Prairie Mining Limited

**NEWS RELEASE | 8 MARCH 2016**

# PRE-FEASIBILITY STUDY CONFIRMS LCP AS ONE OF THE LOWEST COST GLOBAL COAL SUPPLIERS INTO EUROPE

***HIGHLIGHTS:***

- *Pre-Feasibility Study results confirm the technical viability and robust economics of the Lublin Coal Project to be developed as a large scale long life strategic coal supplier.* ***The European industry continues to consume more than 300Mt of hard coal per annum with increasing concerns over energy security***

- *Average operating* ***cash costs of only US$25 per tonne*** *(steady state) position the Project as the lowest cost supplier of coal into Prairie's key regional European target markets*

- *Average* ***EBITDA margin (steady state) of US$348 million*** *provides for high cash margins from the adoption of international best practice for the design and operation of the mine and coal processing*

- ***Key PFS results for the Lublin Coal Project are summarised as follows:***
    - ***Annual Saleable Coal Production (Steady State Average)*** ***6.34 million tonnes per year***
    - ***Total Operating Costs FOR Mine Gate (Steady State Ave)*** ***US$25 per saleable tonne***
    - ***Annual EBITDA (Steady State Average)*** ***US$348 million***
    - ***Initial Mine Life from First Production (Ore Reserves Only)*** ***24 years***
    - ***Initial Marketable Ore Reserve*** ***139.1Mt***

- *In-situ coal quality provides* ***flexibility to produce exceptionally low ash semi-soft coking coal and premium coals for the power generation sector****, as well as a range of sized coal for households and industrial coals, with substantial netback pricing advantages due to the proximity of regional end users*

- ***Access to well established regional rail and port infrastructure*** *with underutilised bulk cargo capacity for low transportation costs within Poland, to regional European markets by rail, and to the seaborne export market through underutilised ports in the north of Poland*

- ***Leveraging off existing infrastructure*** *has resulted in total direct Capex of US$558 million plus contingencies, EPCM and owners costs of US$74 million. The Capex is comprised of US$136 million for coal processing and surface facilities, shaft sinking costs of US$233 million and other underground development costs of US$188 million*

- *Significant positive social and* ***economic benefits for the Lublin region****, including the potential to double foreign direct investment and create new jobs*

- ***Potential for significant expansion*** *of production beyond the proposed PFS marketable reserve (see Figure 21), by inclusion of some 87Mt of inferred resource from the 391 seam, or inclusion from other new coal seams, which will be examined as part of upcoming technical studies to enhance the Project*

- *Prairie's Polish and international management team with experience in developing, operating and financing world-scale coal projects, will now commence discussions with potential off-takers and EPC contractors as well as focus on Project permitting*


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Prairie Mining Limited ("**Prairie**" or "**Company**") is pleased to announce the results of a Pre-Feasibility Study ("**Study**" or "**PFS**") which has been prepared in accordance with the JORC Code (2012 Edition). The Study has been conducted on the Company's Lublin Coal Project ("**LCP**" or "**Project**") located in the low cost and proven Lublin Coal Basin in south eastern Poland.

Utilising the Project's initial Marketable Ore Reserve Estimate of 139.1 million tonnes ("**Mt**") of coal, the Project can support average steady state production of 8.0 million tonnes per annum ("**Mtpa**") Run-of-Mine ("**ROM**") coal, yielding an average of 6.34Mtpa of saleable clean coal. The LCP's fundamentals are extremely encouraging with average operating cash costs (inclusive of SG&A and royalties) during steady state production of US$24.96/tonne of saleable coal Free On Rail at the Mine Gate ("**FOR**"), indicating that the LCP would be the lowest cost supplier of coal into Prairie's key regional European target markets. The high margin LCP is expected to achieve average earnings before interest, taxes, depreciation, and amortization ("**EBITDA**") of US$348 million per annum (steady state).

**Table 1: Coal Price Sensitivity Analysis**

| Adjustment to Sales Forecasts | -10% | -5% | Base Case | +5% | +10% |
|---|---|---|---|---|---|
| **Annual EBITDA (Steady State)** | US$298m | US$323m | US$348m | US$373m | US$399m |

The LCP is located in south eastern Poland in the Lublin Coal Basin, which is proven to be the lowest cost hard coal basin in Europe, and is well serviced by modern and highly efficient infrastructure, offering the potential for low capital intensity mine development. Mining services, construction personnel, contractors and equipment are expected to be supplied and/or built by a combination of Polish firms and international firms.


*Figure 1: Strategic Location of the Lublin Coal Project*

Prairie's Chief Executive Officer, Mr Ben Stoikovich, said "*The PFS has confirmed the potential to develop a world scale, multi-generational coal mine with strong cash flows. In fact, we expect that the Lublin Coal Project would be the lowest cost global supplier of coal into Prairie's key regional European target markets.*

*We are in the enviable position of having a highly advanced project with very strong fundamentals, located in a proven world class coal basin. The Lublin Coal Project has the potential to become a significant new coal producer within the industrial heartland of Europe and offer a strategic supply of high quality coal to regional European markets, and for seaborne export. We expect this will become even more important given the ever increasing concern over the security of energy supply, particularly for Central Europe. We look forward to the Project providing a tremendous boost in local employment opportunities and benefits for the regional and national economy".*

Mr Mirosław Taras, a Prairie executive and former CEO of Lubelski Węgiel BOGDANKA ("**Bogdanka**"), further said: *"The Lublin Coal Project is the first coal mining investment in Poland in line with international standards such as JORC or the Equator Principles. The new Jan Karski mine at the Lublin Coal Project will be the first, but hopefully not last in Poland to introduce advanced roof bolting technology for roadway primary support, which will lower costs, increase productivity and improve safety. I believe that the world-class Lublin Coal Project can contribute to Poland reclaiming its position as a reliable coal exporter in Europe and bring enhanced energy security to the region. I am strongly connected to the Lublin region as I have already built one mine in Lublin and seen the prosperity it bought to the community. I will now take even greater satisfaction in working on a similar project, except that this project will have the benefits of being more technologically advanced, thoroughly planned and run according to international best practice. I'm proud to see the Lublin Coal Project continue to receive strong support from the local community and government who recognise its potential to provide a tremendous boost in local employment opportunities in both the regional and national economy."*

***Figure 2: 3D Render of LCP PFS Mine Site Design***

### *For further information contact:*


| | | |
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## Key PFS Results

Prairie is pleased to report the results of the PFS prepared by independent, international consultants Golder Associates (UK) ("**Golder**") and Royal HaskoningDHV UK Limited ("**RHDHV**"), with input from other specialist International and Polish consultants. The Study utilised an updated Coal Resource Estimate ("**CRE**") for the Company's LCP which comprises a Global CRE of 728Mt including an Indicated Resource of 181Mt from two coal seams, the 391 and 389 seams. The PFS incorporates a mine plan based on an initial Marketable Ore Reserve Estimate generated from the indicated resources within the 391 and 389 seams, and other Project refinements since the completion of the Scoping Study in April 2014. Key results of the PFS are as follows:

| **Table 2: Strong Project Fundamentals** *(to a maximum accuracy variation +/- 20%)* | | |
|---|---|---|
| **Cash flow** | | |
| Average Operating Costs Steady State | US$24.96 per tonne | |
| Average Basket Sales Price Received FOR Steady State | **2024** | **2036** |
| | US$77.46/t | US$80.23/t |
| Average Annual Free Cash flow (steady state) | US$267.7 million | |
| **Production** | | |
| Average ROM Coal Production Steady State | 8.0Mtpa | |
| Total ROM Coal Produced Life of Mine ("**LOM**") | 176.7Mt | |
| Average Effective Product Yield LOM | 78.8% | |
| Mine Life Following First Production | 24 years | |
| Average Saleable Coal Production Steady State | 6.34Mtpa | |
| Total Saleable Coal Produced LOM | 139.1Mt | |
| **Capital Expenditure** | | |
| Coal processing and surface facilities | US$135.9 million | |
| Shaft sinking | US$233.3 million | |
| Other underground development | US$188.4 million | |
| Contingencies, EPCM and owners costs | US$74.1 million | |
| Start of Construction | 2018 | |
| Start of Production Ramp-Up | 2023 | |

* FX rate assumed for PFS is PLN:USD - 4.0:1

## High Margin, Significant Cash Flow Generation

The results of the Study demonstrate the potential for exceptionally high operating margins and cash flow generation given the anticipated low operating costs for the LCP. This is achieved because Prairie is pioneering the introduction of international best practice in mine design, production organisation and technology in Poland. Prairie's exploration program has confirmed that the Lublin coal basin has ideal geological and mining conditions for high productivity longwall operations. The LCP is adjacent to the Bogdanka mine that has successfully operated in the Lublin coal basin since 1982 and is proven to be the lowest cost hard coal mine in Europe. One of the major advantages that Prairie enjoys is that the LCP is a greenfield mine development and our project studies have incorporated international best practice from the very start of the project, demonstrating the potential to deliver substantial operational and product quality improvements.

Some of the international best practice Prairie has incorporated into the PFS includes:

- Modern exploration and geological modelling techniques to provide more accurate and reliable estimations of resources and improved mine planning;
- Optimized targeting of coal seams focusing on maximizing profitability by targeting highest quality coal seams first
- Modern mine design reduces operating costs, improves coal yields and optimizes logistics;
- New technologies focus on increased automation, improved productivity and safety;
- Adoption of continuous miners and rock-bolting techniques that are common in Australia, USA, China, Great Britain and other countries;
- Adoption of modern coal washing techniques such as froth flotation cells, resulting in higher coal yields, high value coal product specifications and improved product flexibility; and
- Improved labour organisation through flexible shift structures, seven day per week rotations, bonuses based on production targets aimed at increasing productivity, reducing costs and aligning staff interests with investor goals.

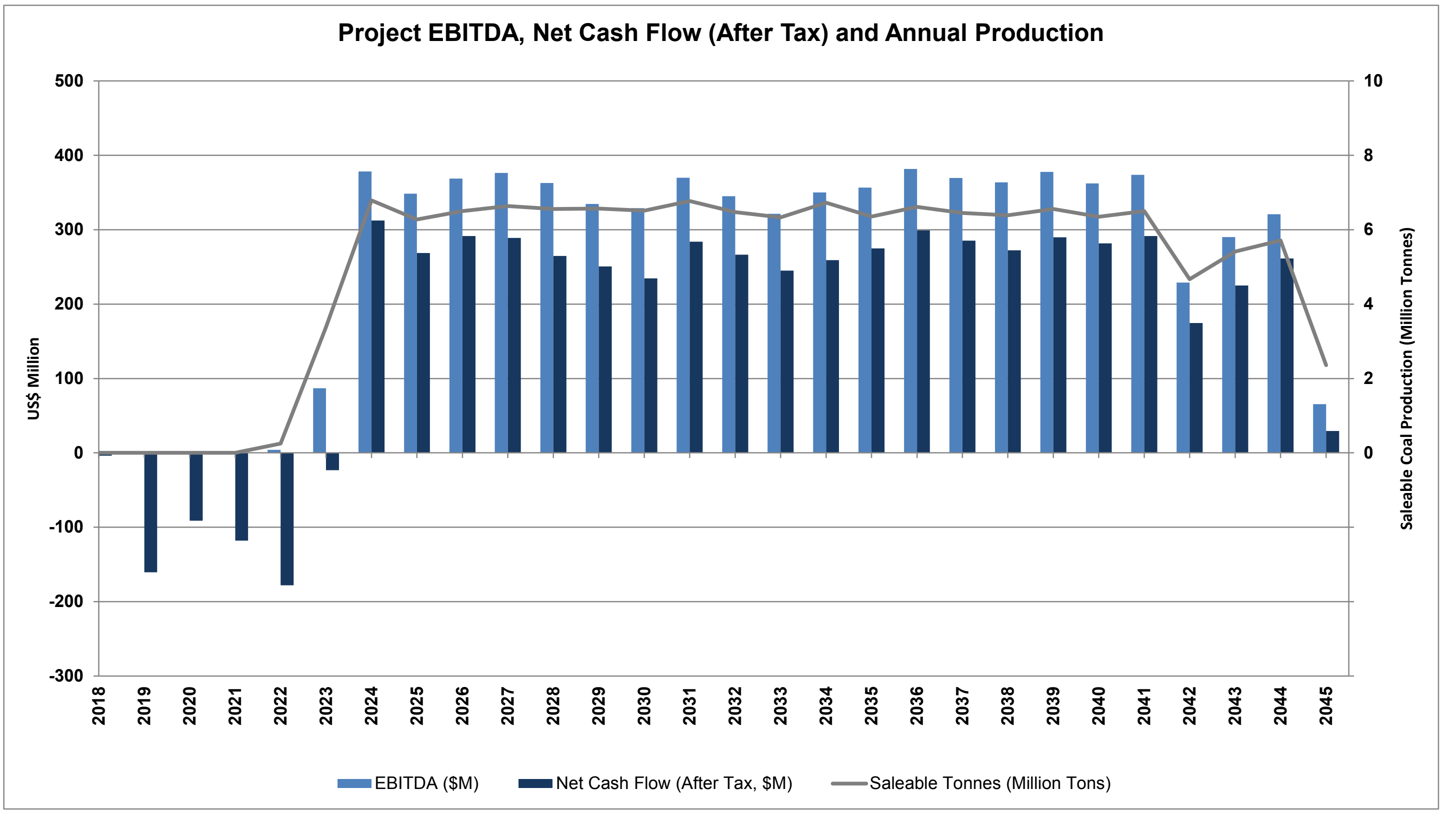



***Figure 3: Project EBITDA, Net Cash Flow (After Tax, Ungeared) and Annual Production Life of Mine***

## Lowest Global Cash Operating Costs

The LCP is projected to have an average operating cash cost of US$24.96 per tonne FOR at steady state production for all of its saleable coal products, producing an average 6.34Mtpa. Semi-soft coking coal product from the LCP is anticipated to be at the bottom of the global cash cost curve for semi-soft coking coal delivered into the European trading hub of Amsterdam, Rotterdam and Antwerp ("**ARA**") with a delivered cost of US$44.86 per tonne (FOR cost + rail to Gdansk of USD11.7/t + ship loading of USD4/t and shipping of $4.2/t).

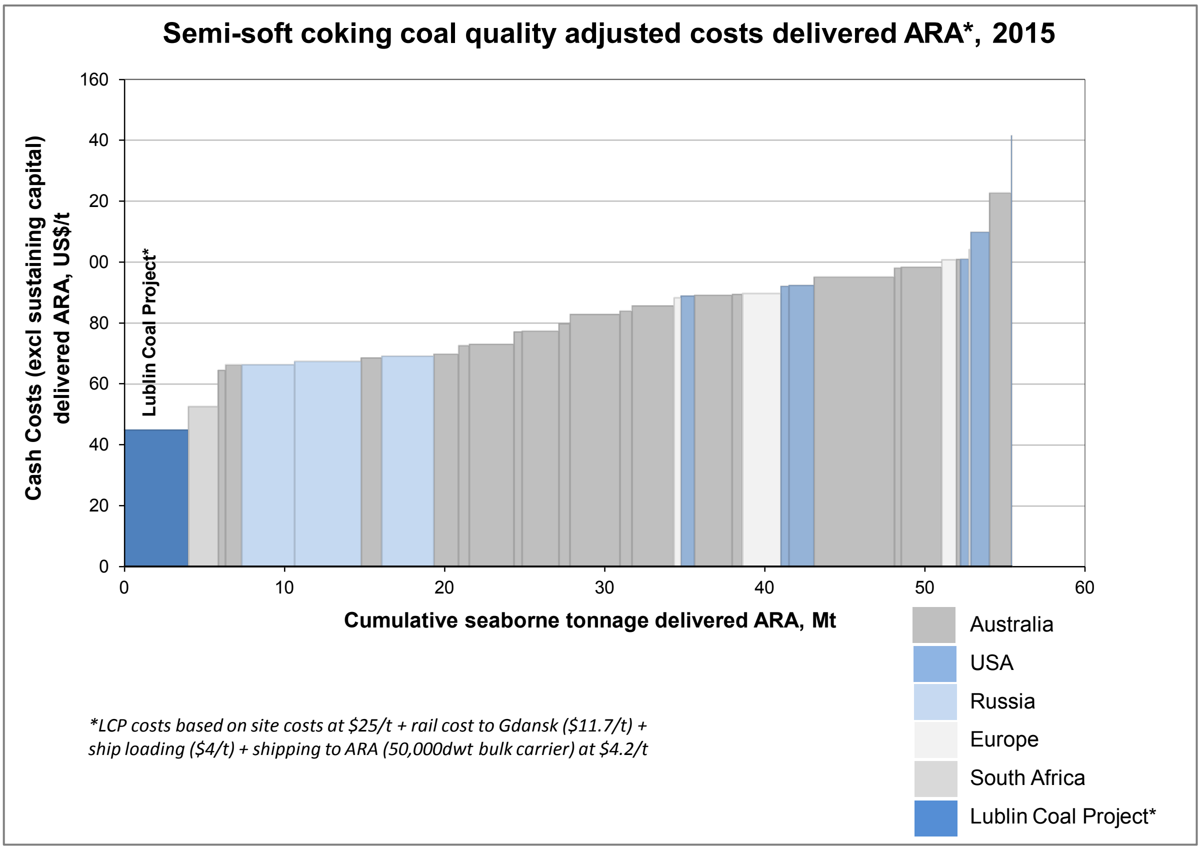



***Figure 4: LCP – Potential Position on the Cash Cost Curve Semi-Soft Coking Coal***

*(Source: CRU)*

The LCP's API specification thermal coal delivered to ARA would cost US$44.86/tonne (FOR cost + rail to Gdansk of USD11.7/t + ship loading of USD4/t and shipping of $4.2/t) thus positioning LCP in the lowest quartile of the global cash cost curve for export quality thermal coal delivered to ARA. This is a premium quality thermal coal for the combined heat and power plant ("**CHP**") and power generation sectors, with comparable or superior quality to the API2 (Argus Price Index) specification that is the key benchmark for export quality thermal coals traded into Europe.

Due to proximity and freight cost advantages there are several key target markets where LCP export thermal coal will be significantly more cost competitive on delivered to power plant basis. In all likelihood, export thermal coal to be produced at the LCP would not be shipped to ARA, but could readily be sold by rail into the Czech Republic, Germany, Austria, Slovakia or Ukraine, and the LCP would be a lowest cost supplier into these key regional markets.

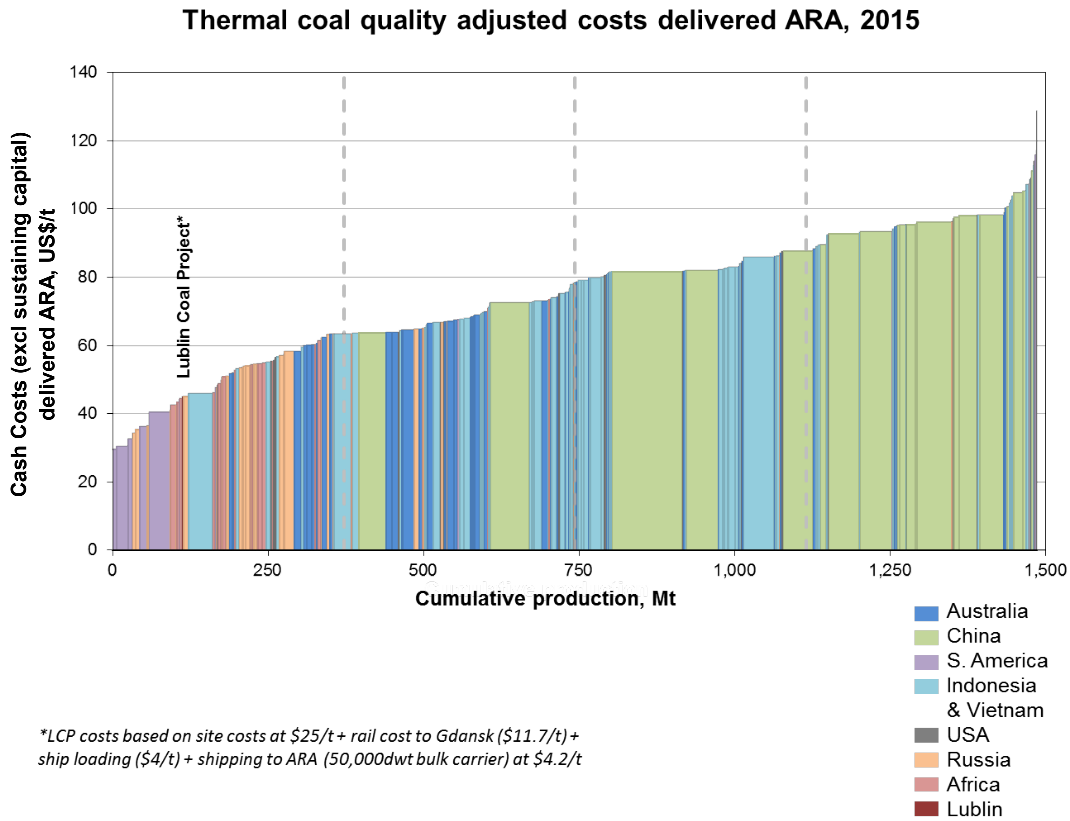



***Figure 5: LCP – Potential Position on the Cash Cost Curve – Thermal Coal***

*(Source: CRU)*

The Study assumes that a substantial portion of the mining equipment fleet will be leased, which is common for underground coal mines in the region. In addition, there is a royalty of approximately PLN 3.2 per saleable tonne, in-line with the established Polish fiscal regime.

**Table 3: Low Operating Costs**

| **Average Operating Costs (Steady State)** | **US$ per tonne Saleable Coal** |
|---|---|
| Labour Costs | 4.52 |
| Materials & Consumables | 5.34 |
| Power | 3.60 |
| Leased Equipment & Contractors | 5.32 |
| **Sub-total Direct Mining Costs** | **18.79** |
| CHPP*, Waste Management & Logistics | 2.92 |
| **Sub-total Direct Production Costs** | **21.71** |
| SG&A | 2.25 |
| Mine Closure Fund | 0.21 |
| **Average Operating Costs** | **24.16** |
| Royalty | 0.80 |
| **Average Total Cash Cost** | **24.96** |

* Coal Handling & Preparation Plant

The LCP's very low operating costs are primarily due to the following inherently favourable attributes:

- A large resource base of flat lying, consistent and laterally continuous coal seams with a low incidence of geological structures, which allows for highly productive longwall panels up to 5km long and 400m wide;
- Stable geological setting with a very low risk of potential hazards such as rockbursts and outbursts, and very low in-situ coal seam methane gas contents, as the record from 34 years of coal mining in the region demonstrates;
- Minimal surface constraints given that agricultural activity dominates in the area of the Company's concessions;
- Close proximity to existing and underutilised rail and port transport infrastructure that provides access to coal markets in Poland and wider Europe by rail, and to seaborne export markets;
- Located within a mature coal mining country with access to a highly skilled coal mining workforce; and
- Competitive power, labour and utilities costs.

## Strategic Access to Export Markets

Transport infrastructure studies for the LCP, conducted by Polish specialists (refer ASX announcement 3 April 2014) have confirmed that regional infrastructure servicing the Project can support bulk coal transport. Studies completed by international coal marketing consultants CRU, as well as other Polish specialists, confirm that coal from the LCP can be transported at competitive rates into regional export markets via rail and sea, and also into traditional Polish markets. Given the large scale of the LCP and the availability of nearby well established and low cost transport infrastructure, the Project is well positioned to provide a significant new strategic supply of coal to various industries in Europe.


