





## Prairie Mining

5<sup>th</sup> September 2017

**“Under the radar” potential world-class hard coking coal supplier with two low-cost projects in Poland to supply Europe’s leading steel makers & a likely acquisition target**

Prairie Mining listed in London in 2015 to bring its hard coking coal interests in Poland to the attention of European investors. The company is currently moving its two-impressive large Tier-1 low-cost coking coal projects towards production as early as 2023.

### ■ Enviable high margin projects at currently strong coking coal prices

Prairie is continuing to advance its two projects towards production and has a world-class partner in China Coal, the second largest coal miner in China. In the current strong coking coal price environment, Prairie looks likely to be an M&A target in our opinion as majors are seeking such world class Tier-1 projects and midcap producers need growth options.

### ■ Close to Europe’s steel makers who rely on imports for 85% of supplies

Europe is a big importer of coking coal from Australia and the US. Coking coal from Prairie’s low-cost Polish projects should attract a premium price due to its quality comparable to coal produced by the majors and far lower transportation costs being on the doorstep of big European steel makers.

### ■ Management has proven expertise in project development & financing

CEO Ben Stoikovich is an ex-BHP coal mining engineer/investment banker whose skills have helped get Prairie where it is today. Managing operations in Poland is Miroslaw Taras, the ex-CEO of the neighbouring Bogdanka coal mine which he turned into Europe’s lowest cost coal producer.

### ■ DCF analysis reveals potential upside of 250%

Discounting forecast cash flows from the two planned coking coal mines and assigning what we consider to be highly conservative risk factors gives a target price of 118p. **We thus initiate coverage of Prairie Mining with a Conviction buy stance.**

Table: Financial overview

| Year to end June | 2015A  | 2016A  | 2017E  | 2018E  |
|------------------|--------|--------|--------|--------|
| Revenue (A\$m)   | 0.03   | 0.31   | 0.30   | 0.30   |
| PTP (A\$m)       | (0.74) | (6.76) | (9.30) | (9.65) |
| EPS (A\$cents)   | (3.81) | (4.52) | (6.14) | (5.76) |

Source: Company accounts & Align Research

*This investment may not be suitable for your personal circumstances. If you are in any doubt as to its suitability you should seek professional advice. This note does not constitute advice to put your capital at risk. This is a marketing communication and cannot be considered independent research.*

**CONVICTION BUY**  
– Price Target  
**118p**



#### Key data

|                  |                                 |
|------------------|---------------------------------|
| EPIC             | PDZ                             |
| Share price      | 33.5p                           |
| 52 week high/low | 42p/11.5p                       |
| Listing          | LSE (Main List),<br>ASX, Warsaw |
| Shares in issue  | 167,498,969                     |
| Market Cap       | £56.1m                          |
| Sector           | Mining                          |

#### 12 month share price chart



#### Analyst details

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## Business overview

### Prairie Mining Projects

- **Debiensko Coal Project in the Upper Silesian Coal Basin in south west Poland** – Premium hard coking coal project where a Scoping Study (March 2017) outlined a mine with 2.6 million tonnes per annum (Mtpa) of saleable production, a 26-year mine life and an operating cost of US\$47 per tonne (t), a pre-tax Net Present Value (using 8% discount rate) of US\$1.5 billion and with an upfront capital expenditure of US\$504 million. **The project is fully permitted with a 50-year mining lease that was granted in 2008. The project is seen to be development-ready with existing shafts and other facilities already on site.**

- **Jan Karski Mine in the Lublin Coal Basin in south east Poland** - High value semi-soft coking coal project where a Pre-Feasibility Study (March 2016) determined a 6.34Mtpa operation, with an initial mine life of 24 years, average operating cost of US\$25/t and pre-tax Net Present Value (8% discount rate) of US\$1.8 billion. Capital expenditure required ahead of production has been calculated to be US\$632 million.

### Coking coal

Metallurgical coals are divided into hard coking coals (HCC) and semi soft coking coals (SSCC). Coking coals are transformed into coke in coke ovens which is fed into blast furnaces along with iron ore in order to produce steel. Coke solely derived from HCC is considered to be expensive in the steel making process and so cheaper semi-soft coking coals that have weaker coking properties are blended with HCC by steel producers to reduce overall input costs for steel making. Blast furnaces need to be fed with a supply of a specific blend of coals in order to meet the required technical specifications and operate efficiently.



*Coking coal prices over recent years. Source: Company*

Coking coal prices had been under pressure up until Q1 2016 however there has been a recent and sustained recovery. In 2015, Japanese buyers were reportedly signing contracts paying \$93 per metric ton, which was the lowest price for metallurgical coal that had been paid for a decade. This represented a fall of over 70% from the US\$330/t level which prices had soared above in 2011. Since early 2016 coking coal prices have sustained their recovery with current (Q3 2017) hard coking coal benchmark prices are at around USD200/t.

The economic slowdown in China and the deterioration of the country's steel industry weighed heavily on coking coal prices. However, this led to reductions in supply by a number of mining companies in Australia, US and Canada such as Anglo American, Peabody, Glencore and Walter Energy. Between 2012 and 2016 global coking coal production was reduced by more than 40 million tons and so set up the attractive supply/ demand dynamic for the sustained price recovery that we are now witnessing.

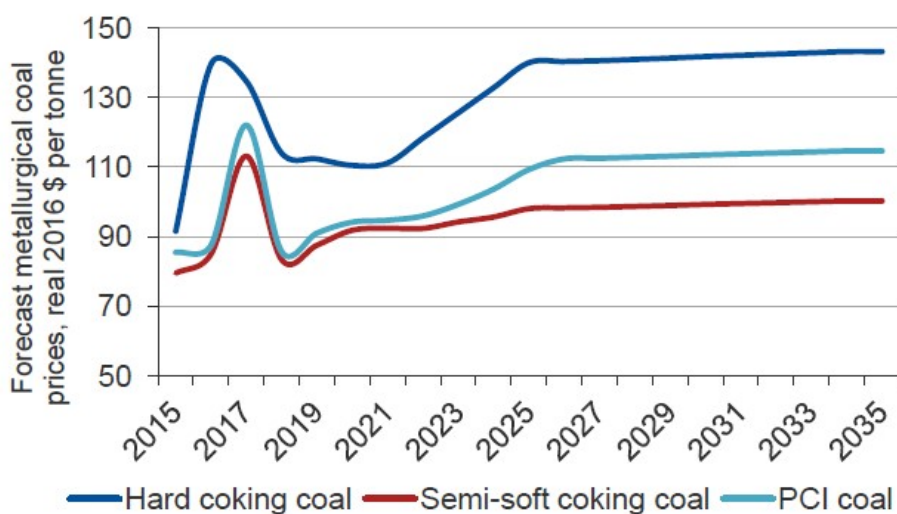
**A sustained rise in the coking coal price began last year and by September 2016 the price of premium HCC had more than doubled to US\$200 per tonne, and has remained at this price level.** This key steel making ingredient had been in short supply and demand has picked up given improved outlook and profitability of the global making steel sector.

| Type of coking coal        | Consumption Mt | Amount imported Mt | Imported % |
|----------------------------|----------------|--------------------|------------|
| Hard Coking Coal           | 47.2           | 40.2               | 85         |
| Semi Soft Coking Coal      | 14.0           | 10.0               | 71         |
| Pulverised Coal Injection' | 14.4           | 14.1               | 98         |
| <b>Total</b>               | <b>75.6</b>    | <b>64.3</b>        | <b>85</b>  |

– Pulverised coal injection (PCI) material is not intrinsically a coking coal but rather used primarily for its heat value and is injected into a blast furnace to replace expensive coke.

