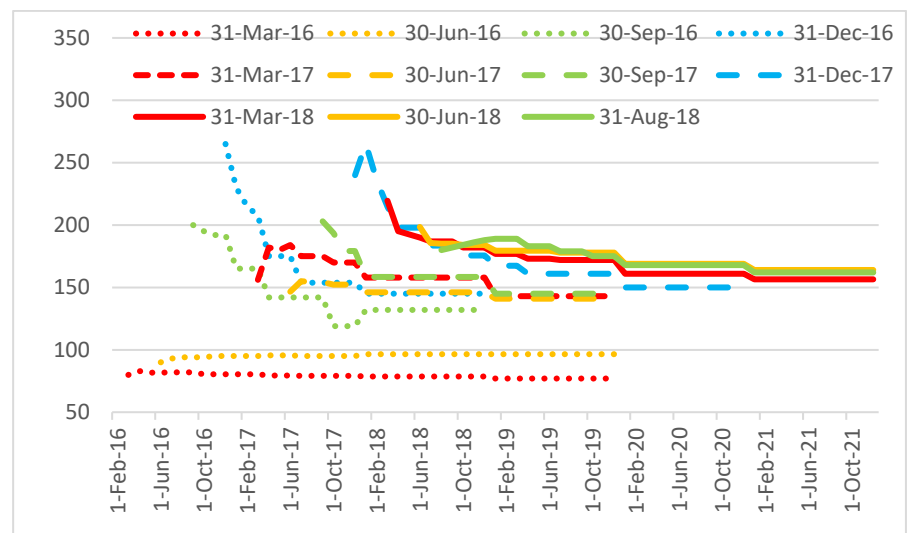
Figure 29 Coking Coal Price Trend to December 2015



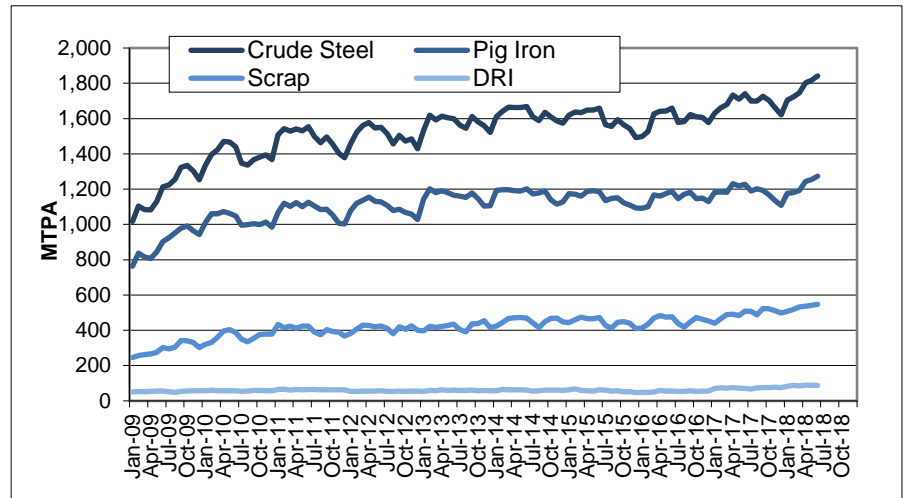
Source: Matau Advisory

The five year bear market in coal prices from the 2010 peak of US\$340/t to US\$74/t has ended in early 2016. The recovery started slowly until June, with prices recovering to around US\$90/t and the forward curve lifting but remaining flat across the curve itself. The upward momentum increased dramatically in July 2016, and by October, the spot price reached over US\$300/t. The current spot price is US\$180/t and the forward curve long term is settling around US\$162/tonne. We are using US\$140/t as our long term price in real terms.