***Figure 6: Access to Coal Export Markets***

| Table 4: Transport Cost from Lublin | | |
|---|---|---|
| **Destination** | **Mode** | **Cost (US$/t)** |
| Berlin IPP | Rail | ~$15.2/t |
| Hansaport | Polish Rail + Ship from Gdansk | ~$19.2/t |
| Czech Steelworks | Rail | ~$10.8/t |
| Western Ukraine | Rail | ~$5.9/t |
| ARA | Polish Rail + Ship from Gdansk | ~$19.9/t |
| Turkey (Mediterranean Port) | Polish Rail + Ship from Gdansk | ~$27.6/t |


***Figure 7: Favourable Regional Transport Cost***

## Marketing Strategy & Pricing Assumptions

Prairie's base case marketing strategy considered within the Study during steady state production is to sell:

- **Semi-soft Coking Coal:** 2.66Mtpa (or 42% of saleable production). Europe imports over 60Mt of metallurgical coal per year (which includes hard coking coal, semi-soft coking coal and pulverised coal injection ("**PCI**") coal). The only current producers of metallurgical coal in Europe are Poland (13.0Mt), Czech Republic (4.3Mt), Germany (1.7Mt) and Turkey (0.5Mt). Germany is the largest import market for metallurgical coal by some distance. It has a small volume of domestic production, but this is likely to close by 2018, further increasing import requirements. Slovakia, UK, France and Benelux are also reasonably sized markets. The Czech Republic has domestic supply of coal, limiting import requirements, although this may grow, with New World Resources Plc announcing in December 2015 that financial difficulties are likely to lead to further mine closures and reduced Czech production. Poland has large demand for coking coal, and this is mostly already met by domestic supply, but it should be noted that Poland has been a net importer of coking coal since 2009. However should coal mines in the Upper Silesian coal basin continue to face financial difficulties, domestic mine closures may lead to a further supply deficit. In total, Europe consumes around 15Mt per annum of semi-soft coking coal. The makeup of semi-soft vs hard coal in imports reflects availability of suppliers, due to freight rates, means much imported coal to Europe comes from the USA as opposed to other more distant suppliers, e.g. Australia. Demand for semi-soft coking coal is substantial in Germany, Benelux, UK and France. In terms of other regional markets, the Ukraine imports 6.5Mt of hard coking coal and 5.5Mt semi-soft coking coal per year – normally most of this comes from Russia, so the current geopolitical tension could present a market opportunity for the Lublin Coal Project.
- **API Specification Coal:** 1.44Mtpa (or 22.7% of saleable production). This is a premium quality thermal coal for the CHP and power generation sectors, with comparable or superior quality to the API2 specification that is typically used for export quality thermal coals traded into Europe. The coal price forecast used in this Study assumes that this coal is sold into the ARA market via railway to and shipping from the Baltic port of Gdansk. This is a conservative assumption since higher netback prices should be achieved by targeting future sales to power plants within Europe that are easily accessible by rail, particularly Germany, Czech Republic, Austria and Slovakia.
- **High Ash Fines Coal**: 1.14Mtpa (or 18% of saleable production). This product is of a similar quality to that produced presently at the Bogdanka mine and is suitable for Eastern European power plants designed for high ash and low calorific value coals. Nearby regional export markets include the Czech Republic and Ukraine, which are both regions likely to show significant demand growth for thermal coal given diminishing domestic production. Whilst the High Ash Fines Coal product is lower quality than API2 benchmark and accordingly receives a discount due to the lower calorific value, the proximity to nearby regional consumers means that on a netback basis the product receives higher FOR pricing than for the lower ash API Specification Coal, if assuming the API Specification Coal is sold into the ARA market.
- **Industrial Coal:** 0.76Mtpa (or 12% of saleable production). Industrial coal consumers in Poland consist of various cement, sugar, paper, chemical, milk and oil businesses. Almost all of the companies are privately owned. Basically, these businesses have large industrial premises located outside of cities with district heating, so they require coal for their own power and heating facilities, as well as coal for their industrial processes for example in cement plants or the chemical industry (e.g. Soda Polska Ciech). This is a large market segment in Poland which consumes some 6Mtpa according to Poland's Central Statistical Office. Industrial Coal is typically sized from 16mm to 30mm and has lower ash and higher CV than typical thermal coals, and therefore sells at a premium to benchmark thermal coals. For the purposes of this Study a 15% premium over the High Ash Fines Coal FOR price was assumed.
- **Household Coal:** 0.34Mtpa (or 5.3% of saleable production). The retail coal market in Poland is comprised of households who burn coal in stoves for heating purposes. Household coal achieves high prices in the Polish market, with Bogdanka currently selling household coal at the mine gate for PLN380 to 433/t (net of VAT). The household coal market in Poland consumes some 10Mt to 12Mt per year of sized coal fractions (cobbles, nuts and peas), and is considered by Prairie to be a premium market.

The Company commissioned independent market analysis for the LCP and the results have been incorporated into the Study. The average basket selling price assumed in the Study is US$79.60 per tonne free on rail (long term real), based on the product mix and price assumptions indicated in Table 5 below. Price forecasts presented below are on a free on rail basis at the mine gate. Generally the FOR prices have been linked to long-term price forecasts for standard international coal benchmarks such as the NSW FOB Semi-soft coking coal benchmark and the API2 index. Appropriate coal quality and value in use adjustments have been applied, as well as netbacks to account for freight differentials, including rail freight, sea freight and port handling charges.

**Table 5: Lublin Coal Project Coal Price Assumptions**

| | Average Volume (Steady State) | 2024 FOR Price (Real) | 2036 FOR Price (Real) |
|---|---|---|---|
| Semi-soft Coking Coal | 2.66Mtpa | US$84.10/t | US$92.00/t |
| API Specification Coal | 1.44Mtpa | US$55.60/t | USD54.20/t |
| High Ash Fines Coal | 1.14Mtpa | US$75.10/t | USD74.60/t |
| Industrial Coal | 0.76Mtpa | US$86.24/t | USD85.79/t |
| Household Coal | 0.34Mtpa | US$105.00/t | US$105.00/t |

Independent market analysis conducted by CRU provided long term price forecasts for the industry standard international coal price benchmarks. For metallurgical coals, including hard coking coal, semi-soft coking coal and PCI, the New South Wales Free on Board benchmarks were used ("**NSW FOB**"). For thermal coal the cost insurance freight Amsterdam, Rotterdam – Antwerp benchmark was used ("**CIF ARA**"), which is equivalent to the API2 benchmark.

Metallurgical coal prices have fallen sharply since their 2011 peak due to a weak demand environment, oversupply, and more recently deep cost-cutting among existing producers. Chinese production has disconnected from prices, with output remaining strong despite 60% of mines calculated to be loss-making on a spot basis throughout 2015. BHP Billiton has led with a productivity-based cost reduction drive – i.e. increasing output in order to reduce unit operating costs. This simultaneously contributes both to oversupply and lowering the cost base in the current market. Based on CRU's analysis, it is estimated that some 50% of global seaborne metallurgical coal output is losing cash in the current market. Accordingly, global coal mine closures are occurring at an increasing rate, which will ultimately lead to a re-balancing of supply/demand fundamentals and long term price equilibrium at the marginal cost of production. CRU forecasts a strengthening in metallurgical coal prices over the long term through to 2024.

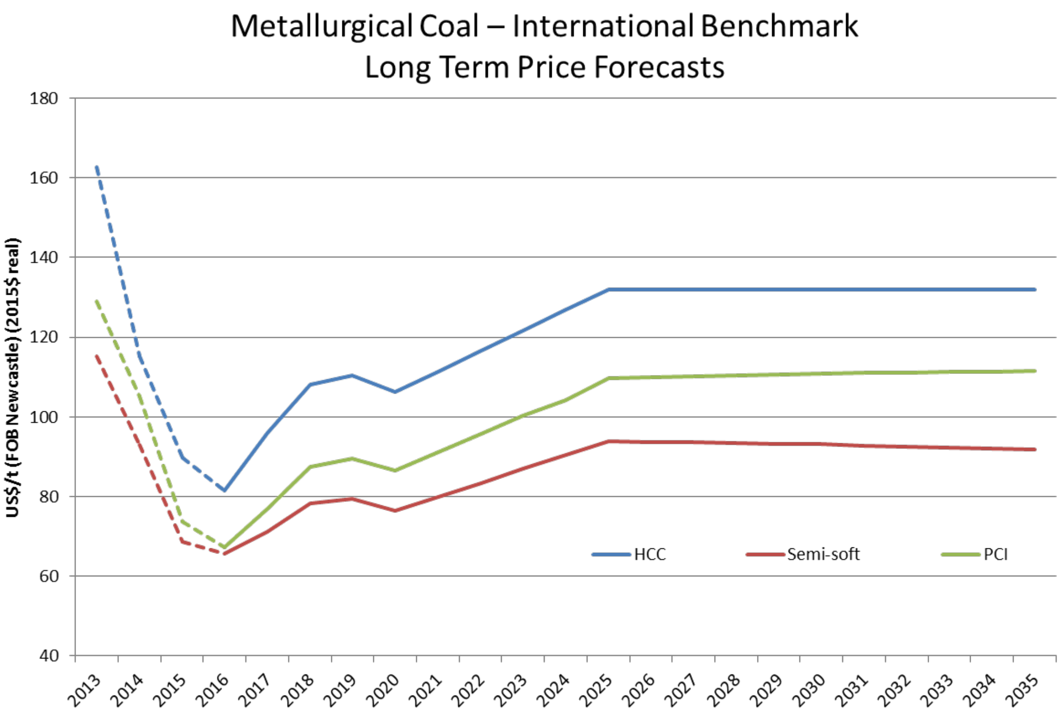



***Figure 8: LCP – Metallurgical Coal – Long Term Price Forecasts***

*(Source: CRU)*

Thermal coal prices have fallen to recent lows, with the API2 index at around US$43/t in January 2016, down from an average of US$84.1/t in 2013. According to CRU's analysis, as of December 2015 only ~63% of global seaborne thermal coal supply (including Chinese coastal trade) was cash flow positive. CRU expect prices to recover in the medium term, reaching over $76.4/t in real (2015) terms by 2020. In the long-term, a real (2015) price of around US$75/t is predicted, with nominal prices rising to US$100/t by 2030. Prolonged economic uncertainty presently witnessed in global markets may affect the rapidity with which prices recover to CRU's forecast long term equilibrium price.

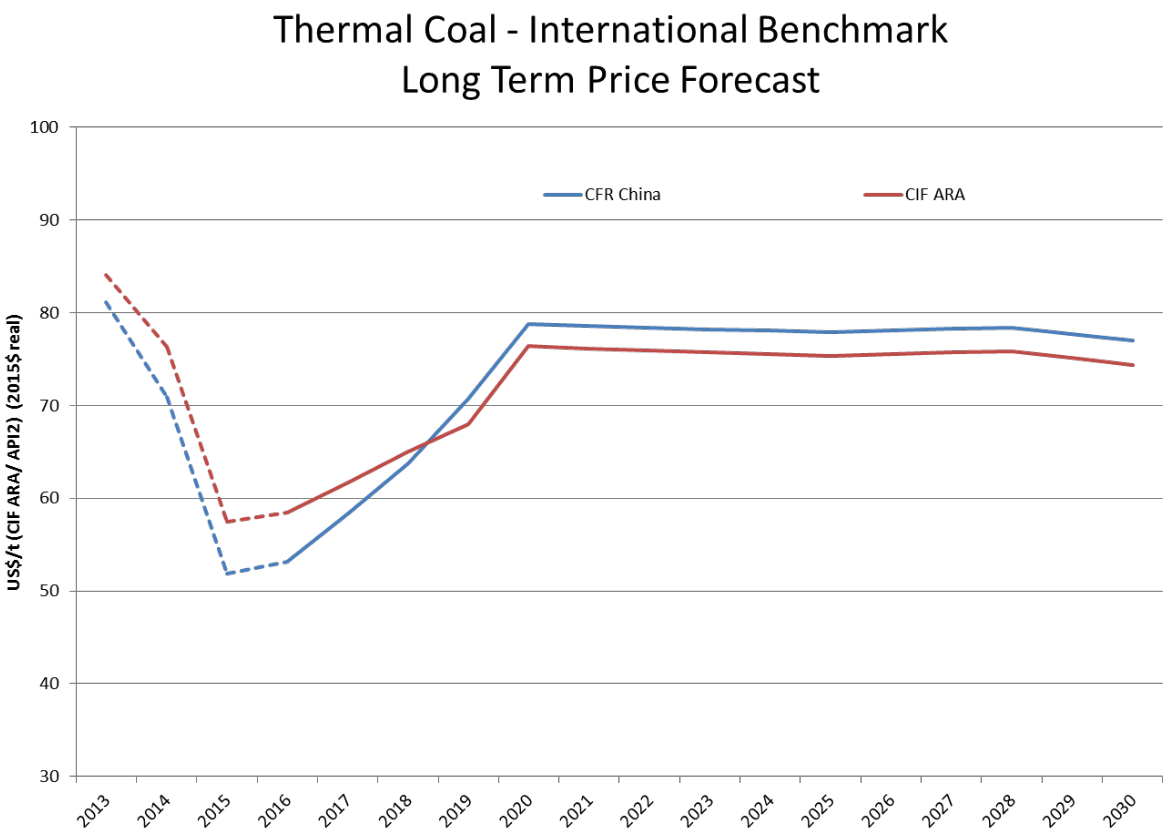



***Figure 9: LCP – Thermal Coal – Long Term Price Forecasts***

*(Source: CRU)*

## Premium Product Specification

Given the exceptional in-situ quality of the 391 coal seam the Company is targeting to produce a range of saleable products for sale into different markets. By utilising modern wash plant technology, as is typically used in other world class coal mines in the USA, South Africa or Australia, the Company plans to be able to adjust the product split as required by the market. Such flexibility in product mix represents a significant potential competitive advantage for the Project since it provides mitigation against LCP coal sales from becoming captive to specific end-users.

| Table 6: PFS Saleable Coal Quality Specifications | | | | | | |
|---|---|---|---|---|---|---|
| | **Product Coal Quality** (As Received Basis) | | | | | |
| | **% LOM Saleable Coal Production** | **Sizing** | **Ash** | **Moisture** | **Sulphur** | **CV** (kJ/kg NAR) |
| **Metallurgical Coal** | 42.0% | 0 to 30mm | ≤4% | 10.5% | 0.9% | 29,170 |
| **API Specification Coal** | 22.7% | 0 to 30mm | 14% | 10.5% | 0.8% | 25,500 |
| **High Ash Fines Coal*** | 18.0% | 0 to 30mm | ≤26%* | 10% | 0.7% | 21,900 |
| **Industrial Coal** | 12.0% | 16 to 30mm | <6% | 7% | 1.0% | 29,170 |
| **Household Coal** | 5.3% | 8 to 80mm | <6% | 5% | 1.0% | 29,890 |

* High Ash Fines Coal product can be varied by adjusting washplant parameters to deliver ash percentage according to end-user requirements. For example, a 23% ash product suitable for export to Ukraine can be produced, or coal similar to Bogdanka's typical product specifications (Bogdanka product Type I: Ash – 23%, CV 21,000kJ/kg, Moisture 9 – 11%; Bogdanka product Type II: – Ash - 25%, CV 20,000kJ/kg, Moisture 9 -11%).

The coal quality results from washability testing of the 391 seam from the core drill holes compare favourably with the quality specifications of standard international benchmark semi-soft coking coals which are produced in New South Wales, Australia. The washed 391 coal quality also compares favourably to semi-soft coking coals currently produced at Jastrzêbska Spółka Węglowa SA's ("**JSW**") Krupinski coal mine in the Upper Silesian Basin in Poland, and with premium, ultra-low ash semi-soft coking coal as exported internationally by New Zealand's Solid Energy.

| Table 7: LCP Semi Soft/ Metallurgical Coal Comparisons | | | | | |
|---|---|---|---|---|---|
| | **LCP** | Rio Tinto (NSW) | Glencore (NSW) | JSW (Poland) | Solid Energy (NZ) |
| Free Swell Index | **4.0 – 6.0** | 5.0 | 4.0 – 6.0 | 6.0 | 3.0 – 5.0 |
| Ash % | **≤4.0** | 9.5 | 9.0 | 8.0 | 4.5 |
| Volatile Matter % | **34 to 35** | 33.0 | 36.5 | 37.0 | 38.0 |

In relation to thermal coal specifications, the 391 seam washed coal quality compares exceptionally well to the globally recognised thermal coal API benchmark, both in terms of calorific value (heat content) and ash content. This means the specification compares well to both Russian and Colombian thermal coals, that account for approximately 60% of Europe's thermal coal imports.

| Table 8: LCP Low Ash API Specification Coal Comparison | | |
|---|---|---|
| | **LCP** | ARA (API2) |
| Calorific Value (NAR, kcal/kg) | **6,100** | 6,000 |
| Ash % | **14.0** | 11 – 15 |
| Volatile Matter % | **32** | 22.0 – 37.0 |
| Sulphur % | **0.8** | <1.0 |
| Total Moisture % | **10.5** | <15 |
| Hardgrove Grindability | **60** | 45 to 70 |

## Coal Resources

Prairie previously announced (refer ASX announcement 23 July 2015) a Coal Resource Estimate ("**CRE**") prepared by RHDHV, an established international mining consultancy ("**2015 CRE**"). For this Study, and for the preparation of the PFS mine plan, RHDHV have made minor revisions and issued an updated CRE ("**2016 CRE**"). RHDHV prepared the updated CRE in accordance with the JORC Code (2012 edition). The updated CRE comprises 352Mt in the Indicated Category as part of a Global CRE of 728Mt. The CRE has been modelled based on data from 10 coal seams that were considered economically extractable and applies a 1m seam thickness cut off and a 100m stand-off from the Jurassic formation.

| Table 9: Lublin Coal Project 2016 Coal Resource Estimate – Gross Seam Thickness | | | |
|---|---|---|---|
| **Coal Seam** | **Indicated Coal Resource In-Situ (Mt)** | **Inferred Coal Resource In-Situ (Mt)** | **Total Coal Resource In-Situ (Mt)** |
| **382** | 63 | 35 | **98** |
| **385** | 35 | 13 | **48** |
| **389** | 17 | 54 | **71** |
| **391** | 164 | 87 | **251** |
| **Other Seams** | 73 | 187 | **260** |
| **Total – Project Area** | **352** | **376** | **728** |

* The tonnage calculations for the Indicated Resource have included allowances for geological uncertainty (15%)

* Note: Apparent differences in totals may occur due to rounding

Exploratory drilling within the LCP concession area first began in the late 1960's, with the majority of drilling being undertaken by Polish government agencies during the 1970's and 1980's. It is previously reported that between 1965 and 1983 more than 200 boreholes were drilled in the region, including a total of 117 boreholes within the LCP. As such, a significant proportion of the data for the LCP is historical and has been collated by Prairie from a number of sources, including archives of the Polish Government and Polish Geological Institute/National Research Institute.

Prairie has concluded agreements with the Polish Ministry of Environment ("**MoE**") giving the Company access to detailed documentation from the historical drill hole database. The documentation includes hundreds of volumes of coal quality, geotechnical, hydrogeological, geophysical and seismic test data, analysis and interpretation.

Prairie undertook a core drilling program between 2012 and 2014 that was designed to corroborate past findings and provide additional high resolution data for geological, geotechnical, hydrogeological, washability and other purposes. The drilling program was highly successful, confirming the findings of the historical boreholes and confirming semi-soft coking coal in the 391 coal seam.

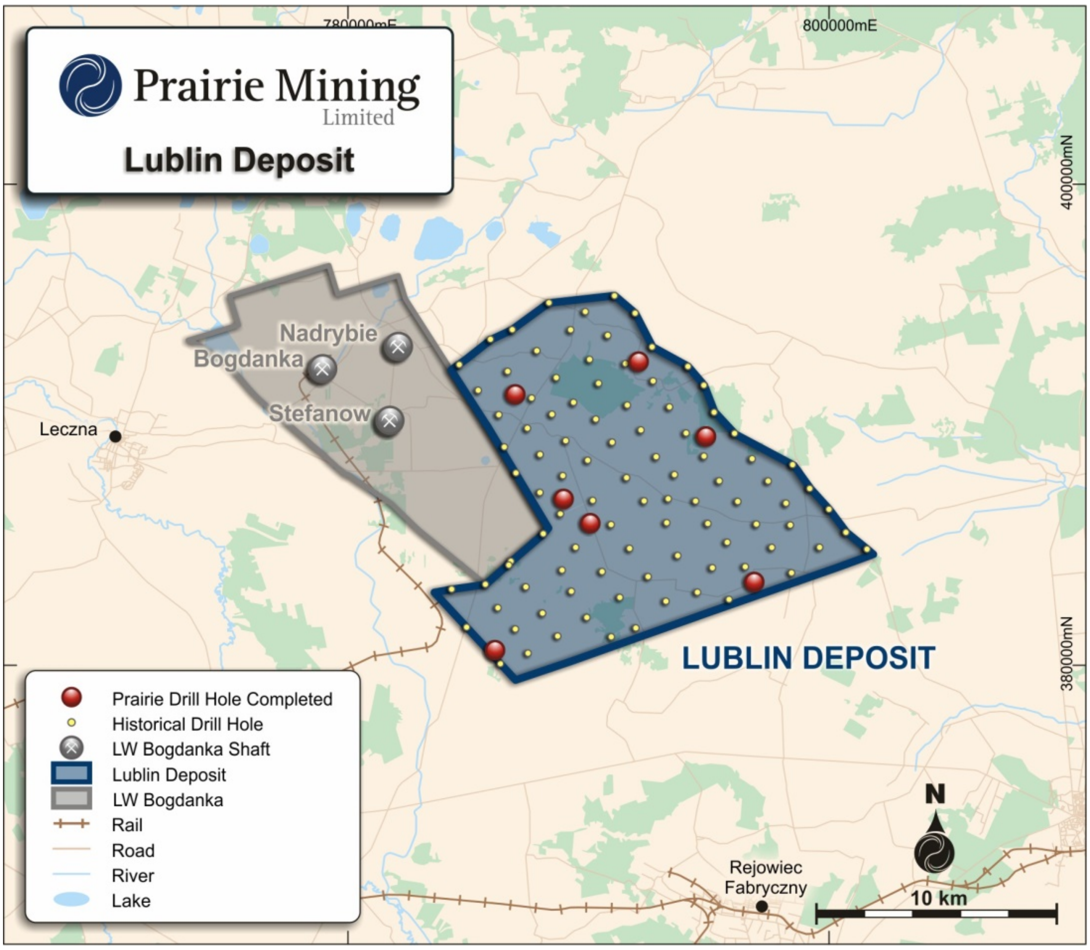



***Figure 10: Location of Historical and Completed Prairie Mining Drill Holes throughout the LCP***

The updated CRE was designed to support the mine plan for the PFS by delivering sufficient tonnes into the Indicated category. RHDHV modelled the available drilling data from 10 potentially economic coal seams within the LCP. The updated CRE has been estimated on a gross tonnage basis, and therefore includes dirt partings within the seam. This tonnage is approximately equivalent to the Run-of-Mine coal that would theoretically be extracted directly from the operation, but does not consider out-of-seam dilution i.e. contamination from roof and floor and mining or processing losses.

RHDHV applied a 1m seam thickness cut-off and also applied a more conservative stand-off of 100m from the overlying Jurassic formation which has been identified as a potential aquifer. RHDHV excluded certain areas within the concessions, including the northern half of the K-9 concession which was deemed not of mineable thickness. As the LCP moves towards development, Prairie's focus is on increasing confidence in its resource base by delivering coal resources into the Indicated and Measured categories in key areas within the LCP concessions. The results have reaffirmed that the 391 coal seam within the LCP is an extensive, thick, flat, consistent, and laterally continuous coal seam containing high quality coal with confirmed potential to produce semi soft coking coals.