Table: Coking coal consumed in Europe in 2016. Source CRU

**Europe relies on imports for 85% of its coking coal needs.** In all, Europe consumes over 75 Mtpa of coking coal of which 64Mtpa has to be imported. The European Commission has determined that coking coal is the second most economically important commodity and has prescribed coking coal as a “critical raw material” for the EU. What this means is that there is big potential demand for European coking coal production, especially if it can be delivered at an attractive discount to product from much further afield such as Australia, the US and Russia.



Metallurgical coal – long term price forecasts. Source CRU

## Background

Prairie Mining was previously known as Prairie Downs Metals Limited and the shares had been trading under this name on the Australian Securities Exchange (ASX) for a number of years. Formerly, the company's focus was on the Prairie Downs Metal Project in the Pilbara region of Western Australia. However, in 2012, Prairie was awarded four Exploration Concessions that formed the Lublin Coal Project (now the Jan Karski Mine) in Poland and commenced a drilling program to assess coal quality and washability, with the results incorporated into a Scoping Study. By 2014, the company's name had been changed to Prairie Mining Limited and the Scoping Study completed which confirmed the potential for a large scale, long life mine to produce both semi-soft coking and premium thermal coal.

In July 2015, Prairie announced plans to list on the London Stock Exchange and the Warsaw Stock Exchange in order to raise the profile of the company and to be able to attract investment funds from what are considered its "home markets" of UK, Poland and other European countries.

In September 2015, shareholders approved the terms for global natural resources private equity fund CD Capital to invest up to A\$83 million to upgrade, expand and develop the Lublin Coal Project. CD Capital's investment was to be in three distinct tranches. Firstly, an initial A\$15 million at A\$0.335 per share, secondly, the grant of options in Prairie at an exercise price of A\$0.60 per option for a further A\$13 million once exercised and lastly, a priority right for CD Capital to invest a further A\$55 million in any future fund raisings.

**The advance of the first tranche of A\$15 million served to de-risk the Lublin Coal Project to the construction decision stage.** The completion of this transaction provided all the funding required for completing the Definitive Feasibility Study (DFS), permitting and all the necessary work ahead of making the decision to build a mine. **As Jan Karski moves towards development, we believe the corporate appeal will escalate, with M&A rumors already circulating in the market.**

The results of the Pre-Feasibility Study (PFS) for the Jan Karski Mine were announced in March 2016, which showed the project was world-scale and financially very robust with the potential to become one of the lowest cost global coal suppliers into Europe.

In October 2016, Prairie acquired the Debiensko hard coking coal project in southern Poland, which is one of the last major undeveloped HCC projects in Europe. This project was acquired by the company buying 100% of the shares in NWR Karbonia SA from the creditors of New World Resources Plc (NWR) for a total of €2.0 million. This payment consisted of an initial €0.5 million along with a deferred €1.5 million consideration. Following the announcement of this deal, £20 million was added to Prairie's market capitalisation in one day as investors realised the true potential value of this acquisition for Prairie Mining

In November 2016, Prairie announced a Financing and Co-operation Agreement for the Jan Karski Mine with China Coal, China's second biggest coal mining company. At that time, the partners were intent on entering into a full wrap-around Engineering, Procurement, Construction (EPC) contract. **Such a deal would see China Coal's mine construction division build the mine and source debt funding from Chinese banks for its construction.**

**In February 2017, a maiden JORC-compliant coal resource estimate of 301Mt HCC was confirmed at Debiensko.** A month later saw the unveiling of a Scoping Study which highlighted that potential technical viability and outstanding economics for Debiensko showing the project to be a large scale, lowest cost and long-life premium HCC supplier.

## Projects

Prairie looks, to us, to be extremely well positioned to become a strategically important supplier to the European steelmaking industry. The company's two coal projects, the Debiensko Coal Project and the Jan Karski Mine, are both large-scale, high quality coking coal resources in Poland which are in close proximity to Central Europe's major steelmakers and benefit from excellent existing infrastructure. **These are Tier 1 coking coal assets due to their scale along with very low estimated production costs. The projects offer the scope for impressive tonnages of coking coal production and cash flow.**



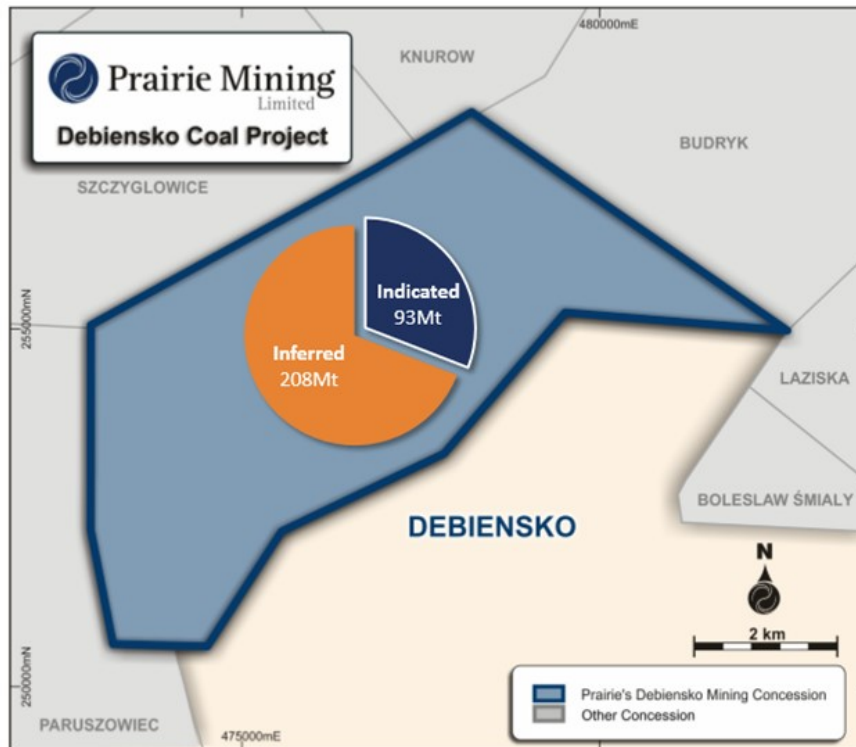
Location of Prairie Mining's projects. Source: Company

### Debiensko Coal Project

The Debiensko Coal Project is a fully-permitted HCC project located in the Upper Silesian Coal Basin in south west Poland. This project lies next to the Knurow-Szczygłowice and Budryk Mines which are both owned and operated by Jastrzębska Spółka Węglowa SA (JSW), and who is Europe's leading HCC producer. Prairie acquired the Debiensko Coal Project in October 2016, and this is a development-ready project of significant scale on a global basis.