Figure 30 The Coking Coal Forward Curve in 2016-2018



Source: Freight Investor Services

**4% yoy growth in blast furnace output drives coking coal demand***Figure 31 Global steel production with uptick driven by increased blast furnace output*

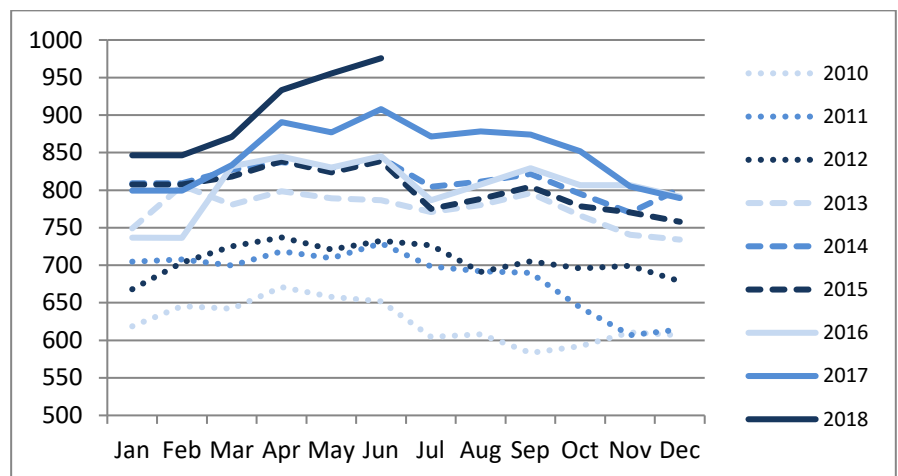
Source: World Steel Association monthly production reports

2018 has seen an uptick in global crude steel production driven predominantly by increased blast furnace output which requires coking coal, and predominantly by China, with significant assistance from the rest of Asia.

Asian steel producers, other than China, generally have no domestic coking coal production, and are reliant on imports. China appears to be successfully restricting its coking coal production (see Figure 35), either as a matter of policy (preserving the environment and long-term supply) or out of necessity. We do not see China's settings changing any time soon.

China's steel production growth has a peculiar seasonal pattern, with almost no apparent year on year growth from November to February in almost any of the last 5 years since 2013, but increasingly strong year on year growth in the April to September period in 2017 and 2018 year to date.

This emerging seasonal pattern of strong growth in mid year is at odds with the coking price volatility in Figure 29, where the seaborne price is at its strongest around January each year, ie when steel production is weakest. We believe the reason is that the surprising strength that continues to be evident in mid year cleans out all China's system pipeline stocks, and the holiday induced coal production slowdown for the Chinese new year, combined with the inventory pipeline reductions will continue to see spot prices surge every year in the foreseeable future.

*Figure 32 Chinese crude steel production seasons by year*

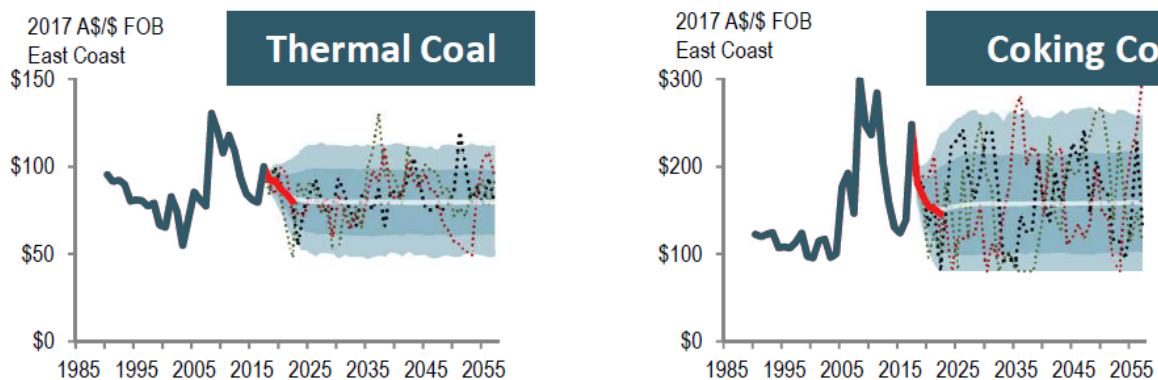
Source: World Steel Association monthly production reports