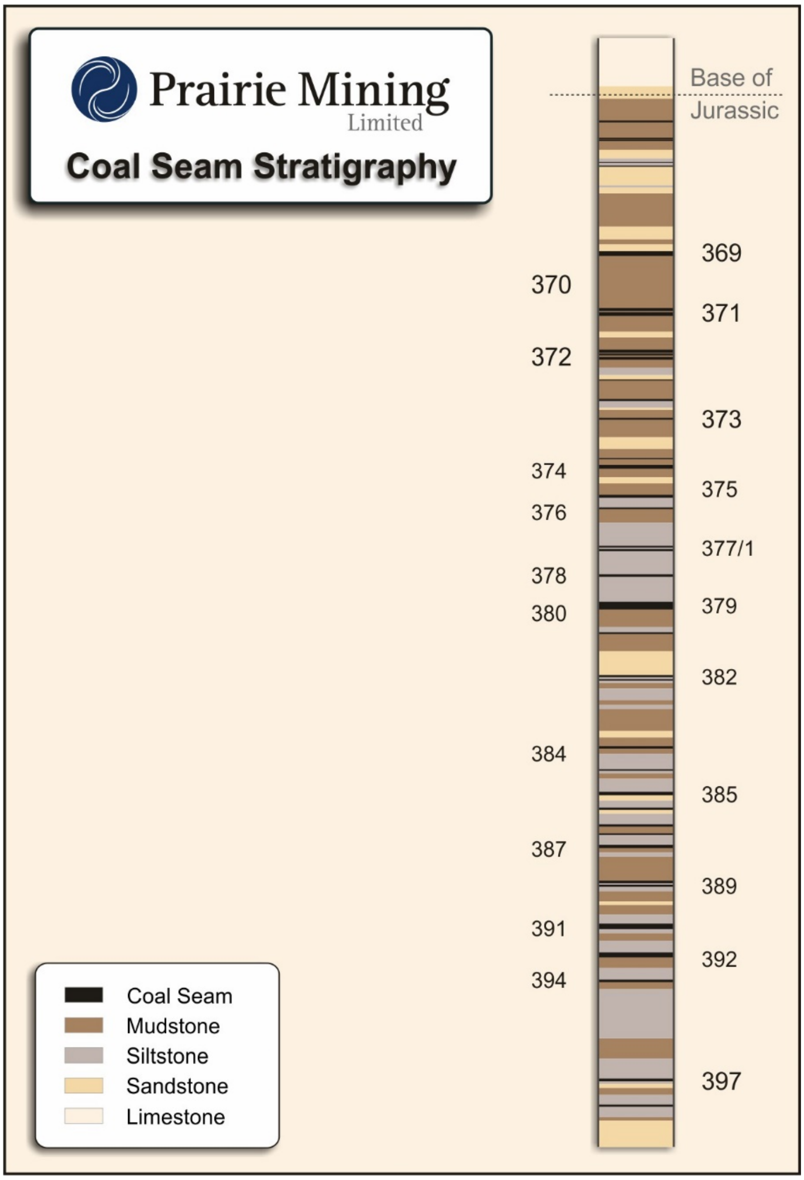



*Figure 11: Generalised Vertical Section through the Coal Measures*

## Coal Quality

The LCP has attractive coal quality parameters, particularly within the 391 seam, with the potential to produce high quality semi-soft coking coal.

The weighted average in-situ coal quality on a gross seam thickness basis (i.e. including non-coal partings) of the 391 and 389 seam resources declared in Table 10 is summarised below.

**Table 10: Summary of Coal Quality (Air Dried) of In-situ Coal Resources within the 391 and 389 coal seams – Based on Gross Seam Thickness**

| Parameter | 391 Seam | 389 Seam |
|---|---|---|
| Ash % (ad) | 10.27 | 14.43 |
| Gross Calorific Value MJ/kg (ad) | 29.57 | 27.73 |
| Sulphur % (ad) | 1.27 | 1.62 |

Prairie has conducted separate coal washability testing based on its completed drilling program, the results of which were published by the company in April 2015 (refer ASX announcement 30 April 2015). These results were highly encouraging as they confirmed the 391 coal seam hosts extensive premium coal throughout the planned target mining areas of the Project where the 391 coal seam is thickest. The 391 seam thickens towards the west of the Project area, as it approaches the border with the Bogdanka mine. In these areas, coal seam thicknesses extend up to 3.2m in the 391 seam.

The metallurgical coal analysis from the composite results shows Free Swell Index ("**FSI**") numbers of 3.5 – 6.0 in all target mining areas of the 391 seam, comparable to international benchmark semi-soft coking coals as well as semi-soft coking coals already produced in Poland.

**Table 11: 7 Hole Coal Quality Analysis – 391 Coal Seam**

| **Drill Hole ID** | **Washed Coal Quality** (Air Dried Basis) | | | | | | |
|---|---|---|---|---|---|---|---|
| | **Calorific Value** | FSI | Ash | Volatile Matter | Moisture | Sulphur | **Yield @ 1.35 to 1.50 Float** |
| Kulik | **7,806 kcal/kg** | 6.0 | 2.2% | 36.4% | 2.7% | 1.0% | **94%** |
| Cycow 7 | **7,832 kcal/kg** | 5.5 | 2.3% | 37.6% | 2.2% | 1.06% | **71.5%** |
| Kopina 1 | **7,526 kcal/kg** | 4.0 | 2.0% | 35.6% | 2.3% | 0.9% | **95%** |
| Cycow 8 | **7,618 kcal/kg** | 2.0 | 2.4% | 34.3% | 4.0% | 0.60% | **91%** |
| Syczyn 7 | **7,830 kcal/kg** | 6.0 | 2.4% | 36.7% | 3.3% | 0.7% | **97%** |
| Syczyn 8 | **7,798 kcal/kg** | 4.5 | 1.5% | 36.7% | 3.8% | 0.66% | **84%** |
| Borowo | **7,809 kcal/kg** | 5.0 | 2.7% | 33.2% | 2.4% | 1.0% | **75%** |

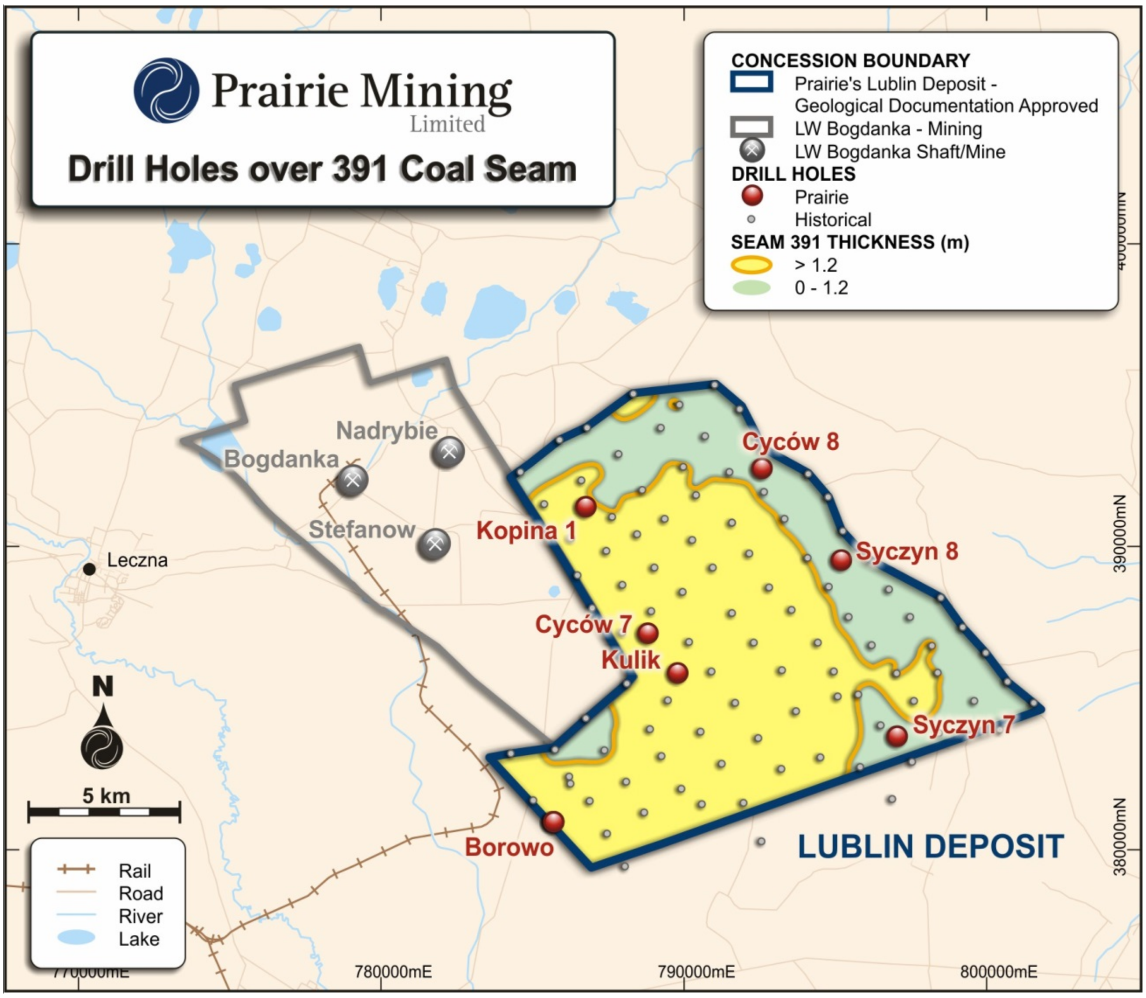



*Figure 12: 391 seam 1.2m thickness contour & Drill Hole Locations*

## Maiden Ore Reserve Estimate

The Study was managed by independent consultants Golders and included input from other specialist industry consultants with expertise in underground coal mine development, generally with Polish and International experience. The consultants analysed various project components including:

- Mine design and production scheduling
- Shaft sinking and winding
- Surface infrastructure
- Mineral transport
- Bulk power supply
- Coal preparation, storage and transport

The figures in Table 12 are drawn from the Competent Person' Report published by RHDHV (ASX Announcement 29 August 2015) and the Production Model Output by Golder. The figures summarise the conversion of the Indicated Resources in Seams 389 and 391 to Marketable Reserves (Saleable Product). Only Indicated Resources have been converted, by use of the appropriate modifying factors as described in the JORC Code 2012. Mining and wash plant losses are accounted for in the figures. All coal tonnes have been estimated on an as-received basis with allowances being made for processing additions so that the final, average moisture content of the clean coal product is 9.5% - as received.

| Table 12: Summary of Coal Reserves - Seams 389 and 391 | | |
|---|---|---|
| **Probable Coal Reserves** | **Basis** | |
| Recoverable Coal Reserves | As Received | 170Mt |
| **Marketable Reserves (Saleable Product)** | **As Received** | **139Mt** |
| Product Yield | | 81.9% |

**Notes**

- Coal Reserves are stated on an as-received moisture content basis and include partings, interburden, out of seam dilution and 2% mining losses (per Golders Mine Schedule)
- Marketable Reserves are stated on an as-received moisture content basis; estimated average clean coal moisture is 9.5% (per Golders Mine Schedule)
- This table contains roundings and background weighted calculations

## Mining Development Plan

The LCP has a well-defined CRE of 728Mt located in an established coal basin with a 34 year history of coal mining. The highly productive coal mining operation of Bogdanka, with similar geological and mining conditions, is located immediately adjacent to Prairie's LCP. As a result, the Company has a greater degree of confidence in many of the mine design elements of the LCP, beyond what is typical for a pre-feasibility level project, since it can incorporate the knowledge and experience gained from this neighbouring low cost, world-class mining operation.

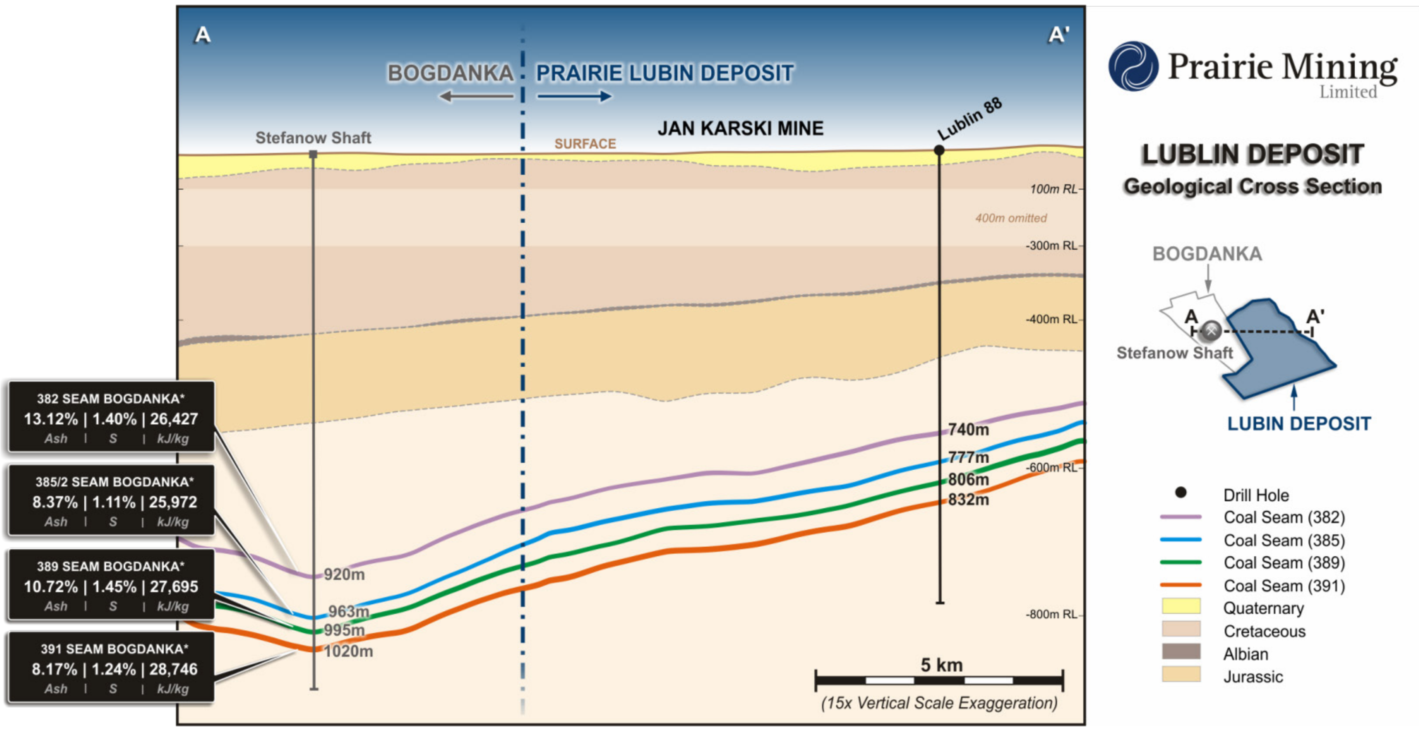



***Figure 13: LCP – Geological Cross Section***

*(*Source: "Expert's Report on Valuation of LW Bogdanka S.A. Geological-Mining Assets for the Prospectus Needs" – English Translation – 15.05.2009)*

## Mining Method

It is proposed that mining will be by longwall retreat caving method using modern, fully mechanised and automated faces. The Study assumes that longwall faces will use either shearers or plows for coal cutting. Generally shearers would be preferred to standardise mine production and equipment. Mine roadway development in the Study mine plan assumes a hybrid approach, utilising traditional Polish steel arched roadways driven by roadheaders for main or lateral headings, and modern continuous miner driven roof bolted roadways for longwall gateroads. On the basis of specialised testing of core and detailed modelling by Golder, the Study has demonstrated that the use of primary roof bolting in roadways is a practical solution for roadway support. This solution for roadway support offers substantial advantages in terms of unit costs due to improved speed of roadway development, lower consumable costs related to roof bolts and mechanised installation, and manpower reduction.

## Mine Plan

The mine plan presented in this Study includes total production of 176.7 million raw tonnes and 139.1 million saleable tonnes over a 24-year period predominantly from the 391 coal seam, with secondary production from the 389 coal seam. The mine plan takes into account only two of the 8 coal seams within the global CRE containing Indicated Resources. Given the large scale of the resource base for the LCP it is envisaged that mining could continue, following the explicit period covered by the PFS model. Production could then move to the residual parts of the 391 seam resources not included in the Study mine plan, as well as other target seams.

At the forecast rate of steady state production of 8Mtpa of ROM coal, two longwall units would be operating at the same time in different sections of the mine. It is assumed that longwall faces can produce at a rate of up to 4Mtpa ROM, depending on panel dimensions and seam thickness, with development units making up the balance of overall ROM production. Clean coal recovery from the raw material production, including dilution, will average approximately 79.6% during the Steady State production period. Annual production will average approximately 6.34Mt of saleable clean coal.

Due to the substantial resource base of 728Mt of coal across the LCP concessions, the Study only considered a mine plan with 24 years of saleable coal production within Indicated Resources covering a limited area of the 391 and 389 coal seams. In the underground coal mining industry it would be normal for the indicated resources to be expanded during production, by upgrading inferred resources. This could greatly expand the coal available to be added to the reserve base. The remaining inferred resources within the 391 seam, should they be converted to measured or indicated resources, would add substantial tonnages to the LCP. With the balance of resources in the 391 seam outside the first 24 years of mine life, substantial Indicated Resources of other target seams including the 378, 379, 380, 382, 385 and the 392 seams are present across the LCP concession at mineable thickness. There is also the potential to confirm new resources at Prairie's adjoining Sawin-Zachod concession, covering an additional 54km$^2$.

## Coal Seam Access

Prairie engaged Deilmann Thyssen Shachtbau ("**DTS**"), a Polish-German joint venture, to complete a specialist study relating to shaft construction and operation. DTS were chosen as they were able to provide the Project with international shaft sinking experience and also employed suitably qualified and experienced Polish engineers qualified to certify the designs as required by Polish legislation. The shaft design proposed by DTS includes freezing of the ground during construction from the surface to just below the Jurassic strata, however the degree to which freezing will be required will be determined only following specialised shaft examination core borehole drilling as part of future project studies. The shafts will then be fitted with concrete linings capable of resisting water pressures at depth following the cessation of freezing. Similar shaft sinking methods were used for the six shafts now operating at the Bogdanka mine, however modern advances in directional drilling, freezing and lining technology are anticipated to result in superior shaft sinking rates and conditions, in comparison to those experienced at Bogdanka over 25 years ago. Two shafts are planned for the LCP, one for bulk coal winding and upcast/return ventilation, and one for staff, materials and downcast/intake ventilation.

As part of the PFS, a number of potential shaft sites were examined on the basis of meeting environmental, geological and engineering criteria. The main criteria considered in the Study for shaft site selection includes:

- Location to give early access to the most productive 391 seam, and to allow ready access to other target seams;
- Location where sterilization of coal due to the shaft protection pillars was minimised;
- Location within an area where there are thin surface superficials (Quaternary). Generally superficials in the region are known to contain water and the thinner they are the less water will impinge on any shaft sinking operation;
- Location to avoid potentially sensitive conservation areas;
- Location in an area where the Albian Sands formation, a known water-bearing sandstone formation at approximately 550m depth within the Jurassic sequence, is relatively thin and is therefore relatively easy to manage from an engineering perspective; and
- Location to facilitate the railway spur line access to the national rail network and coal washing and discard emplacement areas.

The Study provides for two 8m diameter concrete and part steel tubing lined shafts that will be blind sunk up to 1,100m depth using modern shaft sinking methods.

The production shaft will be equipped with a ground mounted friction winder (Koepe) and two large, high speed skips for coal winding and have a capacity sufficient for 9.3Mt ROM per year. This is a bulk coal winding shaft configuration and rated winding capacity already in use in Polish coal mines and can be found in modern new mine installations internationally.

The second shaft will be equipped with a two large cages for manriding and materials, and for transporting large pieces of equipment without dismantling.