Production originally began at the Debiensko mine back in 1898 and was operated by a number of Polish mining companies until 2000. Mining was stopped by the government, which was seeking to restructure the country's coal mining industry in response to a downturn in world coal prices. Subsequently in 2006, the project was acquired by New World Resources Plc (NWR) whose development plan for mining the HCC was approved by the Minister of Environment of Poland. In 2008, NWR was awarded a 50-year mine licence. Full environmental consent from the Polish government was awarded in 2014. Prairie acquired the project in October 2016, and has begun to formulate a revised development approach to improve the economics of the project in the crucial early years.

The results of a Scoping Study were announced in March 2017, showing that Debiensko was a Tier 1 HCC development project. Not only is the project a large scale, long life premium HCC asset where the geology is known, but also, importantly, the project is fully permitted with existing infrastructure. In addition, the project has extremely low capital intensity and an attractive regional market dynamic. Below we look at these key aspects in turn.



*Debiensko Coal Project. Source: Company*

### **Tier 1 premium hard coking coal asset**

Debiensko is undoubtedly a Tier 1 HCC mine in that it is low cost, large and has a long life. The Scoping Study clearly outlined such a project based on a JORC resource of 301 Mt (Inferred 208Mt and Indicated 93Mt). With a forecast production level of 2.6Mtpa of HCC produced over an initial mine life in excess of 26 years.

**The project is expected to have healthy margins and strong cash flow based on very low cash costs of US\$47/t, which means that Debiensko can be resilient throughout the commodity cycle.** The average cash margin of US\$110 per tonne was determined based on a price of Australia free on board (FOB) price of US\$142 plus US\$15 net back premium, giving a total sales price of US\$157/t. **This does mean that the project would be the lowest delivered cost supplier of HCC to the steel makers in Central Europe.**

Based on these figures, the annual EBITDA was calculated to be US\$282 million. Capital expenditure required ahead of production, along with contingencies, came to US\$504 million in the study and the pre-tax Net Present Value (NPV) at an 8% discount rate was US\$1.5 billion, with a life of mine free cash flow totalling US\$5.48 billion.

Debiensko has high quality coal with premium HCC being identified in the target seams. There are expected to be two products from the mine: Mid-vol (mid volatile) and Low-vol (low volatile) HCC which are of a similar quality to coking coals being marketed by multinational mining giants like BHP Billiton and Rio Tinto along with JSW in Poland.



### Known geology

This mine and the two neighbouring coking coal producers share a common geology. In Poland, there are two well-known series of coal seams - the 300 and the 400 series. These 300 series seams are largely thermal coal apart from the lowest seams which represent metallurgical coal. The deeper 400 seam series that will be mined at Debiensko represent purely metallurgical coal. Debiensko is a former mine where production ceased in 2000/01 as the 300 series seams reserves were depleted. At that time, the government did not want to commit to spending the additional US\$200 – 300 million required to develop the 400 series seams and so the mine was mothballed.

Knowledge gained from past mining, existing shafts and exploration drilling at Debiensko has given the team a good understanding of the geological and mining conditions. The seams vary in thickness between 1.2 and 4 metres and are amenable to longwall mining, where a long wall of coal (250 metres wide) is mined in a single slice (1.2 – 4.0 metres thick) using a shearer. **It is worth noting that such longwall coking coal production methods have been successfully used at the adjacent JSW mines for many decades.**



*Debiensko Hard Coking Coal Project showing existing shafts and railway. Source: Company*

### Mine ready project

Debiensko is fully permitted with existing infrastructure. Thorny issues specific to the mining industry, such as gaining environmental permits and a mining concession have therefore been resolved as they are already in place. Following a long history of mining at Debiensko, existing shafts are already in place together with established onsite facilities and decent office buildings, and so this is simply a restart operation. Importantly, there is also good infrastructure in place which includes an exit from the A1 Highway and a railway line. Being a mine ready project dramatically reduces the capital intensity required for re-development.



### Extremely low capital intensity

Compared to many of the recently constructed HCC mines, Debiensko has a highly attractive low capital intensity of US\$197 per tonne of saleable production capacity. **This compares to an average of around US\$400/t for a number of recent projects developed by BHP Billiton, Rio Tinto, Anglo American and Vale which range in capital intensity from US\$220 – 680/t.**

### Attractive regional dynamic market

Europe relies heavily on imported hard coking to meet 85% of its needs, with most of this supply coming from Australia, the US and Russia. Debiensko is conveniently sited just 70 kilometres from Europe's largest coking plant at Zdzeszowice, owned by ArcelorMittal, and which has a capacity of over 4Mtpa. Prairie's project is expected to be able to deliver coking coal to Zdzeszowice within 24 hours, compared to 59 days from Australia - which ties up the buyers' working capital for almost two months.

| US\$ per tonne        | Sea freight | Port handling etc | Rail freight | Rail handling etc | Total cost   | Days |
|-----------------------|-------------|-------------------|--------------|-------------------|--------------|------|
| Debiensko             | -           | -                 | 3.00         | 1.60              | <b>4.60</b>  | 1    |
| Murmansk, Russia      | 6.70        | 6.00              | 11.90        | 1.60              | <b>26.20</b> | 17   |
| Hampton Roads, USA    | 11.50       | 6.00              | 11.90        | 1.60              | <b>31.00</b> | 26   |
| Mobile, USA           | 14.00       | 6.00              | 11.90        | 1.60              | <b>33.50</b> | 31   |
| Queensland, Australia | 18.20       | 6.00              | 11.90        | 1.60              | <b>37.70</b> | 59   |

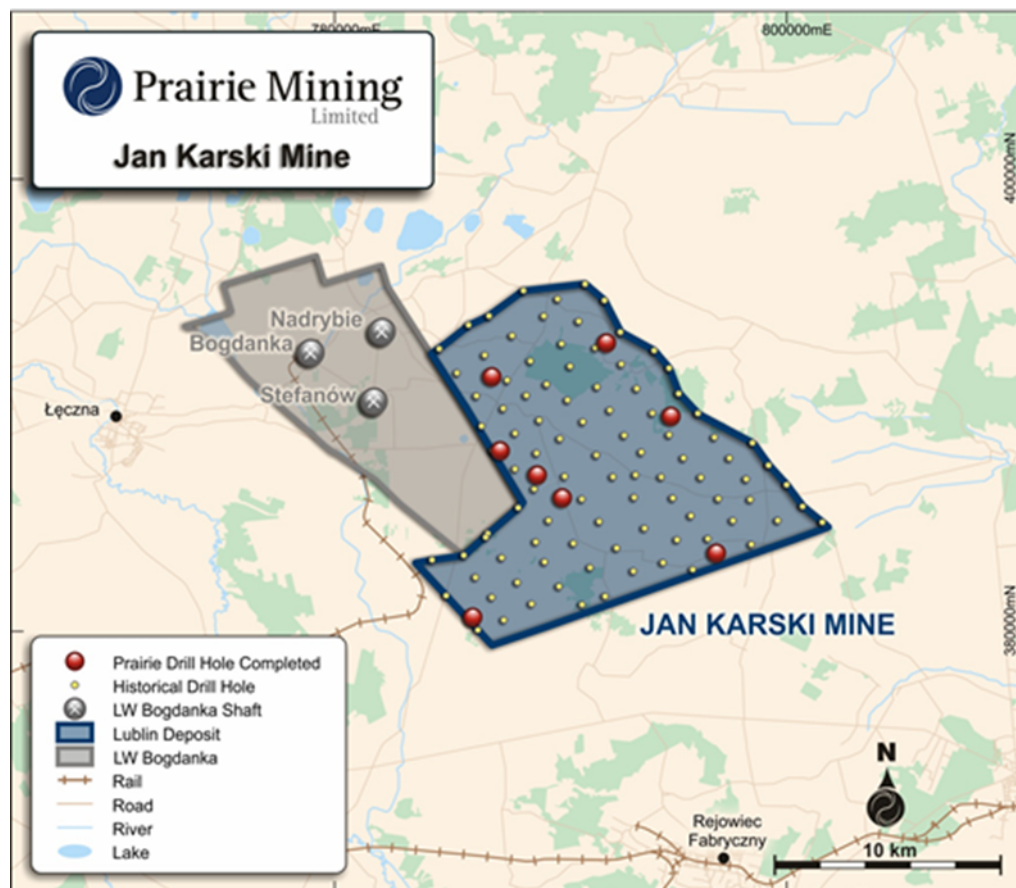
*Table: Transport costs and delivery time of HCC to the Zdzeszowice coke plant. Source: CRU*