### Coking coal market will continue to see high price volatility

We have argued, and continue to argue, that the coal market in general, and that the coking coal market in particular, will continue to see US\$100/t or more seasonal volatility in spot prices for the indefinite future. Our reasons for this assertion are:

- Coal cannot be stored significantly relative to its market. Coking coal degrades in coking properties when stockpiled. The movement in stocks amounts to a couple of weeks at most from price peak to trough. Small buffer stocks relative to inelastic demand is a recipe for volatility. Historically, the market managed this through long term volume offtake contracts, but these days, price formation is dominated by the spot market.
- The spot price reflects the supply demand balance, and in an oversupplied market, the price can fall quickly to top of cost curve break even, but in an undersupplied market, the price moves rapidly to a price reflecting buyer panic, or the price to incentivize new mine development. The market is effectively asking the mines to store the buffer stock for seasonal variations in supply demand balance, and the price of that service is volatility.
- Research by Richard Schodde of Minex highlights the theoretical volatility systematic in the Thermal and Coking coal supply chains in Figure 33 below. His forecast of volatility in coking coal prices is over a A\$200/t range in real 2017 prices, and A\$75/t for thermal coal. His study is available in detail from the Minex website.

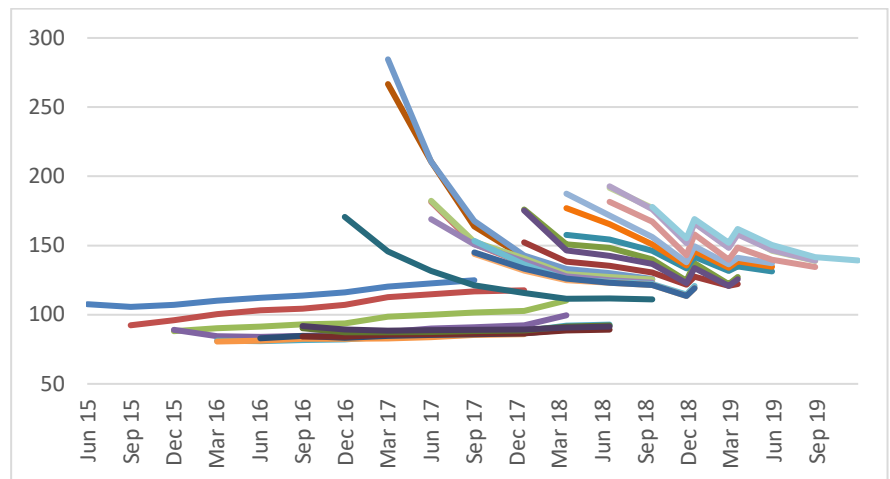
Figure 33 40 year thermal and coking coal price forecast



Source: Minex Richard Schodde – Long Term Forecast of Australian Mineral Production and Revenue December 2017

In Figure 34, analyst forecasts were calling price up by a little in 2015 to mid 2016, then have been calling for significant declines, but to an ever increasing long term base price, which is currently at US\$125/t on 2025 in 2025 US\$. We think this is low.