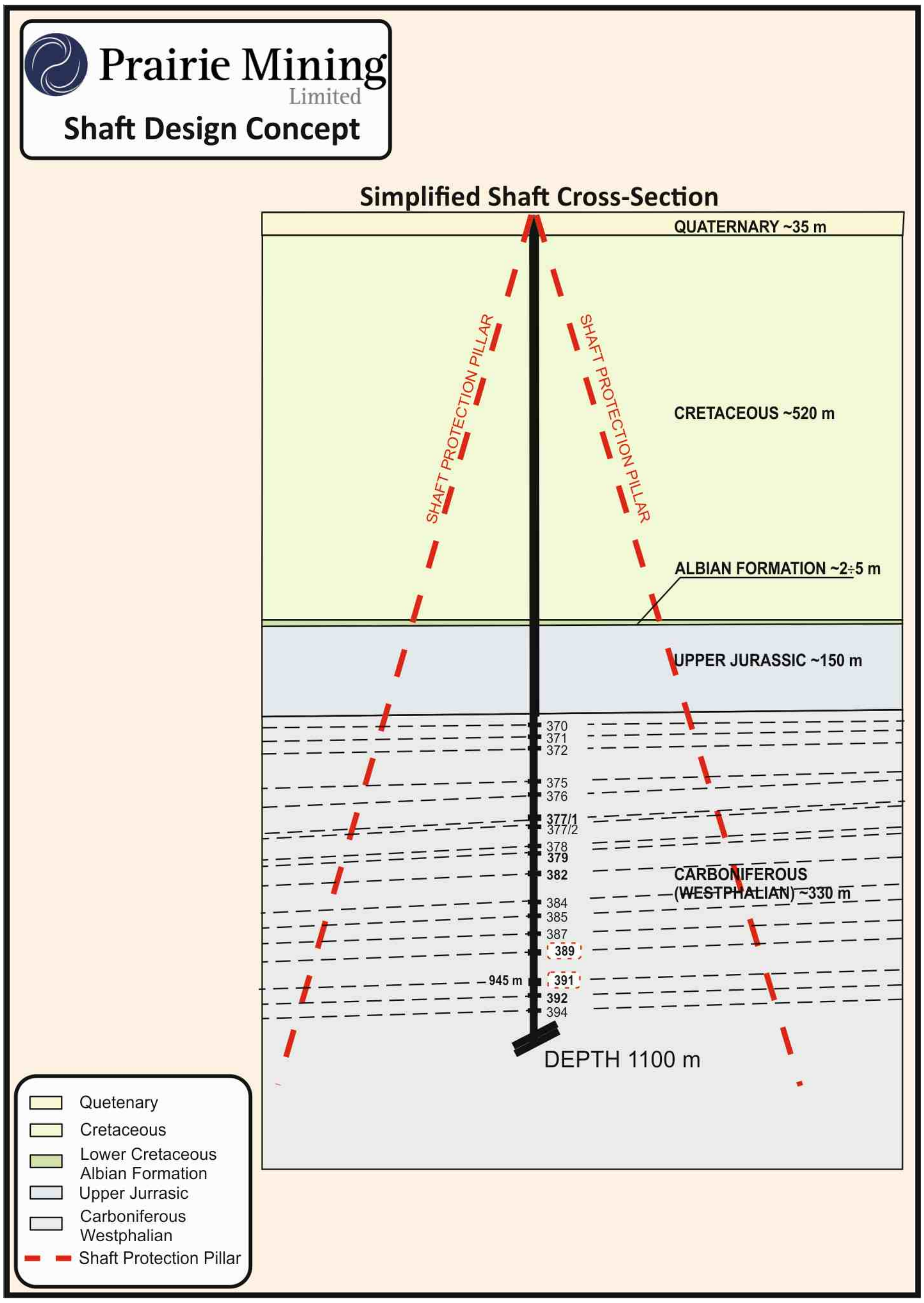



***Figure 14: Lublin Coal Project - Shaft Design Concept***

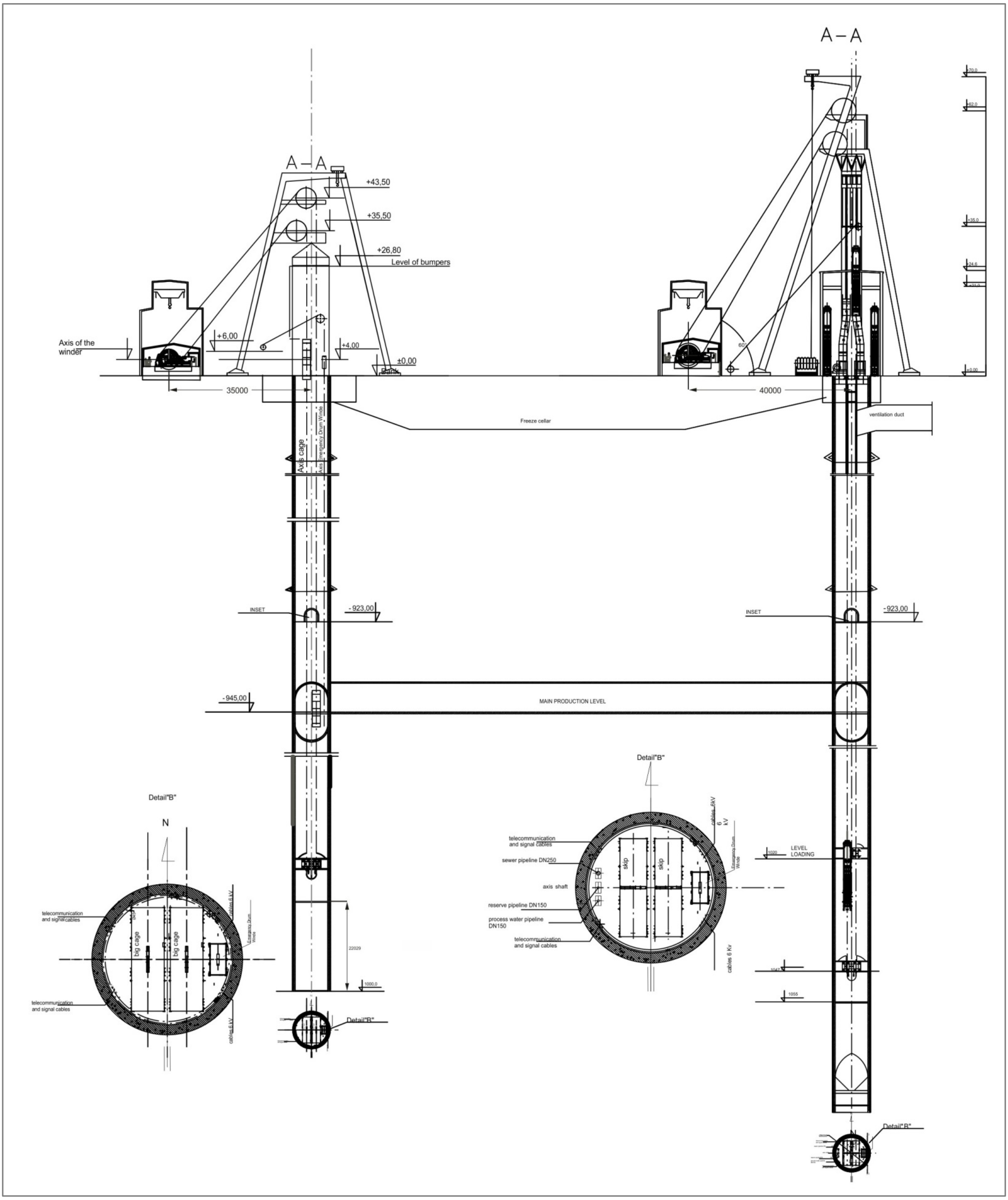



*Figure 15: Lublin Coal Project - Shaft System Cross Section Schematic*

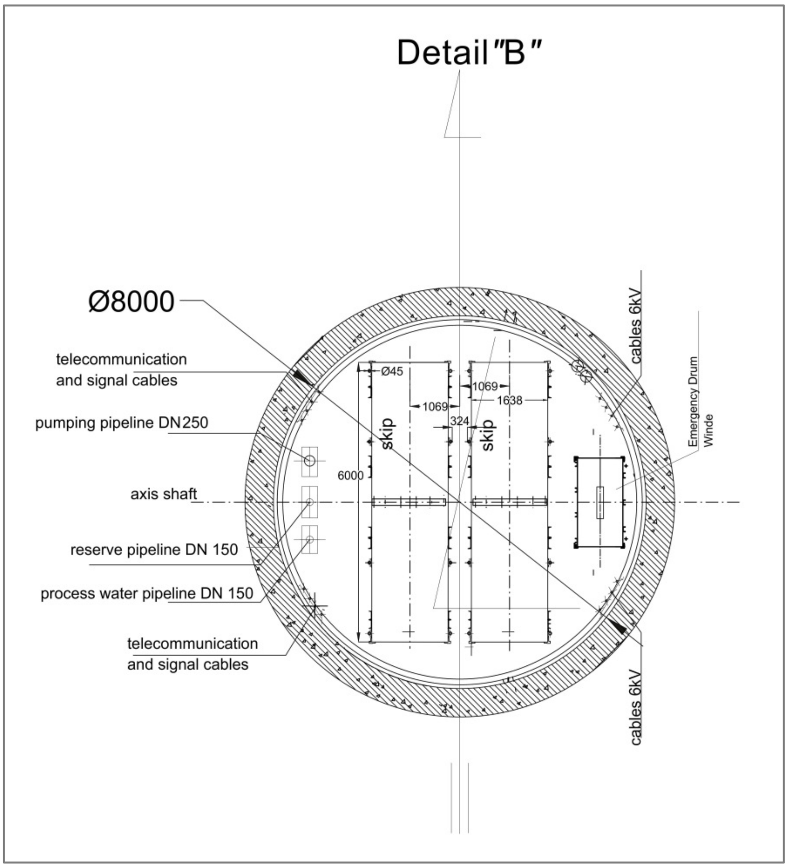



*Figure 16: Bulk Coal Winding Shaft Cross-Section*

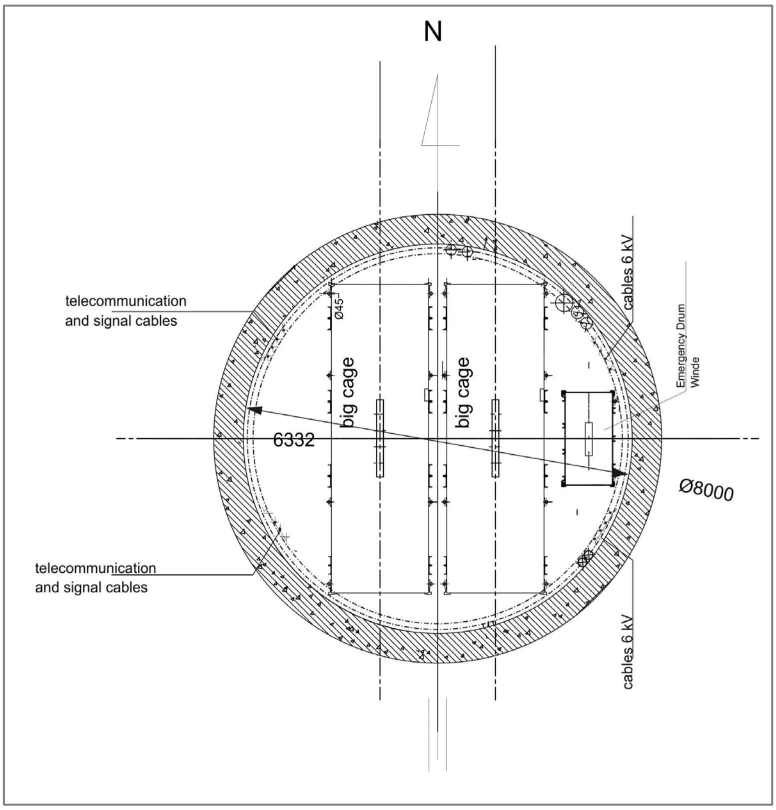
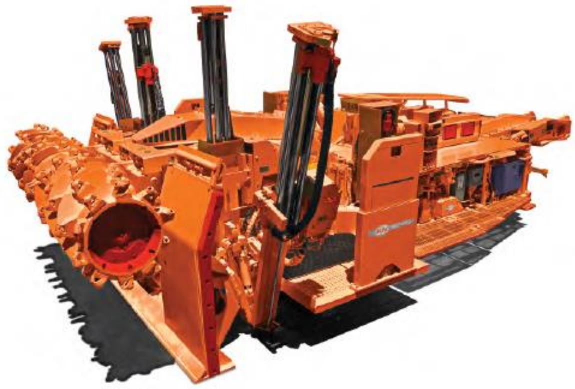



*Figure 17: Men and Materials Shaft Cross-Section*

## Underground Operations

Because of its adjacent proximity to the Bogdanka mine and the demonstrated absence of geological complexity across the LCP concessions, the conditions expected at the LCP are expected be in line with those encountered at Bogdanka and a similar mix of mining methods over the life of the mine has therefore been determined. The production methods and panel layouts have been designed to support high productivity low cost mining, to maximise resource recovery while maintaining a safe work environment.

The intention for the LCP is to develop underground roadways utilising medium duty roadheaders for the lateral roads and bolter miners for the face gateroads.



***Joy 12CM 30 Continuous Miner***


***Roadheader – Sandvik AM75***

***Figure 18: Proposed Underground Development Equipment***

The Bogdanka mine produces coal from longwall faces using both plows, in the thinner seam sections, and shearers in the thicker seam sections.

The Study mine plan envisages that two longwall systems will be utilised simultaneously during steady state production at the LCP, operating in different parts of the mine. Golder have considered that longwall shearers can operate in areas of the LCP where the coal seam ranges between 1.3m and 3.5m. Where seam thickness is between 1.0m and 1.5 longwall plows can be utilised. The mine plan includes 315m wide plow panels in areas where the coal thickness is predominantly 1.1m – 1.5m. In thicker coals, shearers can be used and where extraction thickness is 2m or greater, then 400m wide panels are planned.

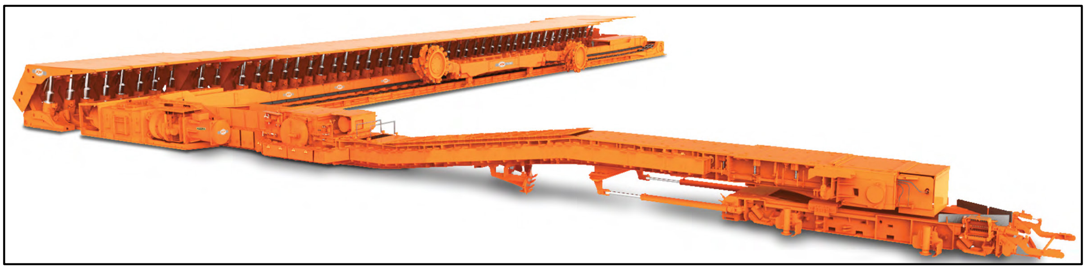
Conventional longwall retreat mining normally comprises the development of single or double roadways on both sides of a 'panel' of coal. Whilst all longwall faces are designed to suit local conditions, face lengths in many parts of the world have been developed in excess of 450m wide with face runs in excess of 5,000m. Based on exploration results from the LCP, indications from the Bogdanka mine, and Polish regulatory requirements, Golder have determined that longwall faces of up to 400m wide and panels of up to 5,000m long would be acceptable at the LCP.

One fully mechanised longwall shearer face is planned for the thicker seam sections with a fully automated longwall plow face deployed for the thinner sections. The whole seam will be taken in one lift, making conventional longwall the most suitable for working. The basic features of the longwall will comprise a shearer (or plow) cutting and loading coal onto an armoured flexible conveyor ("**AFC**"). The AFC will load onto a beam stage loader ("**BSL**") via an integrated side discharge delivery end and coal will then be sized using a crusher on the BSL before loading onto the belt conveyor.

The face roof will be supported by shield type hydraulic roof supports suitable to operate at the appropriate seam height.

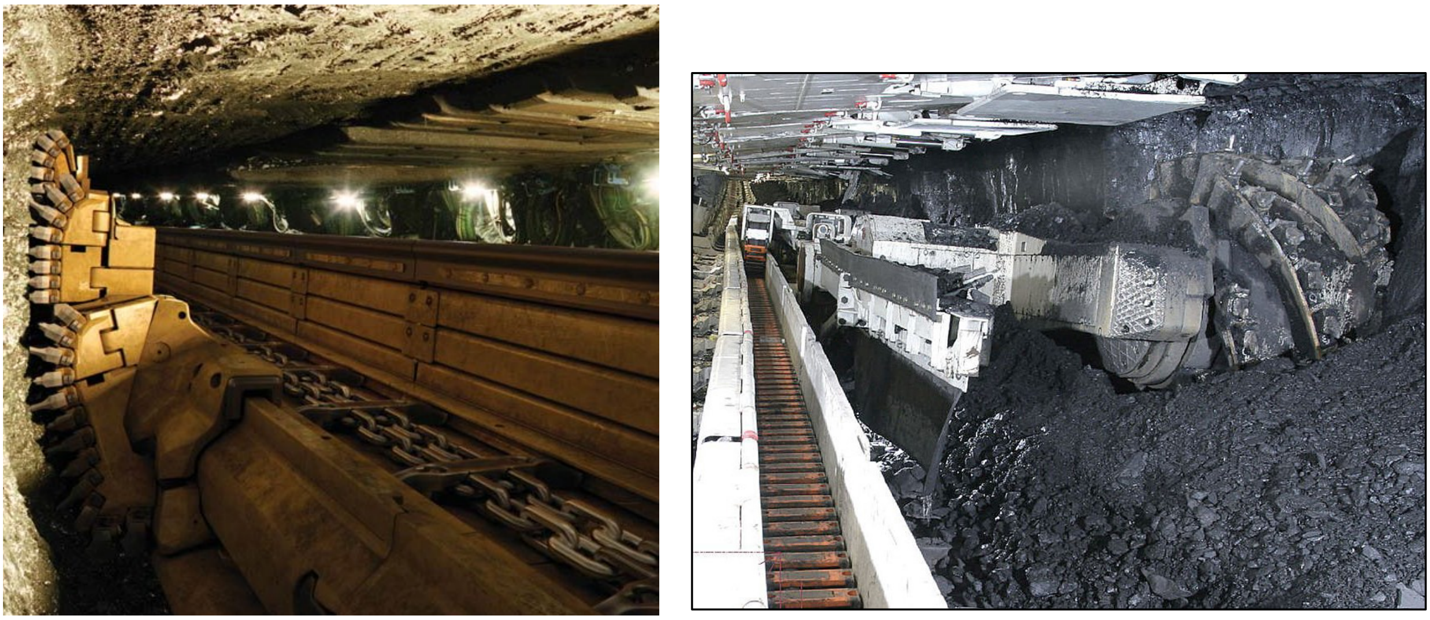
***Conventional Hydraulic Roof Support***

***Longwall Plow***



***Complete Longwall System***

***Conventional Longwall Shearer***



***Longwall Plow vs Longwall Shearer face***

***Figure 19: Proposed Underground Longwall Equipment***

Golder have considered the application of international standard roofbolting as the primary means of support in the face gate roads and have, subject to actual in situ conditions and further geotechnical evaluation, confirmed that roof bolting is appropriate. They have also examined the pillar dimensions between longwalls, which are required when fully bolted gates are utilised, and have determined that 80m pillars would be suitable. Gateroad secondary roof support will include cable bolts, flexi bolts and standing supports such as wooden cribs, as is standard practise internationally in deep coal mines. Golder also, in setting out the panels, aligned the longwall gate roads to make best use of the prevailing in situ stress regimes. The method of mining the development roadways will be based on a single gate entry system driven by bolter miners as utilised extensively in British deep coal mines. A bridge conveyor will be utilised to transport the mined coal from the bolter miner to the mine belts in order to clear the coal. Bolter miners are typically used world-wide to construct access roadways for longwall panels and facilitates the achievement of high development rates.

Golder has therefore based the mine plan on single entry panel developments supported on roofbolts to form the longwall panels. Face runs applied to all coal seams are up to a maximum of ~5km. Due to the extensive length of the face runs, cross cuts will need to be constructed between the gate roads to meet Polish regulations and facilitate efficient ventilation of the developing single entry gate roadways. These would need to be every 2.5km.

A minimum face run of 500m has been assumed within the applied layouts.

The longwall face widths within the mine are planned at 400m in areas where the extracted height is 2m or above and 315m where extracted height is below 1.5m. These face lengths meet Polish legislative requirements and are as currently being used at Bogdanka.

The LCP has an advantage over most other new coal developments in that there is a highly productive operating coal mine with similar conditions immediately adjacent to the Project. Whilst Bogdanka have been mostly highly successful, within their current license area they do not have the extensive areas of thicker 391 seam coal that is available to the LCP. Bogdanka have principally been working the thinner 385/2 seam over the last several years using longwall plow technology with gateroads driven utilising traditional Polish steel arches, and typically follow a practise of systematically mining the coal seams sequentially from top to bottom rather than economically prioritising the best coal seams first.

## Mine Design

The mine design has been developed from the geological structure plan prepared in Vulcan, which was then imported into MineScape by Golder for mine planning purposes. The mine design process was initiated at a workshop in Lublin when key parameters were examined and evaluated by the consultants and the LCP project team. These included face lengths and orientation, methods of mining and production, support systems, geological structure, seam qualities and sequencing of extraction. This resulted in two mine plans that could potentially be deployed to extract the full extent of the 389 and 391 seam resources. They include a plan developed fully on steel arches and a second plan on fully roofbolted roadways. Golder were then tasked to demonstrate that the roofbolting option was practicable and what the pillar dimensions would need to be designed to facilitate such a plan. The results of the Golder modelling in FLAC 3D confirmed that roofbolting was a practicable support system for the rock types likely to be encountered and that the optimum pillar dimension was 80m between longwalls. The mine plan was set out on that basis and tonnage profiles were generated to show that mining from declared indicated resources in the 391 and 389 seams would be capable of supporting a mine life of greater than 20 years at more than 6Mtpa. For the PFS only those resources in the indicated category have been used in the mine plan and the reserve estimate. Small incursions into inferred areas have occurred in the mine plan, however the reserve estimate and PFS financial model treat coal from inferred resources as waste.

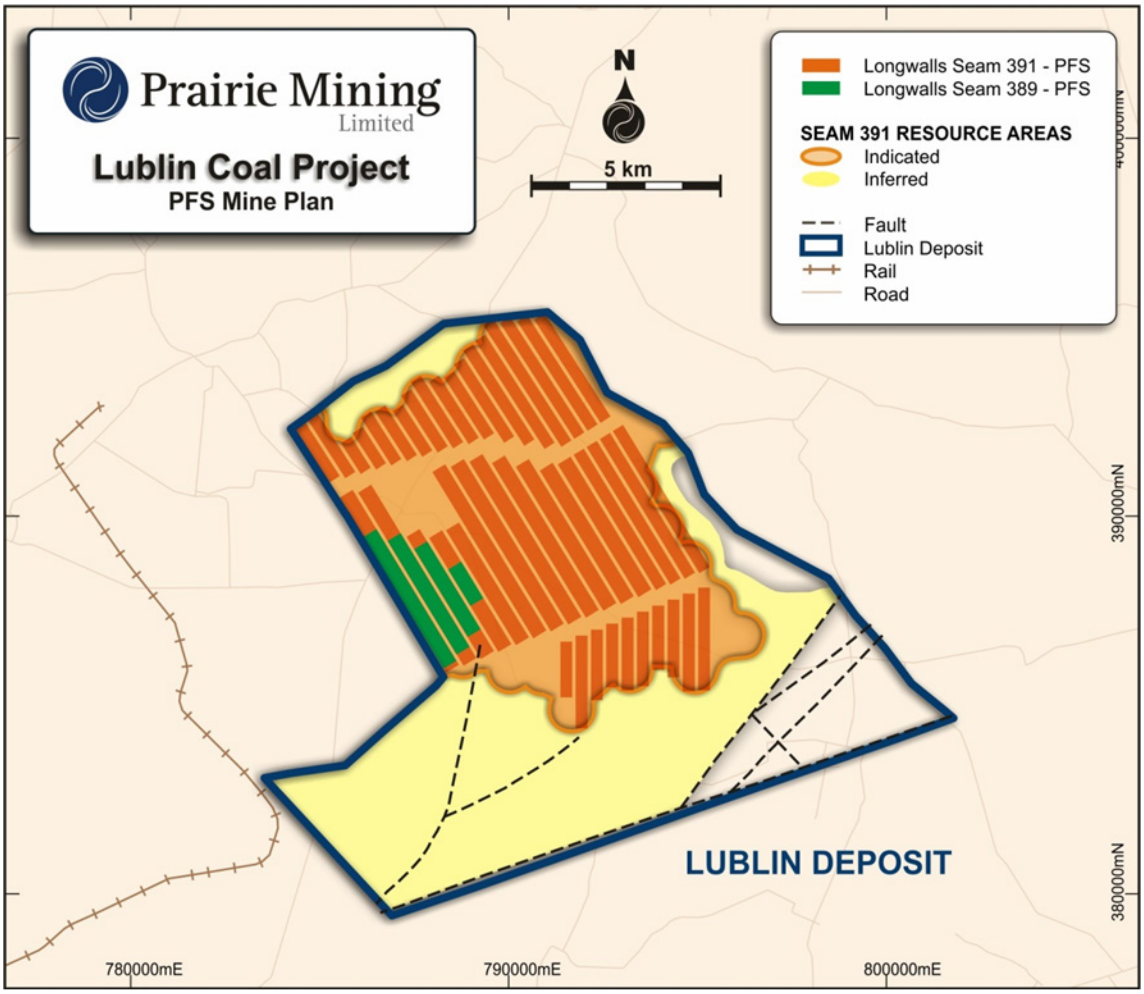



***Figure 20: Mine Plan based on roofbolted gateroads and 80m stable pillars***

The mine plan (Figure 21) below shows how the mine would likely be laid out if the current 87Mt of inferred resources in the 391 seam were converted to indicated resources during future exploration and mine development.