Lying close to the eastern border with the Czech Republic, means that the project is reasonably close to a number of large steel mills, such as U.S. Steel Kosice in Slovakia (200km) and Voestalpine in Austria (430km). Whilst the giant steel mills of Thyssen in Germany are between 600 and 900 kilometres away. There are certainly significant transport cost advantages in being a regional producer.

## Jan Karski Mine

The Jan Karski Mine is a Tier 1 SSCC asset located in the Lublin Coal Basin in the south east of Poland, with good existing infrastructure nearby. The Lublin Coal Basin has a proven reputation of being the lowest cost hard coal basin in Europe. The Jan Karski Mine is adjacent to the Bogdanka coal mine which has been in production since 1982.

In 2012, Prairie’s Polish subsidiary was awarded four Exploration Concessions and later in December 2014 was granted a fifth concession. The Scoping Study was produced by well-known independent consultants Wardell Armstrong International. **The Scoping Study was completed in April 2014 and showed the potential to develop a world-scale coal mine with the lowest costs for coal delivered into Europe.**



*Jan Karski Mine. Source: Company*

The results of the PFS were announced in March 2016 and built on the strong fundamentals of the Scoping Study. The necessary work program included targeted drilling aimed at upgrading the coal resources to provide the required level of detail for the mine plan. The JORC Resources total 728Mt consisting of 352Mt Indicated Resources and 376Mt Inferred Resources. The PFS confirmed that the Jan Karski Mine had robust project economics and would be highly cash generative. It also determined a steady state annual clean coal production of 6.34Mtpa and average operating costs of US\$25/t free on rail (FOR).

The project was deemed to have an initial mine life of 24 years, with annual EBITDA of US\$348.1 million and upfront capital expenditure including contingencies of US\$632 million. On this basis, a pre-tax NPV (8%) of US\$1.8 billion was determined. Critically, the PFS was importantly able to demonstrate that the Jan Karski would be able to produce high value low SSCC and have the lowest delivered cash costs into key European markets as well as having low capital intensity.

### High value coking coal

The Jan Karski Mine is located right next to Bogdanka, which is currently Europe’s lowest cost hard coal mine. This project will be mining the same high quality 391 coal seam that Bogdanka is also working. Seam 391 has a high calorific value and extremely low ash levels, as well as excellent coking coal properties.

| Seam | Ash content'<br>% | Gross Calorific Value'<br>MJ/kg | Sulphur content'<br>% |
|------|-------------------|---------------------------------|-----------------------|
| 391  | 10.27             | 29.57                           | 1.27                  |

' Air dried

*Table: Average coal quality (air dried) of in-situ Coal Resources within 391 the coal seam from 2016 Jan Karski PFS. Source: Company*

**We see excellent potential to produce what is termed high value ultra-low SSCC.** Production from Jan Karski is expected to attract a 10% premium to international SSCC benchmark pricing for two good reasons. Firstly, the coal has a significantly lower ash content, at less than 3% compared to the average 7% content of competitors’ production. Secondly, it also has a higher coke strength than the typical SSCC.

Washability tests have shown that there is an opportunity to upgrade the product to achieve a 75% ultra-low ash hard coking coal and a 25% AP12 specification thermal coal by-product. This 10% premium suggests a price of US\$109/t (compared to CRU Long Term SSCC FOB Australia price of US\$99/t) before allowing for any netbacks.

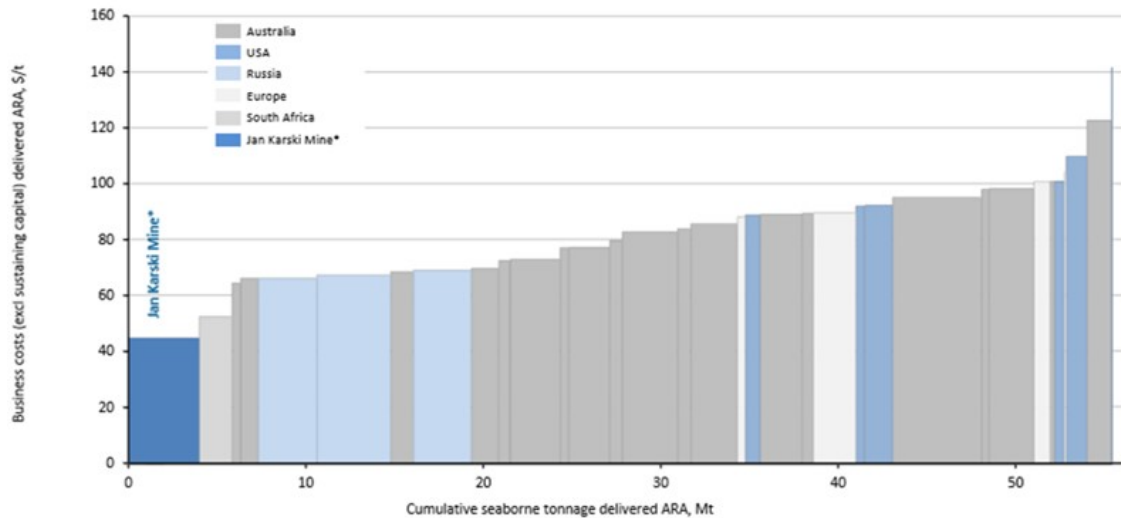
### High quality transport infrastructure

The project is blessed with being located in a coal basin that has impressive existing infrastructure. The Lublin region is well-connected to the rest of Europe by high quality railway lines which provide direct access to the major markets in Germany, Czech Republic and Ukraine. The Port of Gdansk is located 520 kilometres by railway and is reported to have around 15Mtpa of spare coal export capacity. The Jan Karski Mine will also benefit from favourable regional transport costs. Being well served with infrastructure ensures that the project has low capital intensity.



### Low delivered cash cost

The Jan Karski Mine will have the lowest delivered cash costs into key European markets. The mine is projected to have an average operating cash cost of US\$24.96/t at steady state production. **The SSCC product from this mine is anticipated to lie right at the bottom of the global cash cost curve for SSCC delivered to ARA Port in The Netherlands**, compared to seaborne tonnage delivered from Australia, the US, Russia, South Africa and elsewhere in Europe.