Figure 34 Consensus coking coal price forecasts from 2015 to 2018



Source: Average analyst coking coal forecasts from various sources

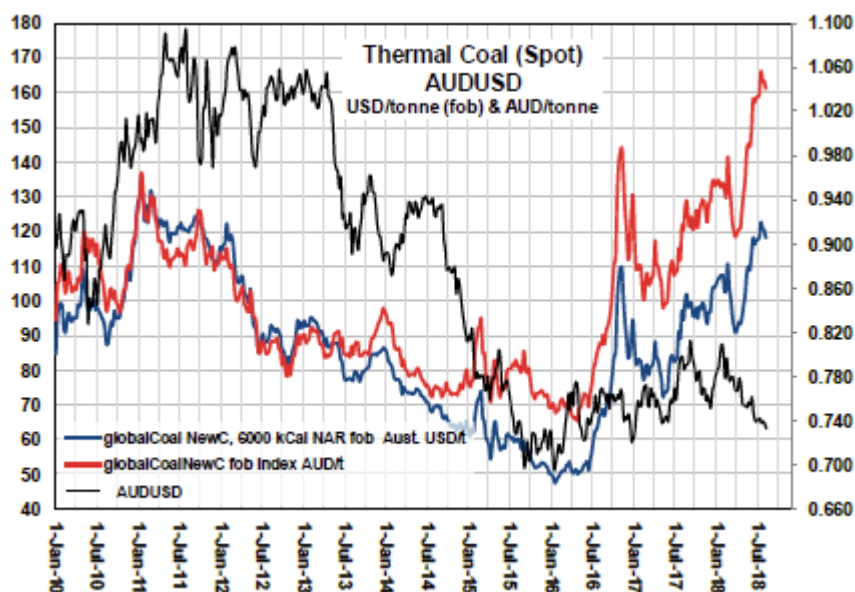
### Drivers of the coking coal price recovery

Since 2016, the coking coal price recovery has been driven by major changes in China in supply and demand across the entire coal sector, both coking and thermal. The supply and pricing of thermal coal impacts coking coal, which is why we discuss both.

- The closure of thermal and coking capacity in China (impacts supply of both)
- The strength of electricity demand in mid 2016 (indication of Chinese growth)
- The surprising strength of steel demand in China (direct demand for coking coal)

The closure of capacity lifted prices of all varieties of coal in the half to June 2016, and then from July 2016 to the present, the recovery in steel and power production has taken over as the driver of prices.

Figure 35 Thermal Coal Prices - Asian Region



Source: Matau Advisory

With electrical consumption and steel demand (actual and expected) both suggesting that China has ended its period of contraction, and with the Central Government saying it wants to see an end to financial support for loss making coal producers by ending excessive production, we have two major forces supporting the view that higher prices will last longer than the market expects.

We do not expect coking coal prices to be sustained over US\$200/tonne, but the period of sub US\$100/t of the second half of 2015 appears to be the anomalous period, where prices were very oversold.

We agree with industry commentators like Teck that coking coal price should be between US\$100/t and US\$200/t going forward, and we have assumed US\$140/t in our modelling.

### Chinese coal producing days cut from 330 to 276 ie 600tpa less supply

On 18 April 2016, Reuters (<http://www.reuters.com/article/us-china-coal-idUSKCN0XF1I9>) reported that The Chinese National Government was reducing the number of statutory working days for coal miners from 330 to 276 days per year, a reduction of 16.4% in official days worked.

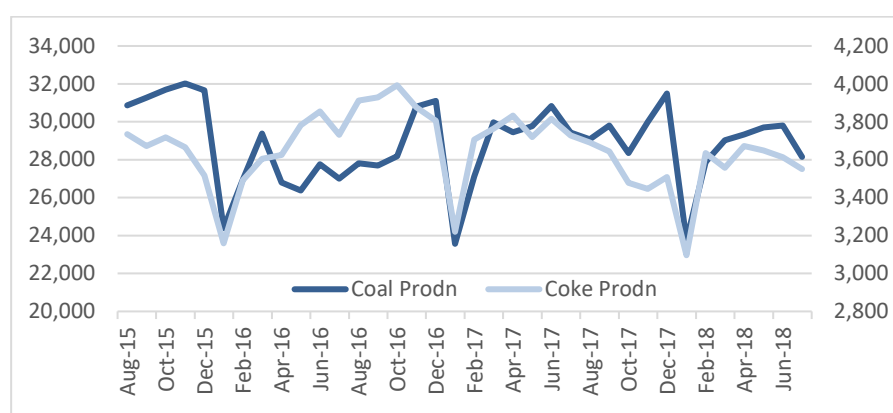
On 2015 coal production of 3.68 billion tonnes, that reduction in days would amount to a 600Mtpa supply reduction. The real change would depend on the level of compliance to official working hours before and after the mandated change.