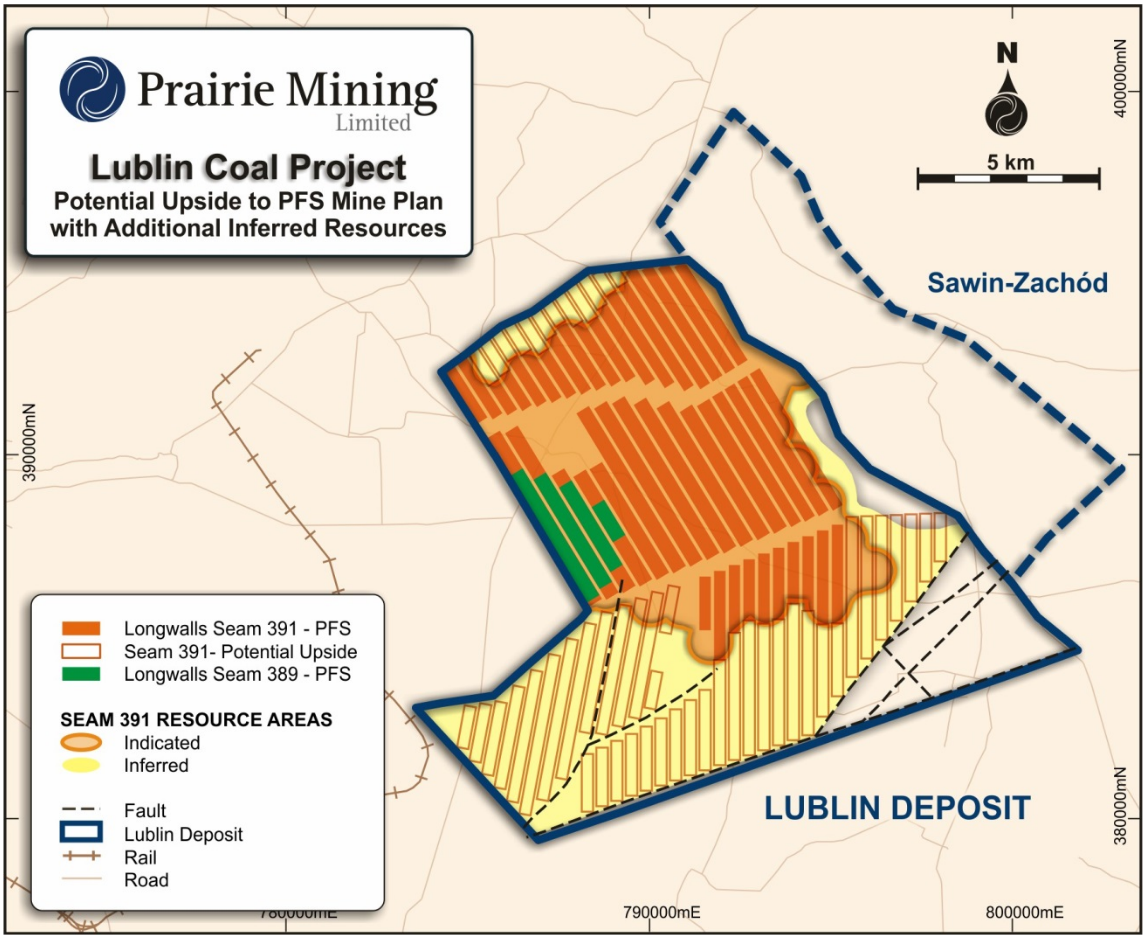



*Figure 21: PFS Mine Plan showing potential mine life extension into inferred resources*

## Labour Organisation and Structure

Labour organisation for the LCP has been designed to meet Polish legislative requirements for coal mine statutory positions whist also taking into account modern mining practices and systems. Where practicable the mine will adopt sub-contract and build own operate ("**BOO**") type arrangements for services which will include development of the main lateral roadways and operation of the railway spur between the mine and the main lines. The mine is organised under a CEO and a Head of Mine Operation. The CEO must be responsible for the health and safety oversight and financial aspects of the mine, whilst the Head of Mine Operations or KRZ (Kierownik Ruchu Zakładu) must be responsible for all other activities. The KRZ is held accountable for all mine operations. The mine will function with two operating longwalls supported by up to four gate road development teams. The mine will be operational for 24 hours 7 days per week but with production based on operating for 6 days per week in rotating shifts to minimise overtime payments. It is envisaged that the LCP would utilise up to 1,420 directly employed workers for both the surface and underground operations, which includes a 20% headcount provision for holidays and absenteeism. It is estimated that a further 265 contractors and BOO operators would work at the LCP. Underground production is planned on a 52 week per year, six day per week basis with four operating shifts per day utilising a Polish five brigade system.

## Labour Costs and Productivity

The Bogdanka mine, which has operated in the Lublin Coal Basin since 1982 and is located adjacent to the LCP, has demonstrated that it is able to achieve exceptionally high productivity rates from its underground longwall faces. The Bogdanka mine produces from coal seams at some 900m depth, and has historically achieved annualised ROM production rates of some 3Mtpa to 4Mtpa for each operating longwall, depending on seam thickness. Results of the Study indicate that similar or improved annualised production rates are achievable for the LCP given similar geological and mining conditions across the concessions.

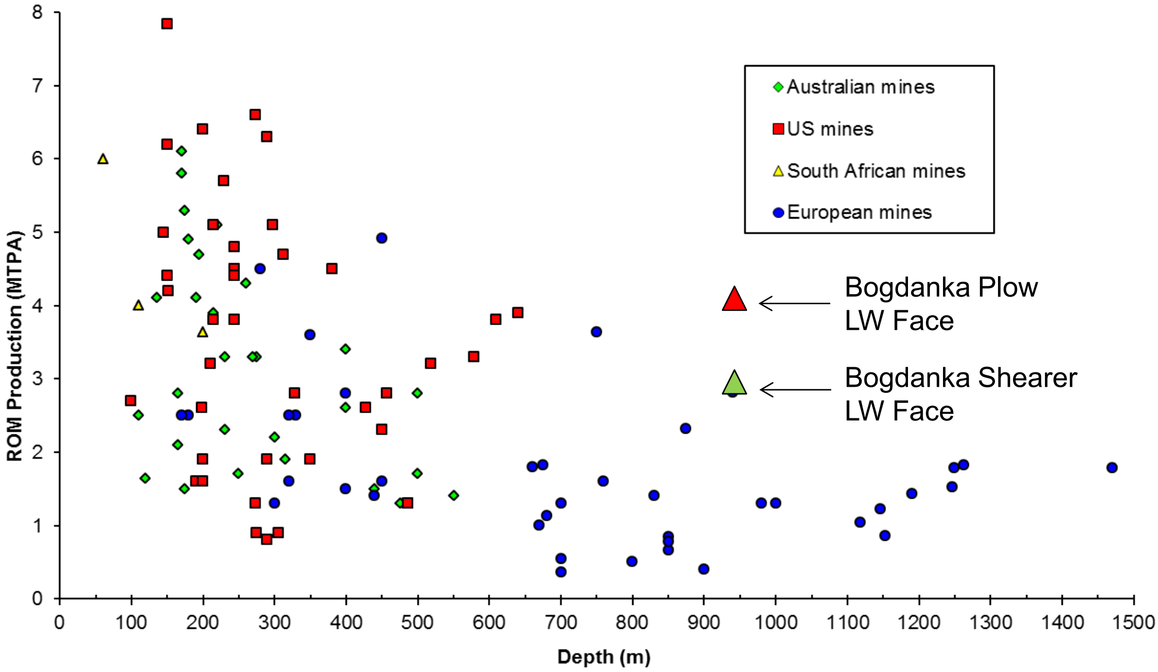



***Figure 22: International Longwall Mine Productivity***
*(Source - Company analysis based on various sources)*

Results of the Study also indicate that by incorporating international best practice and modern mine design into the LCP, substantially better labour productivity can be achieved compared to incumbent coal producers in Poland. Modern approaches such as advanced roof bolting technology and orientating longwall panels to reduce the effects of horizontal stress within the strata are anticipated to improve longwall operating performance. Furthermore, current labour management in Polish coal mines follow historical practises and there is significant scope to improve the efficiency of manpower use, for example, through the use of contractors and appropriate shift patterns that minimise down-time, as typical of coal mining operations in Australia and the USA.

**Table 13: International Longwall Coal Mine Labour Productivity**

| Country | Tonnes/man/year |
|---|---|
| USA | 10,000 |
| Australia | 7,000 |
| Lublin Coal Project - PFS | ~3,750 |
| Bogdanka | 1,300 – 2,000 |
| Upper Silesian Mines (Poland & Czech Republic) | 600 - 700 |

*(Source: Wardell Armstrong International & Prairie Mining)*

## Project Configuration

As previously indicated a number of optioneering studies have been carried out to determine the best design solutions for taking forward into the Study as the preferred project configuration. The selection process was based around a number of criteria some of which were exclusion criteria. The options were then subjected to a Multi Attribute Decision Analysis ("**MADA**") and collective scoring of each option by experts from the consultants and the LCP project team. This process was applied to the following aspects of the project, namely, shaft siting, shaft design, ROM surface transport systems, CHPP and waste discard location, HV power supply and spur railway line routes.

The assessments were all underpinned by baseline Environmental and Social Impact Assessment ("**ESIA**") work carried out by WS Atkins and Multiconsult, Lidar surveys of the concessions areas and off site locations, orthophotomaps, regional maps and structure plans. All this data was combined into a fully integrated GIS system to enable analysis and selection of optimum design solutions.

This work culminated in a project configuration which included a basic mine infrastructure site, CHPP, product stockpiles and coal wash emplacement facilities with a circa 15km railway spur line connection providing direct access to the Polish railway network.

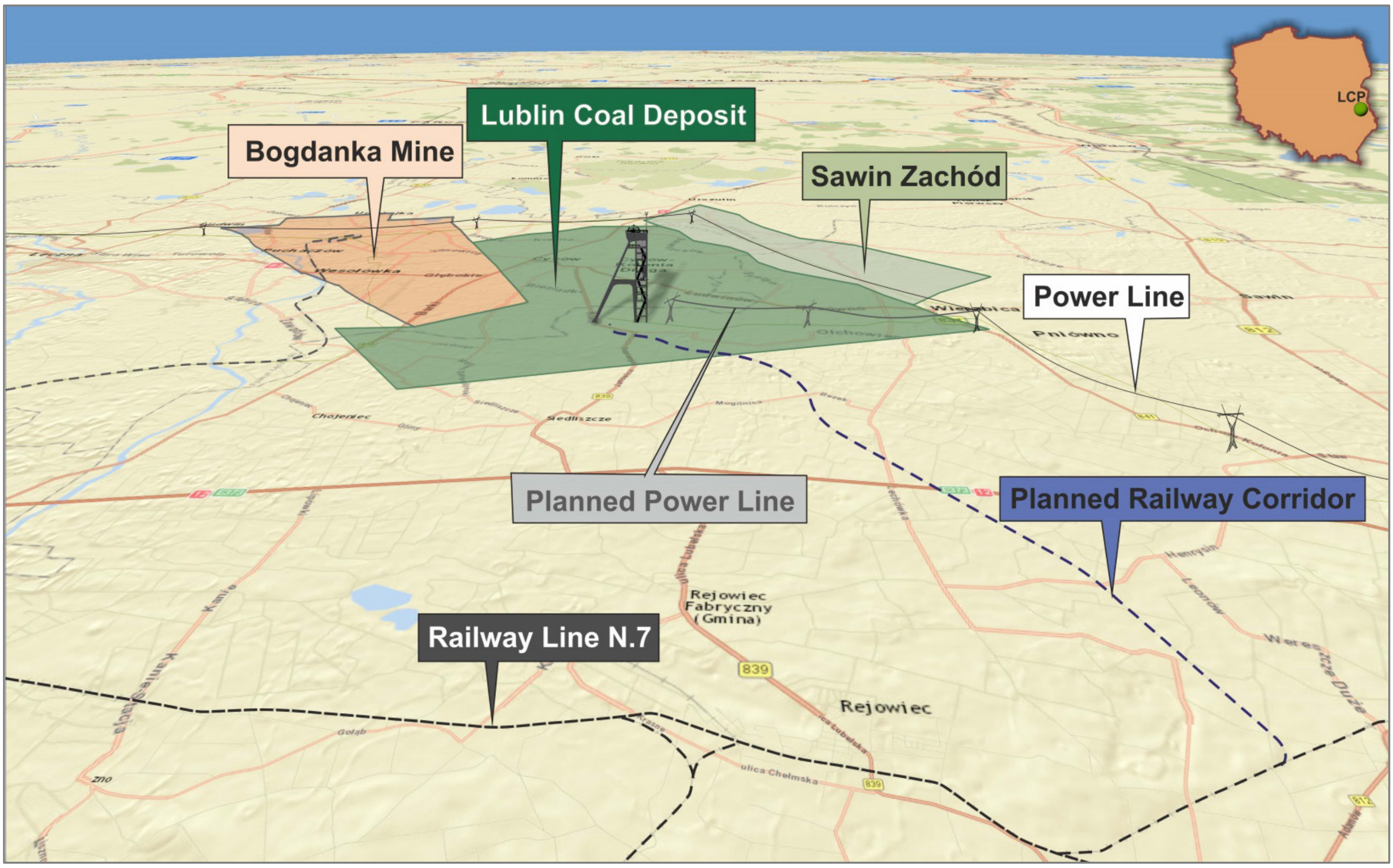



***Figure 23: Project Configuration***

## Mine Site Infrastructure

Following site selection and siting of the shafts, the mine site infrastructure was built up to comprise the key elements illustrated in Figure 24. The footprint of the mine site will be some 60 hectares: Key components are the two shafts and their winding facilities, offices, workshops and stores; water treatment plant and settling ponds, car parking and laydown areas, fire and rescue station, medical centre, baths and lamproom, main HV sub-station, ROM stockpiles and rail loop and ROM loading bunkers. The site would be fenced and have appropriate security arrangements in place.

***Figure 24: Mine Shaft Site Plan***

## The ROM transport

The process of selecting the best option for the transport system and the location of the CHPP, product stockpiles and coal wash emplacement was based on a MADA process. Seven options were analysed, including conveyors, railways and hydraulic transport combined with different locations for the CHPP, product stockpiles and coal wash emplacement. From an engineering perspective, the best option was to site all the facilities at the mine site. However, from an environmental impact perspective the siting of the CHPP, product stockpiles and coal wash emplacement at an intermediate location was preferable This was therefore used as the go forward case in conjunction with rail transport of the ROM as illustrated in Figure 25 below:

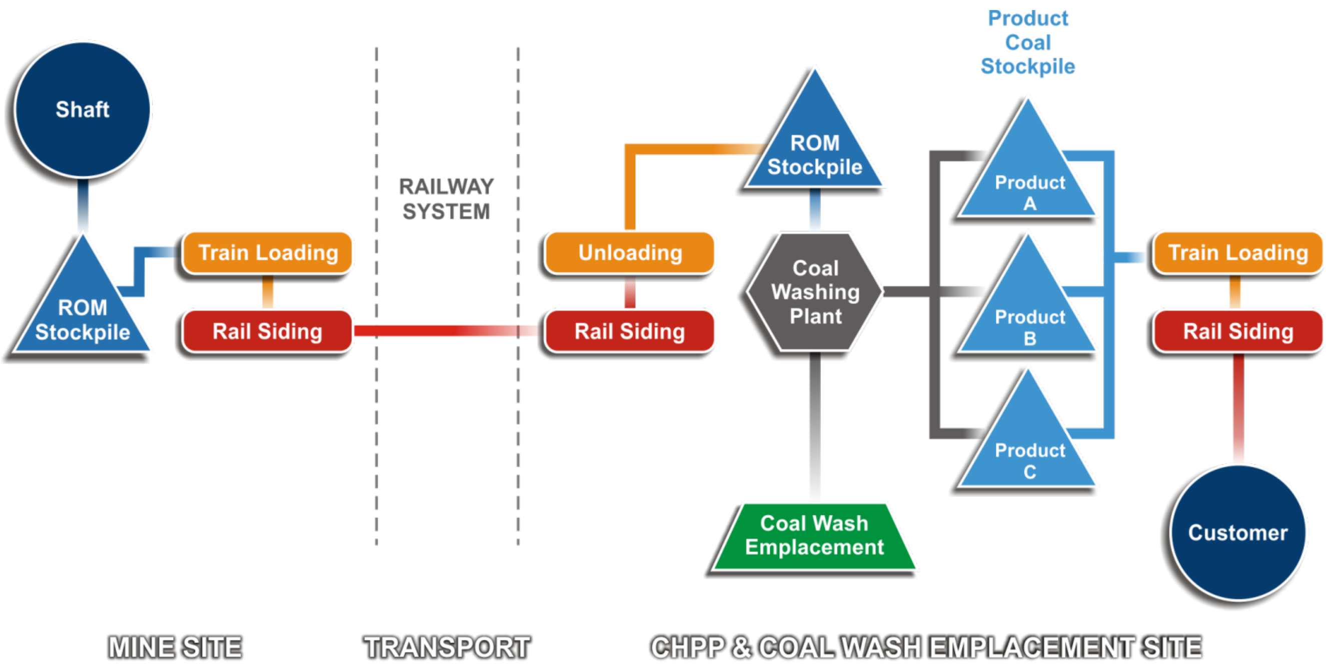



***Figure 25: ROM Transport Flow Diagram***

The subsequent rail routing was also subject to engineering and environment scrutiny and a number of options were also evaluated. There are three remaining options which have been subject of further analysis and for the purposes of the PFS have been retained subject to value engineering and additional study prior to detailing in the DFS. Mota Engil Central Europe ("**MECE**") were retained to carry out more detailed engineering studies of one of the preferred routes and also a cost analysis suitable for PFS level financial input. Shallow site investigation boreholes were also drilled at intervals along the rail alignment to assist with assessing ground conditions and resultant costings.

## Coal Handling & Preparation Plant

The LCP will include a modern fully integrated coal preparation plant in order to produce a consistent product that meets the specifications of its customers. The process plant is designed so that it can produce low ash semi-soft coking coal, sized household coal, industrial coal and a range of low ash and high ash coals for the power sector. A full design for the coal preparation plant has been prepared as part of the Study including flow sheets. The equipment is that which is employed typically in modern efficient coal process plants around the world.

The CHPP was designed to be fully flexible in producing coal ranging from the lowest ash (typically 4% in the case of the LCP) to a high ash product for typical Eastern European power plants (up to 26% ash). In addition to bulk coal, the Lublin CHPP will produce specialty sized products for household use in the size range 30mm to 80mm of up to 6% ash, and industrial coal sized at 16mm to 30mm.

At full production, the coal preparation plant will process the mine's entire ROM production, with a notional design capacity to process up to 9.3Mtpa of ROM coal to produce up to 6.8Mtpa of saleable coal. The plant is designed as a 1,150 ton-per-hour facility (air dried basis). Coal will be sized at 30mm and the plus 30mm will processed and either sold directly as household or industrial coal or be crushed to be included in one of the other bulk products. Less than 30mm raw coal can either be totally processed to produce high quality semi-soft coking coal, or some of the raw coal can bypass processing and be blended with the processed coal to produce the higher ash export thermal coal products. The coal processes planned for the coal preparation plant are as follows:

1. The 30mm to 80mm size fraction will be processed in dense medium drums
2. The 2mm to 30mm fraction will be processed in dense media cyclones
3. The 0.25mm to 2mm fraction will be processed in hydrosizers
4. The minus 0.25mm fraction will be processed by froth flotation

Effluent treatment will be thickener and filter presses. The design allows for magnetite dense media to be recovered and re-used, thereby reducing consumables costs. Stockyards are fitted with stackers and re-claimers. The reclaimed coal will be conveyed to a train loading hopper of 500 tonnes capacity. Trains will be loaded continuously without stopping and the loading facility will be supplied with a standard Polish train control signalling system and a commercial quality weighbridge. Household coal and industrial coal will be also sold from the CHPP product stockpiles, with loading facilities and a weighbridge suitable for commercial trucks.

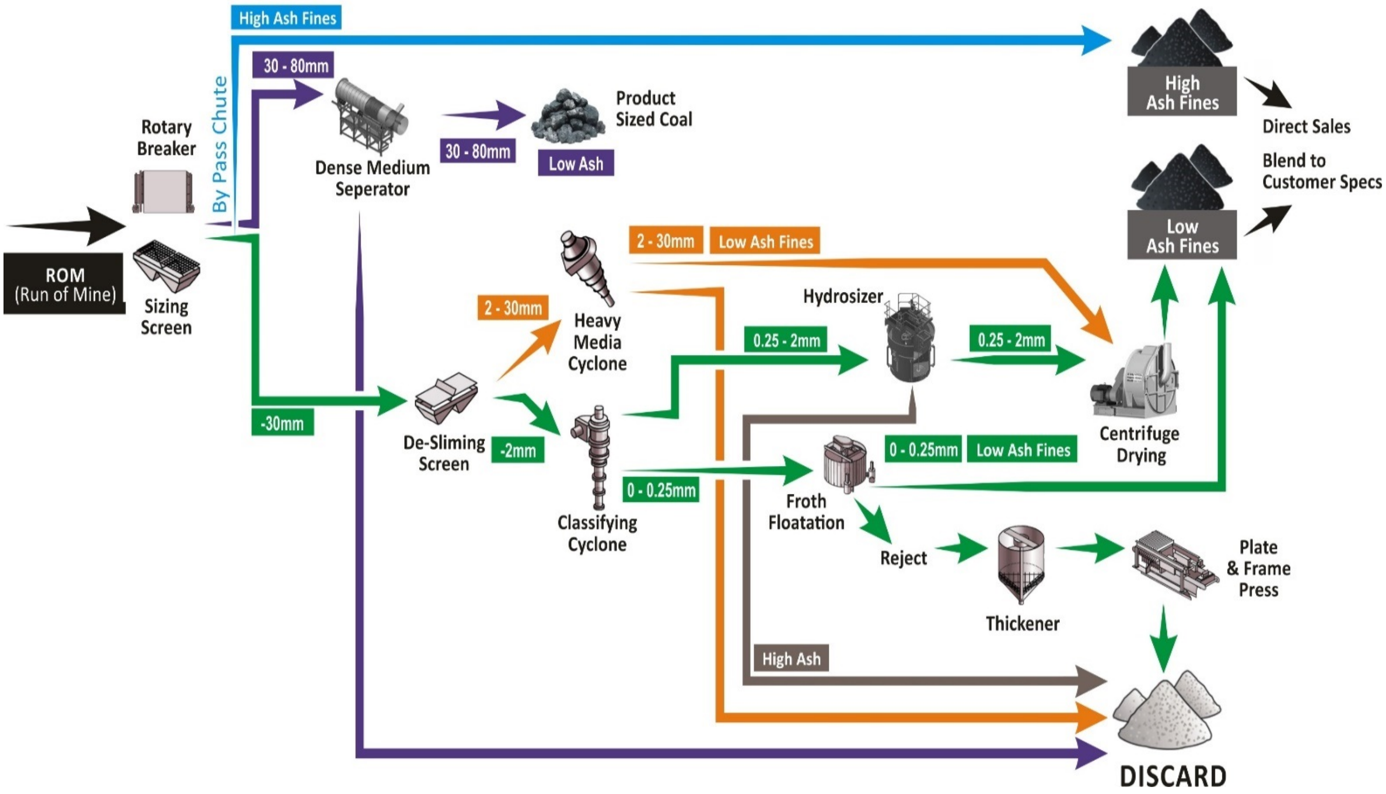



*Figure 26: Lublin Proposed Coal Preparation Flowsheet*

## High Voltage Power

The mine site has two 110kV lines running to the east and west of the site and some 9km from the proposed shaft locations. A new sub-station would be required from the existing 110kV line adjacent to the site. A Polish consultancy, Energoprojekt, were commissioned to firstly evaluate the likely impact of the mine and its facilities on the existing grid and propose a suitable option(s). They evaluated a number of scenarios based on different line routes to the site, namely either from the east, west or south. The latter following the route of the proposed railway line corridor. Energoprojekt also looked at different loadings on the grid depending on where the mine and supporting facilities would be sited. Under Polish legislation it is a requirement to have two separate power lines to the mine site to ensure security of supply in the event of a single line failure. The preferred solution is to support the mine with either two separate power lines from the east or a single line from the east and another line from the south along the railway corridor. These options were then taken forward for detailed analysis and costings for the PFS.

## Water

Water for the site is available from either the regional utility or shallow boreholes to abstract water from the water table. Recycled water will also be utilised. The borehole and recycled water will require basic treatment before use. Usage of water for the mine, CHPP and related surface facilities combined is estimated to be 10.55ML per day (3,851ML annually); through recycling the water consumption is estimated to be 3.2ML per day (1,168ML annually).

Extensive hydrogeological modelling conducted by Golders predicts that water-make from underground workings is expected to reach a maximum of 3.5Mm$^3$ per year during the mine life with an influent total dissolved solids in the range of 4.5 grams per litre and of similar quality to the mine waters discharged by Bogdanka.

## Roads

The most important roads in the area include the Dorohucza-Cyców-Włodawa road passing through the north-western part of the concessions and Lublin-Cyców-Chełm road in the western part of the area. The Lublin-Chełm road passes to the south of the concessions. There are also a number of local roads connecting individual locations. A new expressway is planned to run roughly parallel to the existing National road N12 although no start date has yet been announced.