\*Jan Karski costs based on site costs at \$25/t + rail cost to Gdansk (\$11.7/t) + ship loading (\$4/t) + shipping to ARA (50,000dwt bulk carrier) at \$4.2/t

*Cost curve for SSCC quality adjusted costs delivered to ARA, 2015 from the Jan Karski PFS (2015). Source: Company*

### China Coal strategic co-operation agreement

China sees Poland as a strategic partner which gives the Chinese economic access to Europe. A trade co-operation deal struck in June 2016 illustrated succinctly Poland's importance as a gateway for Chinese exports, and which is all part of President Xi Jinping's "One Belt, One Road" initiative.

Prairie and China Coal entered into a Financing and Construction Co-operation Agreement in November 2016. China Coal is the second largest coal mining company in China as well as being one of the most prolific shaft sinking and coal mine construction companies globally. In all, China Coal has sunk more than three hundred major shafts around the world. So, it is difficult to think of a more appropriate partner.

China Coal is using the Jan Karski Mine to showcase how well it can build underground mines in Europe. Although China Coal will be arranging the finance in China for the project, the coal mining major's prime motive is not to take an equity stake or gain an offtake agreement, but to export their mine building expertise to a world class project in Poland.

This agreement serves to de-risk the project. A Chinese-compliant Bankable Feasibility Study (BFS) is expected to be completed in September 2017 and it will outline the cost of the construction work. The BFS is required to gain Chinese bank finance approval. This is likely to be followed by Prairie mandating certain banks to provide project debt finance. The partners plan to enter into an Engineering, Procurement and Construction deal where China Coal No.5 Construction Company (CC5C) will construct the mine.

### **Mining concession application**

On 25<sup>th</sup> May 2017, the Deposit Development Plan for Jan Karski Mine was approved by the Lublin Regional Mining Authority. This is an important step ahead of a formal Mining Concession application. The project has received very strong support from both the regional authorities and the backing of the local communities. At that time, it was announced that development activities had commenced including obtaining connection to the power grid by way of a 10km long 110kV power line from a nearby power substation.

An announcement on 22<sup>nd</sup> August 2017 brought news that Poland's Ministry of Agriculture had approved the re-zoning of agricultural land for industrial use which will allow for the construction of the mine site. Next the team will be submitting the ESIA for formal environmental consent which is the final step ahead of submitting the company's Mining Concession application.

Also in August 2017, the Company reported that the BFS, which is being prepared by China Coal for the development of the Jan Karski Mine, is due for completion in September 2017 and that the company was on track to submit the Mining Concession application.

## Strategy for growth

Prairie has two Tier 1 coking coal projects with enviable access to the European steel makers. These are low-cost projects with high operating margins from sales of high quality coking coal production. Moving ahead, we believe that the company currently has sufficient funds to continue to move its projects further towards the production decision and the creation of further value.

The timetable of events at Jan Karski suggests that marketing studies following the enhanced coking coal quality reported in May 2017, completing the Chinese BFS, along with finalising the funding package and offtake agreements, should all take place over the next six to twelve months. Slightly further ahead in 2018 is the likely date for commencement of construction of the mine.

At Debiensko, the focus of attention will be on an infill drill program, the upgrade of the JORC resource and the start of a feasibility study.



*Design of the Jan Karski Mine from the PFS. Source: Company*

Construction at Jan Karski Mine could begin in 2018 and there is a long construction period with completion and first production in 2021/2022. China Coal is arranging the financing which could consist of up to 85% of the capex requirement with low-cost debt on favourable terms with the remainder most likely to be funded by a mixture of offtake financing agreements and equity. **In addition, cornerstone investor CD Capital has, importantly, committed A\$83 million to this project in funding and the balance of these funds could provide additional finance to fulfil part of the equity component of such a financing.**

It is possible that Debiensko could come into production at the same time as Jan Karski. Being a brownfield site probably means that it is a lot easier to develop Debiensko than Jan Karski. There is plenty of upside potential at Debiensko, as outlined in the Scoping Study, with the intention to mine a total 65Mt of saleable coal over a 26-year initial mine life from a JORC resource of 301Mt. There is also potential resource upside as the maiden JORC resource covered seven seams and the initial production is targeted from only four seams. So, potential exists to expand the resource base into other seams and at depth. The planned program of infill drilling will improve the level of geological knowledge and confidence of the mineral resource.



## Financials & current trading

Prairie has invested around A\$26 million in exploration and evaluation expenses as the company moves its two coking coal projects further towards production. Corporate overheads have been maintained at a low level and Prairie has also been able to conserve cash by making share based payments which averaged A\$1.65 million a year in 2015 and 2016.

| Y/E 30 June A\$'000 | 2012A | 2013A  | 2014A  | 2015A  | 2016A  |
|---------------------|-------|--------|--------|--------|--------|
| Revenue             | 147   | 141    | 132    | 35     | 310    |
| Pre-tax profit/loss | -155  | -5,129 | -8,664 | -742   | -6,761 |
| Net profit/loss     | 1,575 | -5,954 | -5,019 | -5,152 | -6,671 |

*Prairie's five-year trading history. Source: Company accounts*

### 2016 results

The financial year ending 30<sup>th</sup> June 2016 was a busy period for the company which included the completion of the PFS and gaining the exclusive right to apply for a mining permit for the Jan Karski Mine at the Lublin Coal Project. In addition, CD Capital agreed to invest up to A\$83 million in three tranches and the company also listed on the London and Warsaw Stock Exchanges. During the twelve-month period, there was also the disposal of the Prairie Downs Metals Project, and which allowed the company to focus all its attention on the Polish coal operations. The cash position at the year-end was just over A\$18 million.

### 2017 interim results

The first half of the current year saw the transformational acquisition of the Debiensko Coal Project, followed by the commencement of a Scoping Study and a Maiden Coal Resource Estimate of 301 million tonnes. **Meanwhile at Jan Karski, Prairie and China Coal signed a landmark Strategic Co-Operation Agreement which covers the construction and financing of the mine.**

### Recent developments

In March 2017, the Scoping Study on the Debiensko mine restart was unveiled which indicated that the mine will deliver the lowest cost hard coking coal into Europe. Later that month, the company raised £3.2 million at a price of 28p per share in a placing to UK institutions that was well received.

May 2017 saw Jan Karski established as a high value ultra-low ash coking coal mine following coal quality test work. This was followed by news that the Deposit Development Plan (DPP) for Jan Karski had been approved by the Lublin Regional Mining Authority, demonstrating strong regional governmental support for the project.

The company was also able to announce that the re-zoning of land had been approved for the Jan Karski Mine in August 2017 which, together with the approval of the DDP, are both key steps ahead of submitting the Mining Concession application, and which was reported to be on schedule.

## Risks

### Geological risks

There are a series of technical risk factors concerning the amount of understanding of the geology of the project areas and the coal seams being targeted for production. These technical factors, along with factors concerning the market for coking coal over future years, could lead to a different outcome than expected in the feasibility studies carried out on the two coking coal projects. That said, Jan Karski is adjacent to an existing mine, whilst the Debiensko Project is a brownfield site and so in both cases the geology seems to be better known than at many coal projects around the world. Both projects are located in proven coal basins that have been producing for in excess of 30 years.