Such mandated capacity reductions have historically not been effective, but in this case they have, according to the production in Figure 36, and given the move in coal prices. We attribute the success to two factors:

- Compliance was managed by China's State Administration of Work Safety ([www.chinasafety.gov.cn/](http://www.chinasafety.gov.cn/)), which had the manpower to monitor the change.
- The cuts have meant that Chinese coal miners have moved from a position where much of the industry was producing below cost, to one at current prices where every mine is generating a surplus, and therefore not drawing on Provincial Government Credit to stay in production. This is effectively a coal OPEC inside China.

The rationale behind the reduction in production days is the result of a nationally managed rebalancing of profit sharing between the power generators, who were making good profits, and the coal miners, many of whom were booking cash losses. However, the authorities will not want the higher coal prices to drive inflation in China, and can be expected to loosen the controls in response to the surge in coal prices.

Figure 36 Chinese official coal and coke production in 10,000 tonne units



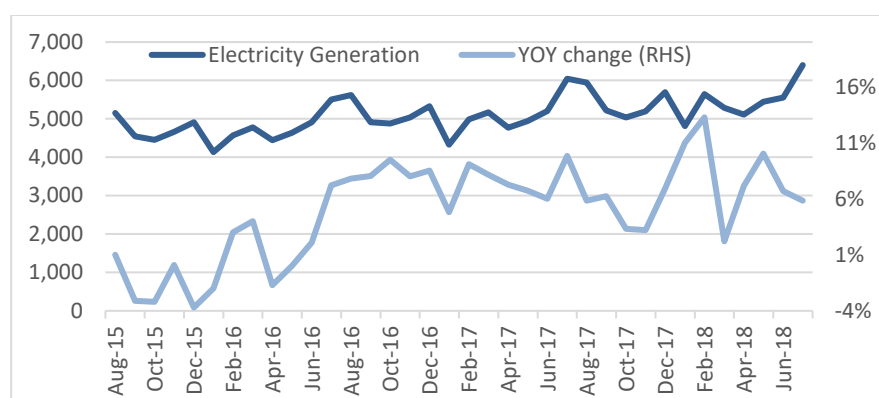
Source: NBS of China

### 6%pa growth in Chinese electricity demand = a strong economy

Any return of supply would have to be sufficient to infill the demand surge in power generation of 9% yoy that emerged in July 2016, and has sustained year on year growth of 6%pa since 2016. This strong growth is positive on two counts:

- More generation directly impacts demand for coal
- Electricity consumption is one of the most reliable proxies for measuring economic activity in China, and strong generation growth means a strong economy.

Figure 37 China Electricity Production in 100 Million KWh and Yr on Yr Growth



Source: National Bureau of Statistics of China



### Surprise strength of Chinese steel demand in 2017, sustained in 2018

Every six months, the World Steel Association forecasts expectations for current year and next year steel demand, shown in Figure 37. The forecasts lifted 2017 steel demand by over 60Mtpa in 2017, and is showing a growth of 40-80Ktpa in 2018, before slower growth in 2019, reflecting the current interest rate/trade friction uncertainties. China is expected to respond to the trade sanctions by easing domestic monetary policy, which stimulated construction and is very positive for steel demand.

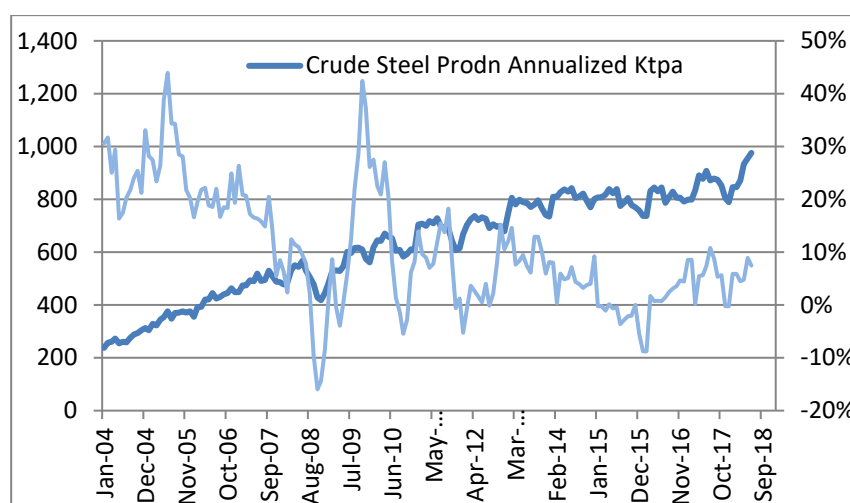
Figure 38 Global Steel Demand Forecasts October 2017 to April 2018