## Land

The land comprises mostly arable farming, meadows and pastures for summer grazing with limited forestry areas.

## Airport

The nearest international airport is Lublin Airport, which was constructed with European Union ("**EU**") funding and commissioned in late 2012. This is some 30km from the site and provides regular flights to and from the UK, and other destinations.

## National Railway

Major rail routes run to the south-east and west of the concessions. These include a rail spur serving the neighbouring Bogdanka mine, passing very close to Prairie's Kulik (K-4-5) concession. MECE, an international civil engineering firm with major presence in Poland, conducted rail spur analysis as part of the Study that confirmed multiple feasible rail spur options could be developed to link the LCP to the national rail network. A previous transport logistics study conducted by Polish firm TOR in 2014 also showed an analysis that highlighted the considerable underutilised capacity on the major trunk railway lines close to the project.

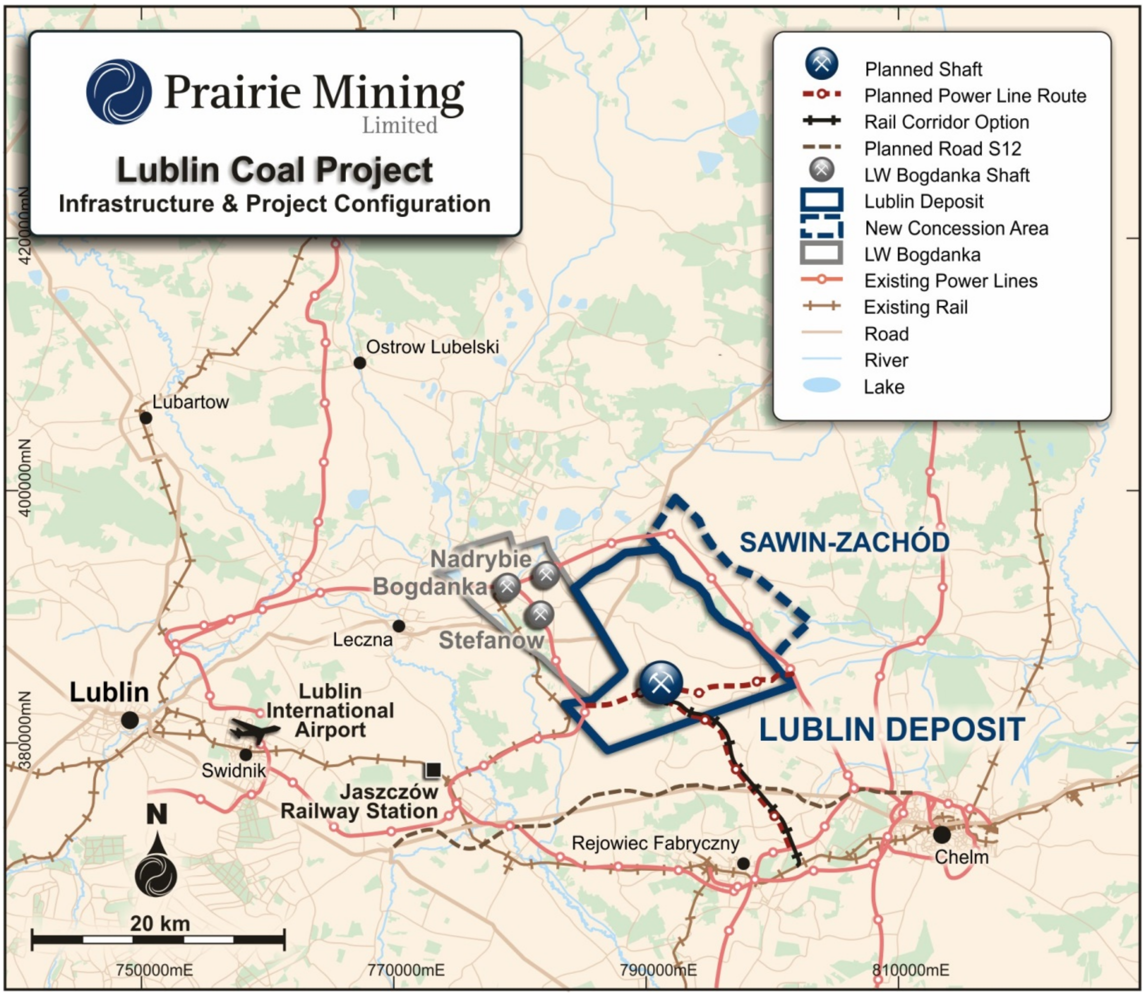



***Figure 27: LCP concessions showing proximity to existing utilities and infrastructure***

## Capital Development Costs

The LCP is located in one of the best serviced and infrastructure advantaged coal regions globally. Capital intensity of the LCP is low for a project of this scale with the added advantage of having exceptionally low cash costs.

| Table 14: Capital Costs | |
|---|---|
| **Capital Item** | **US$ million** |
| **Shaft Costs (Sinking & Furniture)** | **233.3** |
| Underground Development Drivages | 34.1 |
| Underground Infrastructure & Ancillary Equipment (Belts, Ventilation, Electrics, Power Centres) | 87.6 |
| Capitalised Pre-Production Expenses (Labour, Power etc) | 66.7 |
| **Other Underground Mine Development** | **188.4** |
| CHPP & Waste Management | 45.5 |
| Mine Surface Facilities & Infrastructure (Buildings, Roads) | 90.5 |
| **Total CHPP and Surface Facilities** | **135.9** |

Golders has also provided for a further US$74.1 million for EPCM, owners' costs, and contingency (5% to 20% contingency applied depending on the capital item).

Sustaining capital for the Mine, Mine Site Infrastructure and CHPP has been estimated at US$3.43 per tonne of saleable coal at steady state production. For the purposes of this Study, it is assumed that a third party would build and own the 15km long rail link connecting the mine shaft sites with the Polish national rail network, with a fee charged to Prairie for access to the link and for the provision of railway siding and freight services. This fee is included in operating costs in the PFS financial model. Construction services, construction personnel, contractors and equipment are expected to be supplied and/or built by firms that are presently operating within Poland or the EU. Data used in the calculation of the capital costs for the LCP has been provided by a number of local and international suppliers who have given budget cost estimates, and has also been benchmarked against similar underground mines in the region.

## Next Steps

The PFS is an intermediate project phase completed to a level of accuracy of +/- 20%. The next formal study phase will be the Definitive Feasibility Study ("**DFS**") to a level of accuracy of +/- 10 to 15%, which by international standards should be of sufficient detail for project development financers to base an investment decision (a so called "Bankable Feasibility Study"). The DFS should commence after all project options have been suitably examined and an ultimate "go forward" case has been selected. The PFS has gone through a rigorous review of options and alternatives relating to a number of key elements of the project including: shaft siting, surface coal transport systems and railway line routing, mine planning, High Voltage ("**HV**") power supply and CHPP and waste discard location. However, it will be important that the DFS is taken forward with a clear mandate of the ultimate project "go forward" design, since changing the design part way through a DFS can be costly and time consuming. The LCP will therefore be subject to thorough scrutiny by internal and external experts prior to commencing the DFS to ensure that the best technical and commercial solutions, taking into account environmental and stakeholder expectations, are selected as the "go forward" case for the DFS. Value engineering principles will also be applied during the PFS optimization process prior to commencing the DFS.

## Railway Infrastructure, Capacity and Rates

The LCP is located approximately 15km north of the major No 7 railway line, which is standard gauge (1,435mm), double track and electrified and is the shortest route between Warsaw and Kiev. The No 7 line, as with all other Polish rail, is designated as an open access multi-user railway line by EU Directive 91/440.

Numerous other major railway lines service the Lublin region and together provide access to coal markets within Poland and wider Europe (refer Figure 28 below). These include:

- The eastern section of Poland's fundamental east-west railway line (E30) which is part of the international "AGC" line and part of the Pan-European transport corridor TINA No. 2: This trunk line is a double track line electrified along its entire length. It is being gradually upgraded to "AGC Parameters", namely 160km/h for passenger trains and 120km/h for freight trains with the axle load of 22.5 tonne/axle, usable length of main tracks 750m and platforms lengths of 400m;
- Line No 63: A single-track, non-electrified broad-gauge line that branches off Line No. 7;
- Line LHS 65: Entirely broad-gauge; and
- Line No. 69: A single-track, non-electrified, standard-gauge railway line, terminating at the Ukrainian station Rava Ruska.


*Figure 28: Rail Connections Servicing the LCP*

A number of independent rail operators compete for business with the previously state-owned PKP Cargo, whose market share has fallen from 96% in 2003 to around 54% with the introduction of foreign competition into Poland. Independent operators active in the Polish coal rail freight market now include, amongst others, Freightliner (UK) and DB Schenker (Germany), Europe's largest rail freight operator.

Freight charges are determined by competitive open tender between independent rail freight operators, ensuring competitive freight rates. Based on the analysis of recent tender results, rail freight charges within Poland for coal transport have declined over the last two years. Generally higher unit charges are incurred for shorter distances. A list of distances from the Lublin station of Jaszczów, adjacent to the LCP, to various potential export points and key border crossings is provided in Table 15 below:

| Table 15: Distances from Lublin Station to various export points and border crossings | | |
|---|---|---|
| **Country** | **Border in Poland** | **Distance by Rail from Jaszczów (Lublin) to Border in km** |
| **Poland** | Port of Gdansk | 520 |
| **Germany** | Zasieki GR | 691 |
| | Kunowice | 675 |
| **Czech Republic** | Zebrzydowice | 463 |
| | Głuchołazy | 515 |
| **Slovakia** | Zwardoń | 476 |
| | Muszyna | 409 |
| **Ukraine** | Dorohusk | 72 |

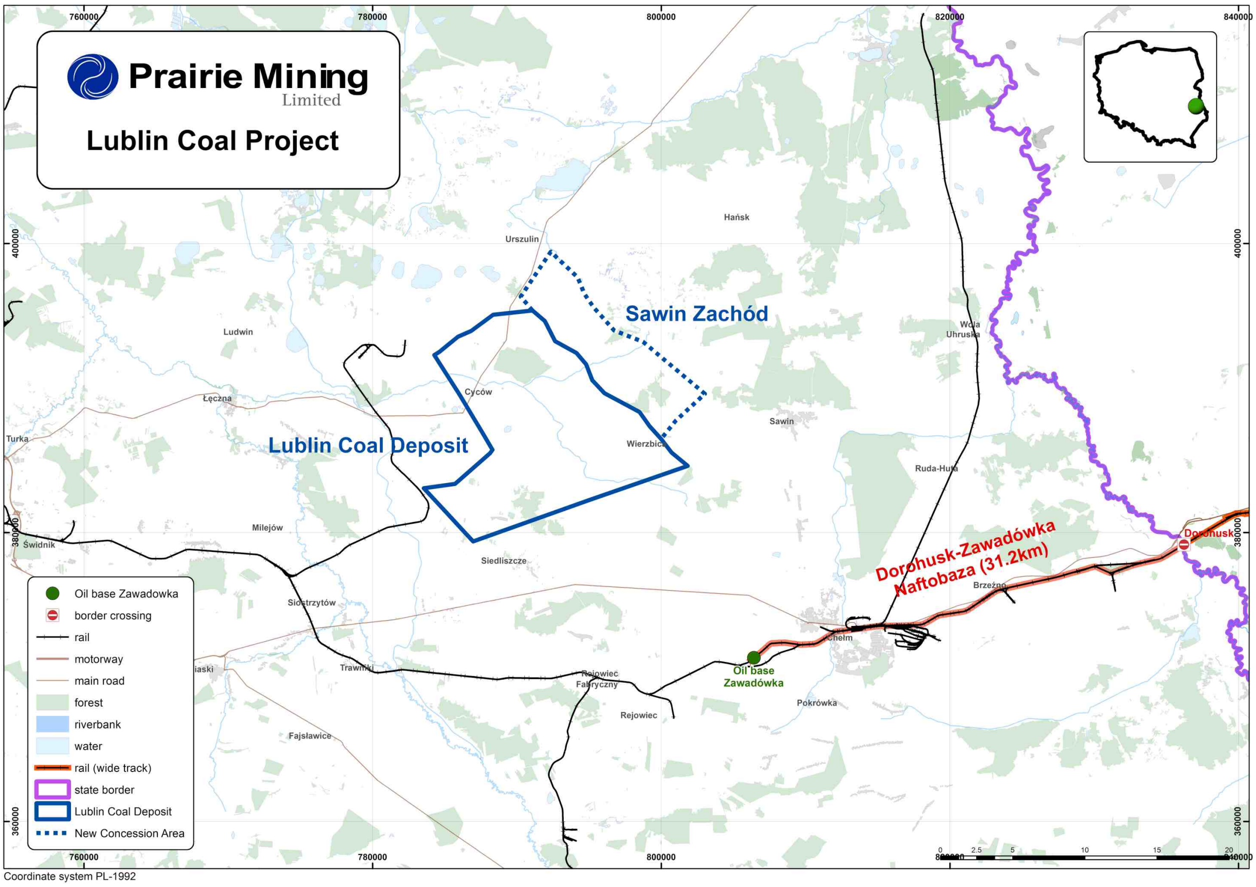



*Figure 29: Broad gauge railway line directly into the Ukraine*

## Port Infrastructure

There are three ports in the north of Poland with coal terminals designed to export approximately 18.5Mtpa, yet only around 20% of this export capacity is currently being utilised.

Port charges in Poland typically range from USD4.00-6.50 per tonne to load FOB vessel, depending on the specific port and degree of port storage and handling, or transhipment required.

The Study identified the Port of Gdańsk as being closest to the LCP, located some 520km north west via existing railway networks.

**Table 16: Handling potential of sea ports for coal imports and exports**

| Port | Name | Handling capacity (Mtpa) | |
|---|---|---|---|
| | | Import | Export |
| **Gdańsk** | Dry Bulk - Export Terminal (Outer Port) | – | 8 |
| | Dry Bulk Import Terminal (Outer Port) | 6 | - |
| | Gorniczy Basin (Inner Port) | 1.0-1.5 | |
| **Gdynia** | Dutch Quay | approx. 1.5 | approx. 1 |
| **Szczecin** | Coal Terminal | approx. 1 | approx. 2 |
| **Świnoujście** | Miners Quay | approx. 4 - 6 | approx. 4 - 6 |
| | **Total** | **approx. 16** | **approx. 18.5** |
| *Elbląg* | *2 barges at the same time* | *0.8* | |

### Port of Gdańsk

Managed by the Port of Gdańsk Authority S.A., the port is situated in the central part of the southern coast of the Baltic Sea. The most important coal terminals at the Port of Gdańsk are the **Dry Bulk Terminal** operated by the Port Północny Sp. z o.o: a modern mechanized facility that can handle approximately 8Mtpa. The terminal can accommodate ships of up to 280m long with maximum draft of 15m. This is the maximum value for Baltic ports, related to limitations of the Danish straits (being the Baltic gateway to the Atlantic Ocean); and the **Górniczy Basin** operated by Port Gdański Eksploatacja S.A. which consists of three quays with a maximum ship length of 225m at the maximum draught of 10.2m.

***Figure 30: Gdansk Port – "Dry Bulk Terminal" – export facility stacker/reclaimers***

## Environmental & Social Impact Assessment

In 2014, the Company commenced an ESIA for the LCP and under Polish legislation, an ESIA must be completed to provide government authorities with sufficient information to award the Environmental Consent Decision, which is a pre-requisite to the granting of a mining licence over a Company's concessions.

Prairie has since completed a number of major work program items in relation to the ESIA which is being conducted by Multiconsult (formerly WS Atkins). The ESIA is an extensive study that includes a wide range of environmental monitoring programs, field surveys, ecosystem sensitivity assessments, socio-economic surveys and a detailed community study and stakeholder engagement plan. The scope of the ESIA has been defined to meet Polish, EU and international standards, including compliance with the Equator Principles to support the future financing of the Project.

Prior to the commencement of environmental baseline field work studies for the LCP, Prairie's ESIA study team completed a desktop review of the available environmental and social data for its concession areas. Given the fact that there is an existing mining operation adjacent to Prairie's concessions, Prairie has benefited from the existence of significant baseline data for the region which represent actual mining conditions, including surface water flows and quality, information on groundwater and ground levels after subsidence, noise and waste characteristics.

Following completion of this desktop review, Multiconsult immediately commenced with the required baseline studies to obtain data that was not already available. The baseline studies are now complete for all concession areas at the LCP. Field studies relating to nature inventory for concession areas were completed in October 2015 with detailed nature inventory reports currently being finalised. One-year surface water monitoring for the concession areas were also completed in October 2015 together with preparation of a specific surface water monitoring report. The company has commenced an initial hydrogeological study with approximately 1,500 existing shallow wells (located mainly in quaternary deposits) having been tested. On this basis, a map of the first ground water table contours has been created. The map will be included in the upcoming Deposit Development Plan ("**DDP**").

The Company has also completed its internal Stakeholder Engagement Plan which is a key component of the ESIA process, and will ensure that the Company communicates effectively with all relevant stakeholders of the Project. In October 2015 the Company also commenced preliminary work on the Acquisition and Livelihood Restoration Framework in line with the International Finance Corporation Performance Standards. The Framework will further strengthen effective community engagement and assess impacts and opportunities for stakeholders through the life of the Project. Prairie is on track to complete all environmental baseline studies and submit its completed ESIA to the Polish authorities during 2016.

The submitted ESIA will provide the Polish authorities with sufficient information to award an Environmental Consent Decision, which is a pre-requisite for the granting of a mining concession over the Project's Mine Plan Area.

## Economic Benefits Study

Prairie commissioned Deloitte Poland to complete an Economic Benefits Study ("**Deloitte Study**") that outlined the potential benefits that the Project could bring to the Lublin region and to the Polish economy. The Deloitte Study indicated that the Lublin region in the Eastern Border area of Poland has a high level of unemployment of up to 20%, compared to the national average of 14%. In the Eastern Border area GDP per capita is some 32% lower than the national average. The Deloitte Study found that a total of 2,000 direct jobs and 10,000 indirect jobs could be created and that a significant improvement in standard of living would occur within the municipalities in the vicinity of the LCP. The Project would stimulate the development of education, health service, and communications and has the potential to double the amount of foreign direct investment in the province. A number of potential non-economic benefits were also confirmed including positive social impacts of the project on the development of human and intellectual capital, improved health standards and social security and an improvement in the image of the region. Prairie's LCP will be a significant contributor to the development of the region and to the creation of jobs and local infrastructure.

## Fiscal Regime & Project Permitting

Poland has a highly favourable fiscal regime for coal mining. Polish concession activities are predominantly regulated by the MoE under the provisions of the Act of 9 June 2011 Geological and Mining Law. Current legislation provides for the following key terms:

- Corporate tax rate: 19%;
- Royalty on Coal Revenues: up to PLN3.2 per tonne;
- An annual contribution to a mine decommissioning fund equivalent to 3% of the annual depreciation and amortisation value of the fixed assets of the mining plant;
- No requirement for Government equity participation.

Prairie's LCP comprises four coal exploration concessions covering 182km². The Licences were granted in July 2012 and were valid for an initial period of three (3) years, and have been extended beyond the initial three year period by approval of the MoE.

In February 2015, the Group was granted a fifth new large contiguous exploration concession for coal at the Lublin Coal Project, increasing the project area by 54km$^2$ to over 235km$^2$. The grant of Sawin-Zachód confirms the company's position as a dominant land holder in the Lublin coal basin and provides the potential for a significant increase in coal resource. The PFS does not contain any CRE in respect of Sawin-Zachód.

Commencing in 2012, under the terms of its exploration concessions, the Company was required to complete a seven-hole core drilling campaign at the Project designed to enhance the historical drill database and facilitate the preparation of geological documentation (a Polish standard resource report). Prairie announced the completion of the seven-hole drilling program in August 2014 and the submission of geological documentation in December 2014. On 1 July 2015, the Company announced that it had been granted a priority right to establish a mining usufruct and apply for a mining concession for the Project (excluding Sawin-Zachód) by April 2018.

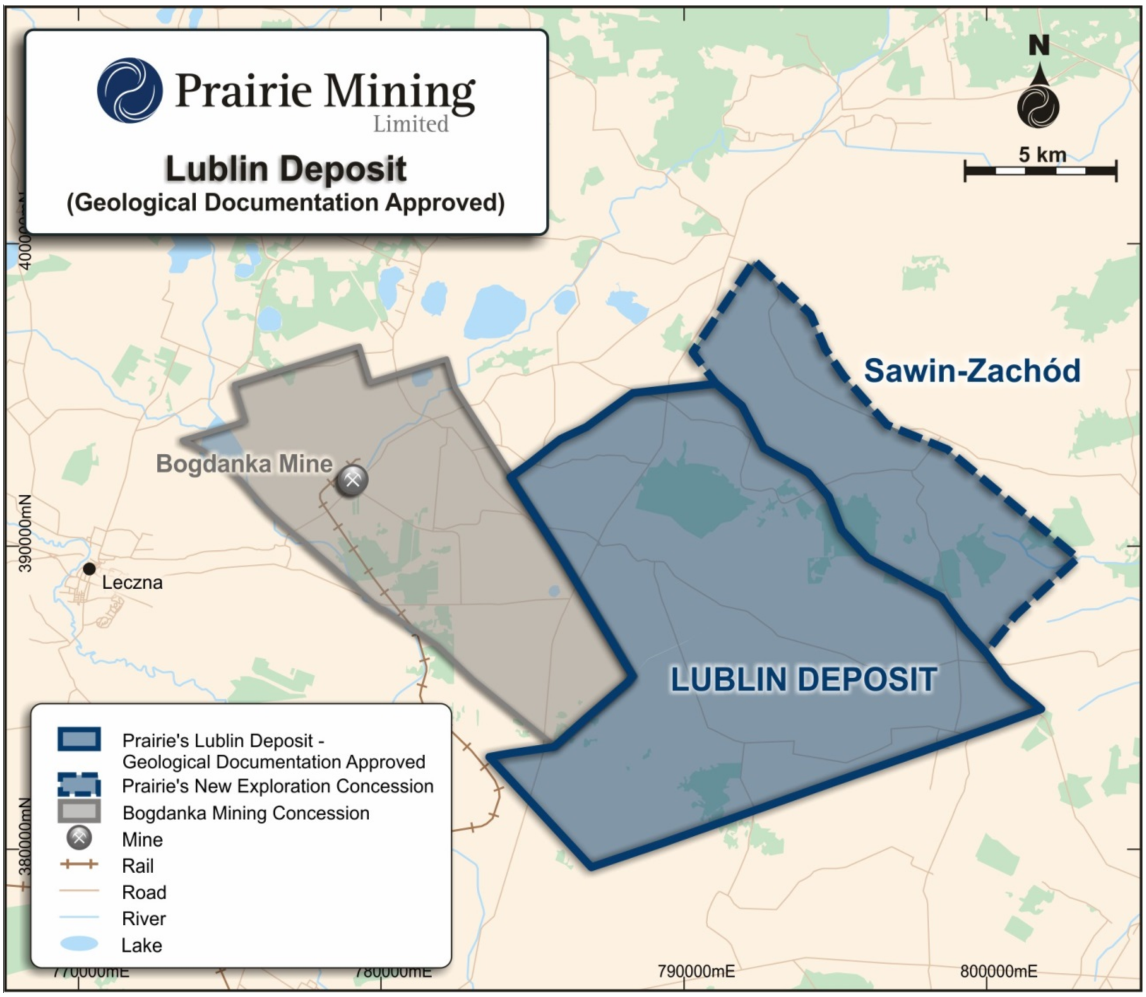



***Figure 31: Lublin Concession and the Sawin-Zachod Concession***

The Company is currently working towards completing a mining concession application which in Poland comprises of the submission of a DDP, an ESIA that is to be approved by regional authorities and approval of a spatial development plan (rezoning of land for mining use). The DDP is a Polish standard mine technical-economic study as prescribed in the Polish mining regulations. Under Polish law, the environmental consent decision has to be obtained prior to the obtaining of the mining concession. The environmental consent decision is issued by a specialised environmental authority (the Regional Environmental Protection Director).