### Coal price risks

Coal prices are highly cyclical and changes in the price could have a negative or positive impact on the valuation of the company's projects and revenue from the sales of HCC and SSCC. Over recent years the price of HCC per tonne has been highly volatile, trading in the range of US\$90 to \$330, and currently sits at around US\$200.

### Exchange rate risks

Movements in the value of currencies will have an effect on the company's accounts on translation from US dollars and Polish zloty to Australian dollars. Fluctuations in the value of these currencies against sterling may have an effect on the valuation that Prairie shares are awarded by the market.

### Future funds

The market for raising funds for mining companies may have improved from the worse conditions seen eighteen months ago, however the equity market does continue to be difficult, especially for pre-revenue companies. Some recent fundraising exercises in the resources sector have seen share prices being undermined by incoming investors demanding substantial discounts to provide the necessary capital.

## **Board of Directors**

### **Ian Middlemas – Chairman**

Ian is a Chartered Accountant, a member of the Financial Services Institute of Australasia and holds a Bachelor of Commerce degree. He worked for a large international chartered accounting firm before joining the Normandy Mining Group where he was a senior group executive for approximately ten years. Ian has had extensive corporate and management experience and is currently a Director with a number of publicly listed companies in the resources sector. He was appointed a Director of the Company in August 2011.

### **Benjamin Stoikovich – Chief Executive Officer**

Ben is a mining engineer and professional corporate finance executive. He has extensive experience in the resources sector gained from a unique career firstly as an underground Longwall Coal Mining Engineer with BHP Billiton where he was responsible for underground longwall mine operations and permitting, and more recently as a Senior Executive within the investment banking sector in London where he gained experience in M&As, debt and off take financing.

Ben has Bachelor of Mining Engineering degree from the University of NSW, a Master of Environmental Engineering degree from the University of Wollongong and an MSc in Mineral Economics from Curtin University. He also holds a 1st Class Coal Mine Managers Ticket from the Coal Mine Qualifications Board (NSW, Australia) and is a registered Chartered Engineer (CEng) and Chartered Environmentalist (CEnv) in the United Kingdom. Ben was appointed a Director of the Company in June 2013.

### **Ms Carmel Daniele – Non-Executive Director**

Carmel is Founder and Chief Investment Officer of CD Capital in London. She has over twenty years of global natural resources investment experience, ten of which was spent with Newmont Mining/Normandy Mining and acquired companies. As a Senior Executive (Corporate Advisory) at Newmont, she structured cross border M&A deals including the three-way merger between Franco-Nevada, Newmont and Normandy. Post-merger, Carmel structured the divestment of various non-core mining assets around the world for the merchant banking arm, Newmont Capital.

Carmel started off her career at Deloitte Touche Tohmatsu where she spent eight years in various corporate finance roles. Prior to setting up CD Capital in London in 2006, Carmel spent a year and half as investment advisor to RAB Capital's Special Situations Fund on sourcing and negotiating natural resource private equity investments. She holds a Master of Laws (Corporate & Commercial) and Bachelor of Economics from the University of Adelaide and is a Fellow of the Institute of Chartered Accountants. Carmel was appointed a Director in September 2015.



**Thomas Todd – Non-Executive Director**

Tom was the Chief Financial Officer of Aston Resources from 2009 to November 2011. Prior to Aston Resources, he was Chief Financial Officer of Custom Mining, where his experience included project acquisition and the funding of project development for the Middlemount project to the sale of the company to Macarthur Coal. A graduate of Imperial College, Tom holds a Bachelor of Physics with first class Honours degree. He is a member of The Institute of Chartered Accountants in England and Wales and a graduate of the Australian Institute of Company Directors. Tom was appointed a Director of the Company in September 2014.

**Mark Pearce – Non-Executive Director**

Mark is a Chartered Accountant and is currently a Director of several listed companies that operate in the resources sector. He has had considerable experience in the formation and development of listed resource companies and has worked for several large international chartered accounting firms. Mark is also a Fellow of the Institute of Chartered Secretaries and a Fellow of the Financial Services Institute of Australasia. He was appointed a Director of the Company in August 2011.

**Todd Hannigan– Alternate Director for Thomas Todd**

Todd was the Chief Executive Officer of Aston Resources from 2010 to 2011. During this time, the company significantly progressed the Maules Creek project, including upgrades to the project's resources and reserves, completion of all technical and design work for the DFS, negotiation of two major project stake sales and joint venture agreements, securement of port and rail access and progression of planning approvals to final stages. He has worked internationally in the mining and resources sector for over eighteen years with Aston Resources, Xstrata Coal, Hanson PLC, BHP Billiton and MIM. Todd was appointed as alternate Director for Tom Todd in September 2014.

## **Management Team**

### **Benjamin Stoikovich – Chief Executive Officer**

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### **Simon Kersey – Chief Financial Officer**

Simon is a Chartered Accountant with over 15 years' experience providing financial and advisory services to the mining industry covering debt, equity and offtake financings for mine developments as well as a variety of other corporate transactions. Before joining Prairie, he was a Managing Director within the investment banking sector in London and has held roles at a number of investment banks and advisory firms including BMO Capital Markets, Deutsche Bank and PwC. Simon is a member of the Institute of Chartered Accountants in England & Wales (ICAEW)

### **Sapan Ghai – Head of Corporate Development**

Sapan commenced his career as a Chartered Accountant (ICAS) having qualified with PwC in London before becoming an investment banker to the mining sector at leading institutions. He has extensive experience in the financing of mining companies and has raised over US\$1 billion of both equity and debt funding for the development of numerous mining projects globally and across a range of commodities. Sapan has a MSc. majoring in Finance and a BSc. majoring in Mathematics from the University of Warwick.

### **Artur K. Kluczny – Group Executive - Poland**

Artur is the former Head of the Secretariat of the Polish Prime Minister's Office. He served as the Deputy Chairman of the Board of the Polish Financial Supervision Authority ("KNF") responsible for capital markets supervision (Warsaw Stock Exchange).

### **Mirosław Taras – Group Executive - Poland**

Mirosław has worked in the Lublin Coal Basin for more than thirty years, starting off as an underground coal mine operator and rising to the rank of Chairman of the Management Board of Bogdanka. In this position, he successfully oversaw the privatisation of the company by way of an IPO on the Warsaw Stock Exchange, including a US\$160 million fundraising exercise to develop two new shafts. He graduated in 1980 from the Academy of Mining and Metallurgy in Krakow, specialising in the design and construction of mines.