million tonnes	2016	Growth	2017	Growth	2018	2018	2019
Date of forecast	Final	YoY	Final	YoY	Oct-17	Apr-18	Apr-18
EU-27	158.2	1.0%	162.3	2.6%	164.3	165.6	166.9
Other Europe	40.5	5.0%	42.3	4.4%	42.2	44.2	46.1
Europe	198.7	1.8%	204.6	3.0%	206.5	209.8	213.0
C.I.S.	49.4	-0.8%	52.8	6.9%	53.0	54.0	55.0
N.A.F.T.A.	132.2	-0.7%	140.7	6.4%	140.4	145.0	147.3
Latin America	39.4	-10.1%	40.9	3.8%	42.3	43.5	45.6
Africa	37.6	1.3%	35.1	-6.6%	38.2	36.6	38.3
Middle East	53.1	0.0%	53.3	0.4%	56.5	55.7	57.8
Japan	62.2	-0.3%	64.4	3.5%	64.5	64.5	64.9
India	83.5	6.2%	87.2	4.4%	92.1	92.0	97.5
Asia ex China	171.8	3.1%	164.6	-4.2%	181.9	172.0	178.2
Oceania	7.0	0.0%	7.0	0.0%	7.0	7.0	7.0
Rest of the World	834.9	1.0%	850.6	1.9%	882.4	880.1	904.6
China	681.0	-1.0%	736.8	8.2%	765.7	736.0	722.1
World	1515.9	0.1%	1587.4	4.7%	1648.1	1616.1	1626.7
China	681.0	1.3%	736.8	8.2%	765.7	736.0	722.1
Developed	359.6	0.6%	374.4	4.1%	376.2	382.1	386.1
ROW	475.3	1.3%	476.2	0.2%	506.2	498.0	518.5

Source: World Steel Association half yearly demand forecasts

Chinese steel production has surged in the first six months of 2018, in line with the more optimistic forecasts of late 2017, rather than the current more downbeat 2018 forecasts. This suggests that the current market downturn in sentiment is not being borne out in the real economy, which appears to remain strong.

Figure 39 Chinese Crude Steel Production Kt/month and Year on Year Change



Source: World Steel Association Monthly Production Report

## Peer Comparisons

Figure 40 Market capitalization per tonne of measures and indicated resource for peer coking coal projects

Code	Company	Shares M	Capn \$M	Cash \$M	Debt \$M	EV \$M	EV/t	Owner ship	Meas. Mt	Ind. Mt	Inf. Mt
JAL	JAMESON RES.	256.6	57.7	2.8	0.0	55.0	9.16	100%	69	6	24
RRP	REALM RES.	252.9	227.6	100.9	67.3	194.0	7.92	70%	29	25	20
MCM	MC MINING	140.9	42.3	11.7	8.7	39.2	5.50	91%	0	7	0
TIG	TIGERS REALM	1791.7	71.7	3.2	12.9	81.3	1.56	80%	22	52	32
AHQ	ALLEGIANCE COAL	465.2	27.0	1.7	0.7	26.0	1.17	100%	102	22	1
CKA	COKAL	713.7	26.4	1.0	0.0	25.4	1.10	60%	20	23	224
AKM	ASPIRE MINING	2563.4	71.8	9.6	3.3	65.5	0.85	90%	197	77	20
PAK	PACIFIC AMERICAN	165.3	7.8	4.9	0.0	2.9	0.05	100%	19	57	181
BCB	BOWEN COKING	327.7	5.6	4.5	0.0	1.1	0.02	100%	0	68	86

Source: Company releases

PAK is very cheap on this measure at A\$0.20/t of measured and indicated resource, say compared to any of its coking coal peers. Jamison EV/t has assumed 100% ownership, but this will convert to half when the Bathurst buy in has been completed.