The DDP and ESIA are currently progressing and are expected to be completed during 2016 to 2017. Spatial planning (rezoning) consents are being prepared on Prairie's behalf by specialised Polish consultants. The new Regional Spatial Development Plan of Lublin, which was passed by the Lublin Regional Assembly in October 2015, established that a leading strategy in the Lublin region is the development of coal mine infrastructure. This resolution significantly facilitates and encourages the development of the LCP.

## Net Present Value

The (ungeared) Net Present Value post tax is US$1.39 billion at an 8% discount rate (real), and the (ungeared) IRR is 26.6%. The Project is expected to exhibit levels of profitability that would contribute value to Prairie shareholders.

**Table 17: Project Net Present Value**

| | NPV (8% real, ungeared) | IRR |
|---|---|---|
| Pre-Tax | US$1.77 billion | 29.7% |
| Post-Tax* | US$1.39 billion | 26.6% |

*Current Polish corporate tax rate of 19% has been assumed

## Sensitivity Analysis

Sensitivity of the (ungeared) post tax NPV to changes in the key drivers of the DCF model are presented in the table below:

**Table 18: Project Post-Tax NPV Sensitivity Analysis**

| | Post-Tax (ungeared) NPV at 8% discount rate (US$ billion) | | | | |
|---|---|---|---|---|---|
| | -20% | -10% | Base Case | +10% | +20% |
| **Coal Prices** | 0.79 | 1.09 | 1.39 | 1.69 | 2.0 |
| **Opex** | 1.60 | 1.50 | 1.39 | 1.28 | 1.18 |
| **Capex** | 1.49 | 1.44 | 1.39 | 1.34 | 1.29 |

The DCF model is most sensitive to changes in coal price. Further flexing of the model with respect to coal prices at +/-40% of the base case price forecast demonstrate a post-tax ungeared NPV (8% real) of US$2.59 billion at +40%, and post-tax ungeared NPV (8% real) of US$187 million at -40%.

## Study Consultants

The Study was managed by independent consultants Golders and included input from other specialist industry consultants with expertise in underground coal mine development, generally with Polish and International experience. The consultants analysed various project components for the Study, including (but not limited to) an updated geological resources assessment, the design of shafts, design of mine, design of processing facilities, and the preparation of transport infrastructure and coal marketing reports.

Golder has expertise in mining engineering, mine reserve evaluation, feasibility studies and due diligence services for mining and resource projects across the globe.

**Table 19: Lublin Coal Project Pre-Feasibility Study Consultants**

| Consultant | Activity |
|---|---|
| Golder Associates (UK) (Golders) | Geotechnical and Roof Support Analysis, Mine Planning and Mineral Reserve Estimation, Hydrogeology, Financial Modelling, and PFS Management |
| Royal HaskoningDHV UK Ltd (RHDHV) | Geology, Mineral Resource Estimation, Preliminary Mine Surface Infrastructure Design and Cost Estimation |
| Dargo Associates (UK) | Preliminary CHPP Design and Cost Estimation |
| Deilmann Thyssen Schatbau (DTS) | Preliminary Shaft Design and Cost Estimation |
| Mota Engil Central Europe (MECE) | Preliminary Railway Design and Cost Estimation |
| Atkins/Multiconsult | Environmental and Social Impact Assessment |
| Sunbar | Spatial Planning |
| Energoprojekt | Preliminary HV Power Supply Design and Cost Estimation |
| CRU/ PAN | Market Price Forecasts and Logistics Cost Estimation |
| Zespół Doradców Gospodarczych TOR (Poland) | Preliminary Transport Logistics Study |
| Deloitte Advisory (Poland) | Preliminary Polish Hard Coal Industry Labour Study & Economic Benefits Study |

Prairie have strengthened the project team for the PFS and have appointed counterpart staff to manage the consultants and enable peer review of specific aspects of the project. The team includes a Project Manager who is also a Competent Person under the JORC Code for mineral reserves, a chief geologist who is a Competent Person under the JORC Code for mineral resources, a senior hydrogeologist, a senior environmental scientist, a GIS specialist, a senior coal preparation specialist and a senior Polish coal geologist. Prairie have also secured the services of the ex CEO of Bogdanka mine, Mr Miroslaw Taras, who has professional qualifications in mine engineering and finance. Mr Taras provided extensive input into the PFS based on his 30 year experience at the Bogdanka mine.

# SUMMARY OF ORE RESERVE ESTIMATE AND REPORTING CRITERIA

## Material Assumptions

The PFS, Coal Reserves, Production Targets, and forecast financial derived from the PFS, and the Coal Reserve and the Production Target contained in this announcement, are based on the material assumptions contained within this announcement which are summarised below:

| Table 20: Assumptions | |
|---|---|
| Maximum Accuracy Variation | +/- 20% |
| Minimum LOM | 24 years |
| Mining Method | Underground Longwall |
| Average Seam Thickness | 391 seam – 1.94m, 389 seam – 2.09m |
| Average Mining Height | 391 seam – 2.11m, 389 seam – 2.30m |
| Production Days per Year | 312 |
| Longwall Productivity | Up to 4Mtpa |
| Longwall Retreat Rate (Thin Seam) | 88.3m/week |
| Longwall Retreat Rate (Thick Seam) | 74.6m/week |
| Development Rate – Continuous Miner | 150m/week |
| Development Rate – Road Headers | 78m/week |
| Steady State Average ROM Coal Production | 7.97Mtpa |
| Capacity CHPP | 1,150 raw tonnes per hour |
| Utilisation CHPP | 90% |
| Average Effective Project Yield | Life of Mine - 78.8%, Steady State – 79.6% |
| Processing Method | Dense Media Plant |
| Average Steady State Saleable Coal Production (tonnes) | 6.34Mtpa |
| Average Direct Mining Costs (Steady State) | US$18.79 per tonne saleable coal |
| Average CHPP, Waste Management & Logistics Costs (Steady State) | US$2.92 per tonne saleable coal |
| Average SG&A and Mine Closure Fund Costs (Steady State) | US$2.45 per tonne saleable coal |
| Royalty | US$0.80 (PLN3.2) per tonne saleable coal |
| Average Total Cash Operating Cost (Steady State) | US$24.96 per tonne saleable coal |
| Initial Capital Costs to Steady State Production | US$557.6 million |
| Contingency (5% to 20%), EPCM and owners costs | US$74.1 million |
| Average Sustaining Capital Cost (Steady State) | US$3.43 per tonne saleable coal |
| Leased Equipment - Operating Lease | Costs included in Average Direct Mining Costs |
| Leased Equipment - Interest Rate (Real) | 6.0% per annum |
| Leased Equipment - Term | 7 years |

| Table 20: Assumptions | | | |
|---|---|---|---|
| Leased Equipment - Residual Value | | | 20% of Capital Cost |
| Poland Corporate Tax Rate | | | 19% |
| Assumed PLN: USD Exchange Rate (LoM) | | | 4:1 |
| Discount Rate | | | 8% (real, unlevered) |
| | **Average Volume (Steady State)** | **2024 FOR Price (Real)** | **2036 FOR Price (Real)** |
| Semi-soft Coking Coal | 2.66Mtpa | US$84.10/t | US$92.00/t |
| API Specification Coal | 1.44Mtpa | US$55.60/t | USD54.20/t |
| High Ash Fines Coal | 1.14Mtpa | US$75.10/t | USD74.60/t |
| Industrial Coal | 0.76Mtpa | US$86.24/t | USD85.79/t |
| Household Coal | 0.34Mtpa | US$105.00/t | US$105.00/t |

Mine rehabilitation and closure costs have been included in the cost estimates for this study.

### Coal Reserve Classification Criteria

Probable Coal Reserves were calculated only from the indicated portion of the Coal Resources for the Project. The coal reserve was calculated using Minescape software by applying a detailed mine design and LOM mine production scheduling to the resource model which was created in Vulcan modelling software by Maptek. A minimum underground mining height of 1.0m (based on typical longwall mining practices and/or equipment capabilities) was used to determine out-of-seam dilution (OSD) and project Run of Mine (ROM) production tonnes. Production data outputs from LOM sequencing were exported into Microsoft® Excel spreadsheets and summarized on an annual basis for processing within the economic model. Coal reserves are estimated based on a mining recovery of around 87.8%, and an effective yield of 78.8%. The Coal Reserves estimate has been classified as probable based on guidelines specified in the JORC Code (2012). The Coal Resources in this report are reported inclusive of Coal Reserves.

### Mining Method and Assumptions

Prairie anticipates commencing construction at the proposed Jan Karski Mine during 2018, with initial production planned during 2023 followed by ramp up to steady state production. Access to the coal seams will be via two 8m diameter shafts, providing ventilation intake and return airways, staff and material transport and a mineral winding capacity of over 9Mtpa. Production from the LCP will come exclusively from two longwall production units using shearers as the coal cutting methodology. Production units will be up to 5km long the faces will be between 315m and 400m long depending on thickness of extraction. Large capacity conveyors will be installed to convey the coal from the production faces to the main laterals and then to the mineral shaft for winding to the surface. Gate road developments will use continuous miners and fully bolted roadway supports. Main laterals will be arched roadways with steel supports of cross-section up to 30m$^2$, driven with medium duty roadheaders. The transport systems will be free steered vehicles of various configurations to provide, staff and material transport and other support/utility functions.

At full production, directly employed staffing for the operation is expected to total 1,420 employees, and each longwall face will produce approximately 6,200 to 18,800 tonnes of ROM coal per day; ROM production for the LCP will average 8Mtpa. Saleable coal recovery is calculated at approximately 78.8%, (which includes mining and preparation plant losses) yielding an average of approximately 10,000 to 21,000 tonnes of clean coal from each unit per day of production. Annual saleable coal production steady state will be 6.34Mt.

### Processing Method and assumptions

The process plant is designed so that it can produce low ash semi-soft coking coal, sized household coal, industrial coal and a range of low ash and high ash coals for the power sector. A full design for the coal preparation plant has been prepared as part of the Study including flow sheets. The equipment is that which is employed typically in modern efficient coal process plants around the world. The CHPP is envisaged to be at an intermediate location away from the shaft site. It will be designed and equipped to process ROM coal that will be received by rail from the mine site.

The CHPP was designed to be fully flexible in producing coal ranging from the lowest ash (typically 4% in the case of the LCP) to a high ash product for typical Eastern European power plants (up to 26% ash). In addition to bulk coal, the Lublin CHPP will produce specialty sized products for household use in the size range 30mm to 80mm of up to 6% ash, and industrial coal sized at 16mm to 30mm.

At full production, the coal preparation plant will process the mine's entire ROM production and requires a notional design capacity of up to 9.3Mt of ROM coal annually to produce up to 6.8Mt. The plant is designed as a 1,150 ton-per-hour facility (air dried basis). Coal will be sized at 30mm and the plus 30mm will processed and either sold directly as household or industrial coal or be crushed to be included in one of the other bulk products. Less than 30mm raw coal can either be totally processed to produce high quality semi-soft coking coal, or some of the raw coal can bypass processing and be blended with the processed coal to produce the higher ash export thermal coal products. The process comprises dense medium drums, dense medium cyclones, TBS Hydrosizers and froth flotation. All drying is by mechanical dewatering. It has been assumed that coal wash will be emplaced at a nearby location, and full transport and coal wash emplacement systems have been designed and costed for this study.

## Coal Quality Parameters Applied

The seams in the LCP considered in this study have the following qualities on a gross air dried basis, 389 – Ash 14.4%, Sulphur 1.62%, Moisture 3.2% and Calorific Value 27.73MJ/kg and 391 – ash 10.3%, Sulphur 1.27%, Moisture 2.6% and Calorific Value 29.6MJ/kg. Based on the preparation plant information and product mix described in this Study, the weighted average product coal quality is projected to contain Ash of 10.4%, Sulphur of 0.85%, Calorific Value of 27.21MJ/kg and Moisture of 9.5%. The effective plant yield over the life of the mine is 78.8%.

## Coal Reserve Estimation Methodology

Grid files prepared from the geological database were used in the estimation of coal resources, including both seam thickness and elevation models encompassing the 389 and 391 seams. Coal seam thickness and base-of-coal-seam structure grid files were used to define the top and bottom of the coal horizon. The grid models were developed using Vulcan software. This data was imported into Minescape, which was then used to develop LOM projections and production timing sequence plans. A minimum underground mining height of 1 m, based on typical mining practices and/or equipment capabilities, was used to determine OSD and project raw production tons. A project schedule and estimated capital and operating costs (+/-10 to 20% in accuracy) have been developed. Annual average saleable coal production at steady state will be 6.34Mtpa.

## Other Material Modifying Factors

*Economic*

A detailed financial model and discounted cash flow analysis was prepared in order to demonstrate the economic viability of the Coal Reserves. The NPV of the projected cash flows is US$1.39 billion at an 8% real discount rate, with an IRR of 26.6%.

*Marketing*

The Company is targeting to produce:

- semi-soft coking coal for the steel-making sector;
- a range of coals for the power sector;
- industrial coal for use in fertilizer plants, foundries and cement works, and
- sized coal for household consumption ("household coal").

By utilising modern wash plant technology as is typically used in Australia or the USA, the Company plans to be able to produce this range of saleable products from the washplant, and will be able to adjust the product split as required by prevailing market conditions. Such flexibility in product mix represents a significant potential competitive advantage for the Project.

Studies completed by international coal marketing consultants CRU, as well as Polish specialists, confirm that coal from the LCP can be transported at competitive rates into regional export markets via rail and sea, and also into traditional Polish markets. Given the large scale of the LCP and the availability of nearby well established and low cost transport infrastructure, the Project is well positioned to provide a significant new strategic supply of coal to various industries in Europe.

*Infrastructure*

The Project is a well-defined coal resource, which is located in an area with a long history of coal mining. The mine site has two 110kV lines running to the east and west of the site and some 9km from the proposed shaft locations. Water for the site is available from either the regional utility or shallow boreholes to abstract water from the water table. Recycled water will also be utilised. The borehole and recycled water will require basic treatment before use. The LCP is located approximately 15km north of the major No 7 railway line, which is standard gauge (1,435mm), double track and electrified and is the shortest route between Warsaw and Kiev. The No 7 line, as with all other Polish rail, is designated multi-user by EU Directive 91/440. Numerous other major railway lines service the Lublin region and together provide access to coal markets within Poland, wider Europe and export sea ports. There are three ports in the north of Poland with coal terminals designed for export with significant underutilised capacity. The Port of Gdańsk as being closest to the LCP, located some 520km north west via existing railway networks.

*Environmental, Permitting, Legal and Socioeconomic Position*

Prairie's LCP comprises four coal exploration licenses covering 182km². The Licences were granted in July 2012 and were valid for an initial period of three (3) years, and have now been extended beyond the initial three year period by approval of the Ministry of Environment.

In February 2015, the Group was granted a fifth new large contiguous Exploration Concession for coal at the Lublin Coal Project, increasing the project area by 54km$^2$ to over 235km$^2$. The grant of Sawin-Zachód confirms the Group's position as a dominant land holder in the Lublin coal basin and provides the potential for a significant increase in coal resource. The PFS does not contain any CRE in respect of Sawin-Zachód.

Following completion of Prairie's seven-hole drilling program in August 2014 and the submission of Geological Documentation in December 2014, the Company announced on 1 July 2015 that PD Co (the Company's Polish subsidiary) was granted a Priority Right to establish a mining usufruct and apply for a Mining Concession for the Lublin Coal Project (excluding Sawin-Zachód) by April 2018.

The Group is currently now working towards completing a Mining Concession application which in Poland comprises of the submission of a DDP", an ESIA that is to be approved by regional authorities and approval of a spatial development plan (rezoning of land for mining use). The DDP is a Polish standard mine technical-economic study as prescribed in the Polish mining regulations. Under Polish law, the environmental consent decision has to be obtained prior to the obtaining of the Mining Concession. The environmental consent decision is issued by a specialised environmental authority (the Regional Environmental Protection Director).

The DDP and ESIA are currently progressing and are expected to be completed during 2016. Spatial planning (rezoning) consents are being prepared on Prairie's behalf by specialised Polish consultants. The new Regional Spatial Development Plan of Lublin, which was passed by the Lublin Regional Assembly in October 2015, established that a leading strategy in the Lublin region is the development of coal mine infrastructure. This resolution significantly facilitates and encourages the development of the LCP.

## Summary of Resource Estimate and Reporting Criteria

### Geology and Geological Interpretation

The Lublin Coal basin covers approximately 9,100km$^2$ in the east of Poland near the border with Ukraine. The Lublin Basin is known to have formed during the Late Visean due to enhanced subsidence, which was followed by numerous episodes of marine ingression and repeated sequences of shallow marine and deltaic sediment deposition during the Namurian. The remaining succession contains lithologies from four main divisions. The first, and oldest, are the Late Carboniferous (Westphalian age) sediments which represent the main coal-bearing strata of the basin, deposited in predominantly fluvial environments. Following tectonic inversion and erosion, these were subsequently overlain unconformably by a sequence comprising Jurassic carbonates, Cretaceous limestone, and finally Quaternary superficial deposits (clay, sand, gravel) of varying thickness.

The Lublin structure is largely controlled by the Bogdanka Syncline and strata is found to be either horizontal or shallowly dipping (predominantly to the west), with the overlying Jurassic and Cretaceous generally more shallowly dipping compared to the Carboniferous.

The site is overlain by poorly consolidated Quaternary superficials of varying thickness between 0 and 85m. The upper stratigraphical sequence comprises Cretaceous and Jurassic units. Both units vary in thickness. The Cretaceous sequence is made up of a range of marine sediments; principally limestones, marls and chalks, and can reach thicknesses of 606m within the vicinity. The base of the Cretaceous sequence is characterised by the water-bearing and less consolidated Albian Sands. The thinner Jurassic units (65m to 155m from borehole intersections) comprise dolomites and dolomitic sandstones. The Cretaceous and Jurassic formations unconformably overly the Carboniferous sequence, of which the upper section is considered the productive series containing the coal seams investigated in the CRE upgrade. The coal sequence within the LCP comprises 30 distinct seams, from Seam 369 at the top to Seam 399 at the base. Carboniferous interburden is made up of sedimentary lithologies ranging from claystones to mudstones to sandstones and some minor calcareous units. The uppermost coal seams subcrop against the base of the Jurassic in some areas.

### Drilling and Sampling Techniques

Some 117 historic boreholes were drilled within the licence area and comprised approximately 90,000m of core drilling, which was subject to down-hole geophysical logging, geotechnical testing and coal quality analysis. The drilling was conducted by various Polish government agencies between the 1960’s and 1980’s.

Historical drilling was conducted using a combination of open hole and strata core drilling in every borehole, reportedly using OP-1200 and ZIF-1200 drilling rigs. All historical boreholes are assumed to have been drilled vertically. Open hole drilling was employed to aid progression through the overlying Cretaceous and Jurassic strata within which rock cutting samples were recovered at 2.0m intervals. Diamond core drilling was used through the base of the Jurassic and the underlying Carboniferous Coal Measures sequence to the end of the borehole.

Coal samples for laboratory analysis were obtained from the solid core, cleaned and sealed in individually labelled plastic bags to prevent contamination or excessive moisture loss before being sent to a laboratory. Coal quality analysis was conducted by the Analytical Tests Department of Katowice Geological Enterprise although exact testing procedures are not available. Coal seams ≥40cm thick were analysed and dirt/non-coal bands ≥5cm thick were not analysed.

In 2013/14 Prairie undertook a geological drilling programme of seven boreholes to corroborate past findings and provide additional high resolution data for geological, geotechnical, hydrogeological, and other purposes including washability test work.

Drilling comprised a combination of rotary openhole and continuous core drilling, with potential zones of unstable ground cased off during drilling. Rock cutting samples were obtained at 2m intervals during the openhole drilling (Quaternary, Cretaceous and Jurassic strata) above the Coal Measures – where geotechnical core drilling was undertaken. The core drilling method deployed was wire line rotary drilling using single tube core barrels.

Geological logging of solid core and chip samples was performed by PolGeol. Detailed lithological descriptions were used as the basis for graphic logs, and were input by PolGeol using RockLab software.

Core and associated samples were stored in robust, marked, wooden boxes at site and housed in a permanent building, providing a secure, covered environment. Core was sealed in plastic sheeting and stored at a controlled temperature to prevent damage and excessive moisture loss or core deterioration. In order to ensure consistency core was photographed through by a camera attached to a rigid metal frame. The photography area was further lit by two lamps.

All the boreholes were subject to detailed down-hole geophysical logging to confirm the depths and thicknesses of the coal seams, together with geotechnical and hydrogeological parameters. The suite of geophysical testing includes 4-arm calliper, dual-spaced density, temperature, natural gamma, resistivity, verticality and acoustic scanner (two boreholes). All coal seams > 0.60m were sampled for coal quality testing and roof and floor strata of the target economic seams), was sampled for geotechnical laboratory testing. Core recovery (%) was calculated after drilling with comparison to coal seam depths and thicknesses as interpreted from the geophysical logs. A record of Total and Solid core recovery and Rock Quality Designation (RQD) were recorded in each of the seven boreholes and provided to RHDHV in the form of geotechnical logging sheets. Fracture / discontinuity logging was also undertaken as part of the geotechnical logging procedure, with roof and floor samples adjacent to coal seams analysed.

## Classification Criteria

The CRE has been classified and is reported as Indicated and Inferred Resources based on guidelines specified in the 2012 JORC Code.

## Sample Analysis Method

Coal seams > 0.40m thick were sampled and tested from the historic boreholes, however dirt beds >0.05 were not tested. The sampled coal was subject to highly detailed coal quality testing in accordance with Polish Standards. A varied suite of analyses were carried out including, standard proximate analysis and coking properties, which formed the basis of the study.

The recent 2013/2014 cored boreholes were subject to detailed coal quality testing undertaken by accredited laboratories in Poland and the UK. The testing included standard proximate analysis and detailed tests, including float and sink analysis.

In regard to the 2013/14 drilling, immediately after the coal seam cores are extracted from the core barrel a spot coal sample was taken for gas testing, secured in an air tight container. Core was then stored within core boxes in plastic sleaving or sheeting prior to logging and sampling to mitigate moisture loss. Coal seam intersections with core recoveries less than 90-95% were generally omitted as Points of Observation, however intervals were exampled on a case-by-case basis, considering seam homogeneity, variability versus adjacent boreholes, overall confidence, and seam properties.

## Resource Estimation Methodology

In 2012, Prairie announced a maiden CRE for the LCP (refer ASX announcement 14 February 2013). The Resource was defined within 21 coal seams found at depths of 624m and 1,091m within the Company's four coal licenses, with average coal seam thicknesses of ~1.4m and ranging between 1.0m and 4.5m.

The Maiden CRE was prepared in accordance with the JORC Code (2004) with the geological modelling of the resource based on a database of approximately 200 historical core holes covering the LCP concessions and totalling some 200,000m of drilling which was conducted by various Polish governmental agencies between the 1960's and 1980's.

In February 2014 Prairie announced it had concluded an agreement with the Polish Ministry of Environment giving Prairie access to further documentation from the historical drill hole database (refer ASX Announcement 13 February 2014). The additional documentation included hundreds of volumes of coal quality, geotechnical, hydrogeological, geophysics and seismic test data, analysis and interpretation.

Independent consultants, WAI, together with Prairie's geological team carried out a detailed review of the additional data obtained from the Government and, together with the results of the Company's ongoing drilling program and coal quality testing, delivered an upgrade to the classification of the CRE ("**2014 CRE**"). The 2014 CRE formed the basis of the mine planning for the LCP and was integrated into the Scoping Study, also conducted by WAI (refer to ASX Announcement 28 April 2014).