## Forecasts

We initiate coverage of Prairie Mining with forecasts for FY2017 and FY2018.

| A\$'000s y/e 30 June  | 2015A           | 2016A          | 2017E          | 2018E          |
|---|-----------------|----------------|----------------|----------------|
| <b>Continuing operations</b>  |                 |                |                |                |
| Revenue   | 35              | 310            | 300            | 300            |
| Other income  | 1,824           | 1,765          | 1,000          | 1,200          |
| Gain on the derecognition of available-for-sale financial assets  | 9,594           | -              | -              | -              |
| Exploration and evaluation expenses   | (7,302)         | (4,830)        | (5,000)        | (6,000)        |
| Employment expenses   | (175)           | (289)          | (150)          | (150)          |
| Administrative and corporate expenses   | (286)           | (310)          | (470)          | (500)          |
| Occupancy expenses  | (489)           | (465)          | (480)          | (500)          |
| Share-based payment expenses  | (1,577)         | (1,723)        | (300)          | (500)          |
| Business development expenses   | (1,301)         | (1,219)        | (1,200)        | (1,500)        |
| Expenses incurred in acquiring Karbonia   | -               | -              | (500)          | -              |
| Fair value movements  | -               | -              | (2,500)        | (2,000)        |
| Other expenses  | (1,064)         | -              | -              | -              |
| <b>Loss before income tax</b>   | <b>(742)</b>    | <b>(6,761)</b> | <b>(9,300)</b> | <b>(9,650)</b> |
| Income tax expense  | (4,410)         | -              | -              | -              |
| <b>Net loss for the year</b>  | <b>(5,152)</b>  | <b>(6,761)</b> | <b>(9,300)</b> | <b>(9,650)</b> |
| <b>Net loss attributable to member of Prairie Mining Limited</b>  | <b>(5,152)</b>  | <b>(6,761)</b> | <b>(9,300)</b> | <b>(9,650)</b> |
| <b>Other comprehensive income</b>   |                 |                |                |                |
| <i>Items that may be reclassified subsequently to profit or loss:</i>   |                 |                |                |                |
| Changes in fair value of available-for-sale financial assets  | (3,642)         | -              | -              | -              |
| Deferred tax on available-for-sale financial assets   | 1,097           | -              | -              | -              |
| Net realised gains on available-for-sale financial assets transferred to other income   | (1,324)         | -              | -              | -              |
| Deferred tax on sale of available-for-sale financial assets   | 397             | -              | -              | -              |
| Gain on derecognition of available-for-sale financial assets transferred to other income  | (9,594)         | -              | -              | -              |
| Deferred tax on gain on derecognition of available-for-sale financial assets  | 2,916           | -              | -              | -              |
| Exchange differences on translation of foreign operations   | 38              | 10             | (200)          | (50)           |
| Total other comprehensive income/(loss) for the year, net of tax-   | (10,112)        | 10             | (200)          | (50)           |
| Total comprehensive loss for the year, net of tax   | (15,264)        | (6,751)        | (9,500)        | (9,700)        |
| <b>Total comprehensive loss attributable to members of Prairie Mining Limited</b>   | <b>(15,264)</b> | <b>(6,751)</b> | <b>(9,500)</b> | <b>(9,700)</b> |
| Basic and diluted loss per share from continuing Operations (cents per share)   | (3.81)          | (4.52)         | (6.14)         | (5.76)         |
| Weighted average number of shares   | 135,077,138     | 149,500,027    | 154,641,153    | 168,546,777    |
| Total shares plus options, performance rights & the fully diluted number of shares resulting from the conversion of CD Capital CLNs & options | 164,974,321     | 236,395,149    | 245,534,954    | 255,649,954    |

Table: Prairie summary forecasts. Source Company accounts and Align Research

Coking coal production is not anticipated to begin until 2021 and so net losses are expected in 2017 and 2018. At present, the company has A\$18 million (US\$14 million) cash and no debt, which we believe is sufficient to meet its needs over the next twelve months. The funding of the Jan Karski Mine is in the hands of the Chinese partner, whilst the ongoing work at Debiensko for infill drilling and the BFS is unlikely, we believe, to exceed US\$8-10 million.

Bringing two mines into production using project financing is likely to involve an equity component. This means that there is the likelihood of dilution, but we do not see these funds being raised in the current financial year, indeed we expect a raise only at a point where there is a material narrowing of the meaningful discount to NPV and the projects further advanced. Consequently, for the year ending 30th June 2018 we have not allowed for any fund raisings in the number of shares forecast to be in issue at the year-end. We have however assumed that options and performance rights that are due to expire before this date are fully exercised.

## Valuation

In seeking to place a valuation on Prairie Mining we have built a financial model of both Debiensko and the Jan Karski Mine. We have then determined a sum-of-the-parts valuation and sought to de-risk to arrive at a target price for the shares. Both the Debiensko Scoping Study and the Jan Karski PFS determined valuations using a discount rate of 8%, a figure which we have also chosen to use in our analysis. We have also shown the NPVs determined by our model for the two projects buy at more conservative discount rates of 10% and 12%.

### Debiensko

The model we have developed seeks to place an after-taxation valuation on Debiensko which has the potential to be a globally significant project with an initial mine life of 26 years. The construction of the Debiensko Coal Project could begin in 2019 with the production ramp-up beginning in 2023. A lot of the assumptions used in developing our model have been taken from the Scoping Study which was announced in March 2017. These include: capital expenditure, rate of production, sales price and operating cost. Capital expenditure is as shown in the table below, plus there is a sustaining capex based on a figure per tonne of saleable coal.

| Capital items   | US\$ million |
|---|--------------|
| Shaft sinking   | 208.5        |
| Coal processing and surface facilities  | 102.5        |
| Underground infrastructure (belts, ventilation and electrics)                               | 62.0         |
| Capital pre-production expenses (labour, power, contractors etc)                            | 51.5         |
| Contingencies, Engineering, Procurement and Construction Management (EPCM) and owners costs | 79.5         |
| <b>Total capital expenditure</b>  | <b>504</b>   |

*Table: Capex breakdown for Debiensko. Source: Company*

**Rate of production** – At steady-state, run of mine (ROM) production was assumed to run at 4.0Mtpa with a yield of 68%, giving 2.60Mtpa of saleable coal.

**Sales price** – In the Scoping Study, a long term hard coking coal bench price of US\$157/t, which equates to US\$142/t (FOB Australia, real 2016 \$'s), was employed, plus a netback premium of US\$15/t by comparison to Debiensko's proximity for the delivery of HCC to the Zdzieszowice Coke Plant in Poland. **The long-term price used in our analysis is more conservative at roughly 90% of the sales price used in the Scoping Study.**

**Operating costs** – Average operating costs in the steady state are assumed to be US\$46.86 per tonne of saleable coal, a figure which includes selling, general and administrative expenses (SG&A) and royalties.

**Tax** – Polish corporation tax currently stands at 19% and we have used this rate over the life of the mine. We have assumed that corporation tax can be offset against the capital expenditure and on that basis, tax will not be paid until 2038.

| Discount rate    | 8%       | 10%    | 12%    |
|------------------|----------|--------|--------|
| NPV US\$ million | 1,106.36 | 742.15 | 487.71 |

*Table: Revenue forecast, cash flows and NPV for the Debiensko Coal Project. Source: Company & Align Research*



## Jan Karski Mine

We have also developed a model which seeks to place an after-taxation valuation on the Jan Karski project focused on mining the highly productive 391 coal seam, with an initial mine life of 24 years. The construction is expected to begin in 2018 and be completed in 2023.