## Share Structure

### Shares and options on issue

Figure 41 Share and Option Detail at 24 August 2018

	million
Shares on Issue M	165.31
Options, Warrants	Nil

Source: PAK June 2017 Accounts

Figure 42 Major shareholders at 30 June 2018

Shareholders	Holding 31 July 2018
Gregorach Group	12.32%
HFT Noms (Geoff Hill)	12.99%
John Wardman & Assoc	4.86%
Dovodo Pty Limited	3.56%
Robert Ashley Pearce	2.89%

Source: PAK at 30 June 2018

## Board and Management

### Board

#### Geoffrey Hill, Chairman B.Ec, MBA, FCPA, FAICD

Geoffrey Hill currently serves as the Chairman of Pacific American Coal and is a founder and the Chairman of Texas and Oklahoma Coal Co. He is currently Chairman of International Pacific Securities and a principal of Sherlock and Willis. Mr Hill has over 30 years of experience in merchant banking with extensive experience in the resources industry.

#### Mark Sykes, Executive Director, Chief Executive Officer, B,Eng (Mining), MMEE

Mark Sykes is an experienced mining engineer with operational and project management experience gained over 25 years in the industry. Mark has worked in operational and management roles in both underground and open cut mines in Australia. Mark was appointed to the board on 31 December 2017.

**Simon Bird, Director, B.Acc. (Hons) FCPA FAICD**

Simon Bird is an accomplished senior executive with over 30 years of experience in Africa, Europe and Australia. Simon's career includes six years with PWC and time in the resources, financial services, property, infrastructure and agricultural sectors. Mr Bird currently holds non-executive director and Chairman roles on ASX listed resources companies.

**Management****Simon Klimt General Manager Investor Relations**

Simon's professional background includes 25 years in investment and commercial banking, with his last role being at Barclays Capital as Director Investment Banking in their Natural Resources business. During his banking career, Simon covered core financing and market areas including:

- Commodity Trading
- Project and Corporate Finance
- Capital Raising and
- Mergers & Acquisition

Since leaving banking, Simon has held a number of roles with ASX listed mining companies including Hillgrove Resources and Pacific American Coal, focusing on business development and investor relations. Additionally, in 2013 Simon along with a business partner established Royalty Stream Investments, a successful mining royalty investment company.

**Dom Hill, Business Development Manager**

Dom bases his time between Dallas and Vancouver and is responsible for project identification, acquisition and investor relations and engagement. Dom has recently been involved with developing and delivering the Elko exploration program.

**Investment risks**

PAK is exposed to risks including:

- Geological risk: the actual characteristic of a coal deposit may differ significantly from initial interpretations.
- Resource risk: all resource estimates are expressions of judgment based on knowledge, experience and industry practice. Estimates, which were valid when originally calculated may alter significantly when new information or techniques become available. In addition, by their very nature, resource estimates are imprecise and depend to some extent on interpretations, which may prove to be inaccurate.
- Environmental Risk: The exploration lease abuts the Flathead catchment reserve inside which no coal mining is allowed. The reserve is a joint agreement between Canada and the USA, and any changes must be agreed between both countries. The border of the reserve is the crests of the mountain range that defines the water catchment, and the Elko leases are on the other side of that divide. We see minimal risk from this source.
- Capital cost and operational cost risk: an increase in capital costs and operating costs will reduce the profitability and free cash generation of the project.
- Commodity price and exchange rate risk: as with all mining and mineral exploration companies, commodity price and exchange rate risks should also be considered.
- Management and labour risk: an experienced and skilled management team is essential to the successful development and operation of mining projects.

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