Many of the assumptions used in developing our model have been taken from the PFS, which was announced in March 2016. These include capital expenditure, rate of production, sales price and operating cost. Capital expenditure is as shown in the table below plus there is a sustaining capex of \$3.43 per tonne of coal sold.

| Capital items   | US\$ million |
|---|--------------|
| Shaft costs (sinking and furniture)   | 233.3        |
| Underground development drivages  | 34.1         |
| Underground infrastructure & ancillary equipment (belts, ventilation, electrics, power centers) | 87.6         |
| Capitalised pre-production expenses (labour, power etc)   | 66.7         |
| Other underground mine development  | 188.4        |
| Coal handling process plant (CHPP) & waste management   | 45.5         |
| Mine surface facilities & infrastructure (buildings, roads)                                     | 90.5         |
| Total CHPP and surface facilities   | 135.9        |
| EPCM, owners' costs and contingency   | 74.1         |
| <b>Total capital expenditure</b>  | <b>632</b>   |

Table: Capex breakdown for Jan Karski Mine. Source: Company

**Rate of production** – At steady-state, ROM was assumed to be 8.0Mtpa with a yield of 78%, giving 6.34Mtpa of saleable coal.

**Sales price** - An average selling price per tonne of US\$79.60 was used in the PFS. This was the average basket selling price assumed in the PFS, which was FOR (long term real price) based on the product mix and assumed prices shown in the table below. **In order to be conservative, we used a sales price per tonne which roughly lies at a 10% discount to the long-term average selling price used in the PFS.**

| Type of coal           | Average Volume (steady state) Mtpa | FOR Price (real) US\$/t |
|------------------------|------------------------------------|-------------------------|
| Semi-soft coking coal  | 2.66                               | 84.10                   |
| API specification coal | 1.44                               | 55.60                   |
| High ash fines coal    | 1.14                               | 75.10                   |
| Industrial coal        | 0.76                               | 86.24                   |
| Household coal         | 0.34                               | 105.00                  |

Table: Jan Karski coal price assumptions used in the PFS. Source: Company

**Operating costs** – Average operating costs in the steady state were assumed to be US\$24.96 per tonne of saleable coal, a figure which includes SG&A and royalty.

**Tax** – Polish corporation tax currently stands at 19% and we have used this rate over the life of the mine. Once again, we have assumed that corporation tax can be offset against the capital expenditure and on that basis, tax will not be paid until 2035.

| Discount rate    | 8%       | 10%    | 12%    |
|------------------|----------|--------|--------|
| NPV US\$ million | 1,147.25 | 768.87 | 501.05 |

Table: Revenue forecast, cash flows and NPV for the Jan Karski Mine. Source: Company & Align Research

### Sum-of-the-parts valuation

Our target price is based on a sum-of-the parts valuation and we have risked both the NPV(8) figures from the analysis of Debiensko and the Jan Karski Mine in order to take account, not only of the potential structure of the final financing deals, but also the current stage of these projects in the feasibility process - whether Scoping Study, FPS or BFS.

The expected financing deals for such projects are probably most likely to be project financing deals where 60-80% of the capital expenditure requirement is debt funded, with the remainder provided by equity. The risk factors have been chosen to reflect the potential levels of uncertainty in the projects at their current stage of progress and likely equity dilution.

| US\$ million                                  | NPV(8)   | Risk factor | Risked -weighted NPV | Sum-of-the-parts valuation |
|---|----------|-------------|----------------------|----------------------------|
| Debiensko                                     | 1,106.36 | 90%         | 110.64               | 110.64                     |
| Jan Karski Mine                               | 1,147.25 | 75%         | 286.31               | 286.31                     |
| Corporate G&A                                 | (23.89)  | n/a         | n/a                  | (23.89)                    |
| Cash A\$18 million (using 1.26 exchange rate) |          |             |                      | 14.29                      |
| Debt  |          |             |                      | -                          |
| <b>Total</b>                                  |          |             |                      | <b>\$387.85m</b>           |

*Table: Sum-of-the-parts valuation for Prairie Mining. Source: Align Research*

We have chosen a heavy 90% risk factor for Debiensko, which has been deemed suitable at the current Scoping Study Stage. However, a 75% risk factor is used for the Jan Karski Mine as this project is at a more advanced stage with the PFS completed. As both these projects progress further through the feasibility stages and towards the production decision, mine construction and actual production, we will be able to decrease these risk factors and which will serve to increase our target price.

| Target price        | Number of shares | Total risked NPV US\$ million | Total risked NPV £ million | Per share p |
|---------------------|------------------|-------------------------------|----------------------------|-------------|
| Currently in issue  | 167,498,969      | 387.85                        | 303.01                     | 181         |
| Fully diluted basis | 255,649,954      | 387.85                        | 303.01                     | 118         |

*Table: Target price for Prairie Mining. USD:GBP FX rate of 1.2805 used.*

*Source: Align Research*

Our total risked valuation for Prairie Mining is \$387.85 million (£303.01 million), which equates to 181p per share based on the number of shares currently in issue. Our target price however has been calculated on a fully diluted basis, dividing the risked NPV by the sum of the total number of shares plus options, performance rights and the fully diluted number of shares resulting from the conversion of CD Capital's Convertible Loan Notes and options. **On a fully diluted basis our target price is 118p.**

**We believe our valuation is extremely conservative for three reasons.** Firstly, as we can see, we have applied tough risk factors to the forecast cash flows and the key end TV. Secondly, in light of the currently strong coking coal market where spot market prices are: HCC US\$200/t, SSCC US\$105/t and high volatile SSCC US\$140/t and so there is potential for a retracement. Thirdly, we have in fact allowed for Polish corporation tax in our analysis.

## Conclusion

Prairie Mining is moving its two world-class Tier-1 hard coking coal projects through feasibility studies in a highly systematic fashion towards taking production decisions over the next twelve months or so. **We do not say this lightly, but the company would appear to be a prime M&A target given its large-scale, long life projects which are located in a stable country like Poland and lie close to the heart of the European steelmaking industry.** Such has been the rate of progress at Jan Karski that this project is now one of the most advanced new large-scale coking coal projects in the northern hemisphere.

Long ago, multinational mining companies realised that it was cheaper and easier to rely on junior miners like Prairie to keep them supplied with the large low-cost projects with a decent mine life they need to grow rather than develop them themselves. In the last industry acquisition flurry, most of the decent coking coal projects disappeared into the arms of the majors. Today, there are majors like South32 and Glencore looking for such projects and we would not be surprised if such multi-nationals are keeping a watchful eye on Prairie and monitoring the company's progress.

**By any yardstick, Prairie Mining shares look to be very cheap.** The stock appears to be undervalued, in our assessment, largely because the story remains relatively unknown to investors in the UK. The company has Australian origins and 75% of the shares are still held in Australia, with only a minimal amount of trading in the shares in London. However, it does seem that the company is seeking to raise its profile in Europe and bring Prairie to the attention of the UK investing public. **We believe there is a good investment opportunity at the current depressed level ahead of the stock beginning to gain a following and getting a re-rating.**

There is also an anticipated stream of news flow over the coming weeks and months which should include the Chinese DFS and news of financing the Jan Karski project and the infill drill program. At the Debiensko Project there is expected to be the upgrading of the JORC resource and the starting of the BFS, both important steps on the critical path to restarting the mine. We look forward to being given the opportunity to revisit our target price following the announcement of such news.

**Our coverage of Prairie Mining is initiated with a target price of 118p and a Conviction Buy stance.**

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