In July 2015, RHDHV prepared a further resource upgrade for the LCP. For this Study, and for the preparation of the PFS mine plan, RHDHV have made minor revisions and issued an updated CRE ("**2016 CRE**"). The 2016 CRE has been estimated on a gross tonnage basis, and therefore includes dirt partings within the seam. This tonnage is approximately equivalent to the Run-of-Mine coal that would theoretically be extracted directly from the operation, but does not consider out-of-seam dilution i.e. contamination from roof and floor and mining or processing losses. The estimate is based on drilling data derived from both the newly available historical data and further information obtained from the Prairie 2013/14 campaign.

RHDHV modelled the available drilling data from 10 potentially economic coal seams within the LCP, as compared with 21 coal seams modelled previously by WAI during the Scoping Study phase of the Project. The modelling of fewer seams is a natural progression from the Scoping Study phase to the PFS phase, where seams are evaluated more critically as proposed mining methods are refined and a more focused approach is taken. RHDHV applied a 1m seam thickness cut-off and also applied a more conservative stand-off of 100m from the overlying Jurassic formation which has been identified as a potential aquifer. Whilst the Global CRE has reduced from the 2014 CRE compared to the 2016 CRE, the studies were not undertaken on the same areas nor under the same criteria, and are not therefore directly comparable.

## Cut-off Grade

No cut-off grades (qualities) were applied during the estimate. Coal was modelled on a gross tonnage basis, including dirt partings within the seam. Coal seams are generally distinct and homogenous with low ash concentrations. Coal will not be selectively mined and Run-of-Mine coal will undergo beneficiation, and as such estimation does not warrant application of grade cut-off. Physical/spatial cut-offs were applied, including omission of faulted regions, seam thickness <1.0m, and 100m stand-off to the base of the Jurassic.

## Mining and Metallurgical Methods and Parameters

Studies indicate that the deposit has the potential to support an underground longwall mining operation, accessed and supplied via two shafts to depths of approximately 1,000m and concludes that the deposit could be exploited utilising plows or shearers depending on seam thickness. In general, above seam thickness of 1.5m shearers are used and below 1.5m plows are to be used. Previous investigations have considered both the use of steel arches and rock bolting, however further work and consideration of detailed geotechnical laboratory analysis will be considered in this regard. RHDHV did not identify any fatal flaws with respect to Modifying Factors and the Resource classification and estimation was undertaken in accordance with the JORC (2012) Code.

## Competent Person Statements

The information in this announcement that relates to Coal Reserves, Mining, Coal Preparation, Infrastructure, Production Targets and Cost Estimation is based on, and fairly represents, information compiled or reviewed by Mr Stephen Newson, a Competent Person who is a Chartered Engineer and Fellow of the Institute of Materials, Minerals and Mining (UK) and has a 1st Class Mine Manager's Certificate of Competency. Mr Newson is employed by independent consultants Golder Associates (UK). Mr Newson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Newson consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

The information in this announcement that relates to Exploration Results and Coal Resources is based on, and fairly represents, information compiled or reviewed by, Mr Samuel Moorhouse, a Competent Person who is a Chartered Geologist and is employed by independent consultants Royal HaskoningDHV UK Limited. Mr Moorhouse has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Moorhouse consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

## Forward Looking Statements

This announcement may include forward looking statements. These forward looking statements are based on Prairie's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Prairie, which could cause actual results to differ materially from such statements. Prairie makes no undertaking to subsequently update or revise the forward looking statements made in this release, to reflect the circumstances or events after the date of this announcement.

## *APPENDIX 1 - JORC CODE, 2012 EDITION – TABLE 1 – CHECKLIST OF ASSESSMENT AND REPORTING CRITERIA*

### Section 1 Sampling Techniques and Data

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Sampling techniques** | • Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.<br>• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.<br>• Aspects of the determination of mineralisation that are Material to the Public Report.<br>• In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. | HISTORICAL DRILLING<br>Across all four license areas the following works have been carried out:<br>• Over 100 boreholes, totalling 71,999m were drilled, between 1965 and 1981 using a combination of open-hole and core drilling;<br>• Coal quality was evaluated through laboratory testing samples, yielding of Coal seams >40cm were analysed and dirt partings less than 5cm, were analysed as part of a composite sample;<br>• The sample collection procedure involved initial cleaning of the coal of any mud and transfer to plastic bags. Bags were then labelled with the borehole ID and sample number and sealed with tape to minimise moisture loss. Individual sample bags were further transferred to a collection bag, and then containers prior to delivery to the laboratory;<br>• Coal quality analysis was undertaken by Analytical Tests Department of Katowice Geological Enterprise;<br>• Average core recoveries for licenses K4-5, K6-7, K8, and K9 were 70%, 80%, 67.5%, and 70% respectively.<br><br>PRAIRIE MINING LTD DRILLING<br>• Boreholes were open hole drilled from surface to the base of the Jurassic. Rock cutting samples were obtained at 2m intervals;<br>• From the top of coal measures to the base of hole continuous rotary rock coring was carried out. A sufficient proportion of coal was obtained to ensure a representative sample was available for analysis;<br>• Geologists carried out detailed lithological logging, core recovery measurements, to confirm an acceptable level of recovery and the use of and geophysical logging. Core recoveries were checked to ensure acceptable levels, and geophysical logs were used to confirm seam thickness;<br>• Core was temporarily placed in plastic sleeves prior to sampling;<br>• After sampling coal was placed into plastic bags to minimise excessive moisture loss. Core was stored at temperatures of <18°C within a secure, air conditioned building at site;<br>• Samples were given a unique identifier (borehole name, seam code and sample number) to prevent loss, misplacement of confusion. All samples were weighed by PDZ and re-weighed at the laboratory. All details were cross-checked by the receiving laboratory to confirm receipt;<br>• Coal seams were sampled single units, or as sub-samples (plies) of coal and/or dirt partings. The core was not split longitudinally and the full core was always sampled. When sampling only samples of >90% core recovery were taken as representative for whole seam or individual ply samples, with recoveries determined through comparison with geophysical logs, as below. |
| **Drilling techniques** | • Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). | HISTORICAL DRILLING<br>• Over 100 boreholes, totalling 71,999m were drilled, between 1965 and 1981 using a combination of open hole and core drilling;<br>• Open hole drilling was confined to the upper units (surface to base of Jurassic), with coring commencing at the top of the Carboniferous, through the coal measures, to the base of the borehole.<br>• Some boreholes were cored from surface, the details of which are described per license below:<br><br>License K4-5<br>• Contained a total of 21 boreholes (21,615m) drilled between 1965-1975;<br>• In 15 boreholes overburden strata was drilled by open-hole methods only, with segmental coring of the base of Cretaceous and Jurassic layers;<br>• For boreholes Lublin 47, Lublin 49, Lublin 55 and Lublin 57 the overburden strata was fully cored.<br>• For boreholes Lublin 51 and Lublin 59 full coring of the Cretaceous to a depth of 150m and then segmental coring was undertaken (one 5m long section every 50m). Full coring commenced ~20m above |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | the Jurassic roof.<br>• Rotary open-hole and core drilling (use of diamond drill bits) methods were used.<br><br>License K6-7<br>• Contained a total of 23 boreholes (21,960m) drilled between 1968-1976;<br>• In 15 boreholes overburden was drilled by open-hole methods only, with segmental coring of the base of Cretaceous and Jurassic;<br>• For boreholes Lublin 71, Lublin 76, Lublin 84, Lublin 86 and Lublin 89 segmental coring of the overburden (one 6m long section every 30m) was carried out;<br>• For boreholes Lublin 68, Lublin 72 and Lublin 79, the overburden was cored to a depth of 150m and the segmental coring commenced (one 6m long section every 30m). In these boreholes continuous coring started approximately 20m above the roof of the Jurassic strata.<br>• Rotary drilling with continuous coring using diamond bits was performed in the Carboniferous strata.<br><br>License K8<br>• Contained a total of 23 boreholes (20,903m) drilled between 1968-1978;<br>• In 16 boreholes overburden was open hole drilled with segmental coring of the Cretaceous and Jurassic;<br>• For boreholes Lublin 90, Lublin 94, Lublin 95, Lublin 102, Lublin 106, Lublin 108 and Lublin 112 continuous coring of the Cretaceous strata to a depth of 150m as well as Jurassic and Carboniferous strata was observed;<br>• Segmental coring (6m long drilling section every 30m) was performed for the Cretaceous interval between 150m and 20m above the roof of the Albian Strata;<br>• Diamond core drilling methods were used in the Carboniferous strata.<br><br>License K9<br>• K9 contained a total of 28 boreholes (26,971m) drilled between 1965-1981;<br>• In 24 boreholes overburden was open-hole drilled with segmental coring of the Cretaceous and Jurassic strata.<br>• For boreholes Lublin 114 and Lublin 123, coring was applied to a depth of approximately 150m;<br>• In borehole Lublin 134 to a depth of 153m and in BH 138 to a depth of 210.30m, with full coring of the Jurassic and Carboniferous strata.<br>• Segmental coring of the Cretaceous strata was carried out from the depths of 150m, 153m and 210.30m to 20m above the roof of the Albian strata was conducted;<br>• Carboniferous strata were drilled using diamond core drilling methods.<br>• Drilling was undertaken by Polish companies based in Katowice and Kielce, using OP-1200 and ZIF-1200 drilling rigs.<br>• Core diameters varied between 74mm, 93mm, 112mm and 132mm.<br><br>PRAIRIE MINING LTD DRILLING<br>• A total of seven boreholes were drilled within the LCP (Borowo, Cycow7, Cycow8, Kopina1, Kulik, Syczyn7, and Syczyn8);<br>• Drilling was carried out via rotary open hole and core drilling;<br>• During drilling sections of potentially unstable or unconsolidated ground were cased off to limit collapse;<br>• Coal-bearing units were continuously cored via wireline rotary drilling with single tube 6m length core barrels, producing 85mm diameter core;<br>• Upon completion the boreholes were sealed with cement. |
| **Drill sample recovery** | • Method of recording and assessing core and chip sample recoveries and results assessed.<br>• Measures taken to maximise sample recovery and ensure representative nature of the samples.<br>• Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | HISTORICAL DRILLING<br>• Core sample collection and assimilation was undertaken using standard procedures as set by the Polish coal industry at the time;<br>• Core recovery was determined by measuring the lengths of recovered core and converting to length through application of a formula. Broken and fragmented core was then weighed and the proportion relative to the total weight was estimated. An overall core recovery length and percentage was then estimated and the output value was expressed as a thickness of the coal seam, based on |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | drilling depths. Recovered core was also compared to the coal interval thickness and geophysical log depth;<br>• It is unknown whether core recovery measurements were recorded based on individual core runs, with details of "solid core" and "RQD";<br>• It is understood that poor core recovery was caused by inappropriate drilling tools and/or poor technical conditions of the boreholes;<br>• Coal seams that were interpreted by geophysical logging but lacked core recovery data were re-sampled using a W-1 hydro mechanical sidewall sampler. The reliability of this method is disputed but poor relative to full seam sampling and analysis and in some cases the results were not found to be reliable (insufficient proportion of seam not represented and analysed).<br><br>PRAIRIE MINING LTD DRILLING<br>• Boreholes were open hole drilled from surface to the base of the Jurassic. Rock cutting samples were obtained at 2m intervals, and lithologically described;<br>• Boreholes were continuously cored through the coal-bearing strata;<br>• Core recovery was derived for each core run based on the length of the core run and the core measured from the core barrel. Coal seam recoveries were calculated using standard methodology, i.e. as the percentage of recovered core (determined by careful measurement) within the overall seam thickness (determined by examination of the geophysical logs, namely density);<br>• Core recovery was recorded per drill run, with records of "solid core" and "RQD".<br>• Coal samples of <90% core recovery for a particular sample (of coal or inter-seam strata) are not typically considered representative. Coal quality analysis and seam representation were considered on a case-by-case basis during the encompassing lateral continuity investigation.<br>• In general, core recoveries exceeded 90% for the principal seams. |
| **Logging** | • Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.<br>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.<br>• The total length and percentage of the relevant intersections logged. | HISTORICAL DRILLING<br>• Core sample collection and assimilation was undertaken using standard procedures as set by the Polish coal industry at the time;<br>• Detailed graphical and written geological logs were produced for the boreholes, incorporating geological/lithological descriptions, geotechnical information, and core recovery data. All logs exhibited information pertaining to depths and thicknesses of the coal seams according to drilling depths, geophysical logs, and a combination of the two.<br><br>PRAIRIE MINING LTD DRILLING<br>• Detailed geological logs were produced based using recorded drilling depths. Coal seam thicknesses and depths were cross-checked against geophysical logs;<br>• A range of samples were taken for the purposes of both geotechnical and coal quality analysis;<br>• All chip samples were geologically logged;<br>• All cores were photographed using a dedicated stable and well-lit metal frame to maintain consistency. |
| **Sub-sampling techniques and sample preparation** | • If core, whether cut or sawn and whether quarter, half or all core taken.<br>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.<br>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.<br>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.<br>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.<br>• Whether sample sizes are appropriate to the grain size of the material being sampled. | HISTORICAL DRILLING<br>• Sub-sampling methodology for the historic drilling is not fully understood. Dirt partings under 5cm were incorporated into coal samples;<br>• The sample collection procedure involved initial cleaning of the coal of any mud and transfer to plastic bags. Bags were then labelled with the borehole ID and sample number and sealed with tape to minimise moisture loss. Individual sample bags were further transferred to a collection bag, and then containers prior to delivery to the laboratory;<br>• Quality control procedures for maximising sample representivity cannot be confirmed.<br><br>PRAIRIE MINING LTD DRILLING<br>• All samples were logged by experienced local geologists from PDZ sub-contractor PolGeol;<br>• Samples were checked and verified by PDZ geologists and Head of Geosciences Jonathan O'Dell;<br>• Coal seams were sampled single units, or as sub-samples (plies) of |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>coal and/or dirt partings. The core was not split longitudinally and the full core was always sampled. When sampling only samples of >90% core recovery were taken as representative for whole seam or individual ply samples, with recoveries determined through comparison with geophysical logs;<ul><li>Immediately following extraction from the core barrel a spot coal sample was secured in an air tight container and taken for gas testing</li></ul></td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td><ul><li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li><li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li><li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li></ul></td><td>HISTORICAL DRILLING<ul><li>Limited detail is available regarding the quality analysis and RHDHV are unable to ratify historical sampling methods and laboratory data, and reliably determine whether international standards (or equivalent) were followed;</li><li>Historical geophysical logs for seam intersections were provided and included natural gamma, density (gamma gamma) and resistivity information;</li><li>RHDHV have evaluated seam depths, thicknesses and correlations during audit and verification.</li></ul>PRAIRIE MINING LTD DRILLING<ul><li>Coal quality analysis has been carried out in accordance with Polish and International standards. A full suite of typical coal quality analysis has been undertaken, plus a range of additional detailed tests (such as ultimate analysis, ash compositions, basic washability) described in the report</li><li>All coal seams >0.60m thick were analysed for basic parameters. The additional detailed analysis was carried out on the key economic seams (typically >1.0m thick);</li><li>Geophysical logs were used to carry out checks on sample thickness and depths;</li><li>A basic suite of analysis has been undertaken by accredited Polish laboratories, including proximate analysis, total sulphur, CV and ultimate analysis. As a cross-check some samples were tested at an accredited international laboratory in the UK (with which RHDHV staff has worked successfully with in the past). Basic washability and some additional analysis (e.g. ash analysis, ultimate analysis, ash fusion, coking properties) were undertaken.</li></ul></td></tr>
<tr><td>Verification of sampling and assaying</td><td><ul><li>The verification of significant intersections by either independent or alternative company personnel.</li><li>The use of twinned holes.</li><li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li><li>Discuss any adjustment to assay data.</li></ul></td><td>HISTORICAL DRILLING<ul><li>Drilling works were supervised by the Lublin-based branch of the Geological Survey Company from Kielce;</li><li>The Geological Survey Company also undertook detailed core logging and sampling as part of the investigation of macro flora and macro fauna;</li><li>It is not believed any twinning was implemented in the historic drilling programme, or any modifications made to laboratory quality analysis.</li></ul>PRAIRIE MINING LTD DRILLING<ul><li>All coal sample thicknesses recorded by the contract geologists were checked by PDZ technical staff (site geologists and Head of Geosciences Jonathan O'Dell);</li><li>Certified sampling and coal quality analysis were provided in electronic format (.xlsx and .pdf) and are held in Poland and the UK. Again all information was checked by PDZ technical staff and subsequently RHDHV geologists</li></ul></td></tr>
<tr><td>Location of data points</td><td><ul><li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul></td><td>HISTORICAL DRILLING<ul><li>It is understood that original spatial data was presented in a range of coordinate systems including 1992 and 2000/8.</li><li>Borehole positions/collars have been resurveyed by a local certified surveyor in 2013/14 to ensure consistency. Signed and certified surveys were provided. RHDHV converted all data to the 1992 system to ensure compatibility with all official documentation;</li></ul>PRAIRIE MINING LTD DRILLING<ul><li>Boreholes are set out by survey in accordance with the Polish local grid. Following drilling each borehole, a down-hole geophysical logging survey is undertaken to confirm the depth location of all coal seams and provide the inclination and azimuth of the boreholes throughout their length.</li></ul></td></tr>
<tr><td>Data spacing</td><td><ul><li>Data spacing for reporting of Exploration Results.</li><li>Whether the data spacing and distribution is sufficient to establish the degree of geological and</li></ul></td><td>HISTORICAL DRILLING<ul><li>The historical boreholes were sited on an approximate 1000-1500m grid by the Geological Survey Company (on behalf of the</li></ul></td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| **and distribution** | grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.<br>• Whether sample compositing has been applied. | governmental State Geological Institute);<br>• Points of Observation were determined using a base set of criteria, and then on a case-by-case basis, using a defined set of criteria, including core recovery, degree of sampling and analysis, homogeneity of the coal seam, variability in seam structure and quality, and correlatability with adjacent boreholes.<br><br>PRAIRIE MINING LTD DRILLING<br>• The new boreholes are widely spaced, and have been drilled to both verify the historic boreholes data set and according to the works program agreed with Poland's Ministry of Environment under the exploration concessions.<br>• Sample compositing has been applied during modelling to produce a sample of a complete seam, or sub-sections of a seam, whereby individual ply samples of coal/dirt are combined based on the thickness and density of each sample. Samples were taken per lithological unit and were therefore typically smaller than the full seam thickness |
| **Orientation of data in relation to geological structure** | • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.<br>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | HISTORICAL DRILLING<br>• It has been assumed that all historic boreholes were drilled vertically with no other predetermined orientation. Precise details regarding verticality are unknown;<br>• Whilst some deviation from the vertical is likely RHDHV have assumed all boreholes are vertical during interpretation and subsequent modelling;<br>• The sampling methods are well understood and defined and are implemented to minimise risk of bias.<br><br>PRAIRIE MINING LTD DRILLING<br>• The geological structures are relatively simple, whereby sampling is not affected by geological structure;<br>• Whilst some deviation from the vertical is likely RHDHV have assumed all boreholes are vertical during interpretation and subsequent modelling;<br>• The sampling methods were designed to minimise risk of bias, are well understood, have been strictly adhered to |
| **Sample security** | • The measures taken to ensure sample security. | HISTORICAL DRILLING<br>• No information was available regarding sample security of the historic data, however RHDHV do not have any reason to believe that this will have affected analysis and the resultant information used in the report.<br><br>PRAIRIE MINING LTD DRILLING<br>• Samples were given a unique identifier (borehole name, seam code and sample number) to prevent loss, misplacement of confusion. All samples were weighed by PDZ and re-weighed at the laboratory. All details were cross-checked by the receiving laboratory to confirm receipt;<br>• Laboratories used are considered competent, responsible and unlikely to cause concern for sample security;<br>• Samples were able to be confidently tracked from site to laboratory. |
| **Audits or reviews** | • The results of any audits or reviews of sampling techniques and data. | • RHDHV has carried out a range of verification procedures to ensure sampling methods were consistent and reliable. Methods carried out at site by PDZ and associated technical staff were also evaluated during a site visit and shown to be of a satisfactory level. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| **Mineral tenement and land tenure status** | • Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.<br>• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | • Prairie hold the exploration licences to 4 no. concession areas that constitute the Lublin Coal Project: Cycow (K-6-7; No. 23/2012/p, updated 2013), Syczyn (K-8; No.21/2012/p), Kulik (K-4-5; No.20/2012/p) and Kopina (K-9; No.22/2012p). |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Exploration done by other parties** | • Acknowledgment and appraisal of exploration by other parties. | • Between 1965 and 1983 a total of 205 historical boreholes have been drilled in the area of the LCP, 117 of which are located within the 4 no. licence areas.<br>• A study of data collected during historical exploration has previously been undertaken and provided to RHDHV by PDZ as Geological Documentation and Supplementary Documentation for the deposit, which includes but is not limited to; resource maps & tables, seam coal quality tables, structural contour maps, cross sections, boreholes cards and geological reports. |
| **Geology** | • Deposit type, geological setting and style of mineralisation. | • The Lublin Coalfield comprises a stratified Upper Carboniferous coal deposit comprising some 30 coal seams, which include a number of economic target seams, in particular the 389 and 391 seams.<br>• Carboniferous coal-bearing sequence is overlain by strata of the Quaternary, Cretaceous and Jurassic. |
| **Drill hole Information** | • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:<br>○ easting and northing of the drill hole collar<br>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar<br>○ dip and azimuth of the hole<br>○ down hole length and interception depth<br>○ hole length.<br>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | • A summary of the drill hole information for exploration undertaken by PDZ has previously been provided on the Borehole Summary Sheets (refer to ASX announcement 13 March 2014).<br>• A summary table of historic and current boreholes used as the basis for this report is provided in Tables A1 and A2 of the Competent Persons Report (CPR) (ASX Announcement 29 August 2015), illustrating basic borehole information and Points of Observation respectively.<br>• As the basis of the geological model, RHDHV hold a managed database containing all information pertaining to the structure and geological nature of the deposit, including geological and geophysical logs and coal quality results. |
| **Data aggregation methods** | • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.<br>• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.<br>• The assumptions used for any reporting of metal equivalent values should be clearly stated. | • No data aggregation methods were used in the preparation of this announcement.<br>• The coal quality for each seam has been determined using the methods outlined in the CPR.<br>• Calculation parameters used to constrain the geological model for the reporting of Coal Resources is discussed in detail in Section 5 of the CPR. |
| **Relationship between mineralisation widths and intercept lengths** | • These relationships are particularly important in the reporting of Exploration Results.<br>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). | • All exploration boreholes for the LCP have been drilled vertically. Subsequent geophysical logging techniques have been employed in every borehole to confirm the inclination deviation and azimuth.<br>• Coal seam intercept depths and thicknesses have been confirmed using geophysical logging in each borehole as a means of confirming the structure of the deposit. |
| **Diagrams** | • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | • A cross section through the geological model of the LCP is provided in Figure 15 of the CPR. Cross section extracted from Vulcan™ modelling software.<br>• A borehole plan relative to the exploration licence boundaries is provided in Figure16 of the CPR. Vulcan™ screenshot of LCP.<br>• A full database of every coal seam intercept used for the purpose of geological model is held by RHDHV and can be supplied on request. |
| **Balanced reporting** | • Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | • All Exploration Results have been provided in Appendix B of the CPR and summarised throughout the CPR. |
| **Other substantive exploration data** | • Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical | • A summary of Material exploration data pertaining to the geological nature and characteristics of the Lublin deposit has been provided or described in the CPR.<br>• Where applicable and considered necessary to the understanding of the CPR, extracts from primary exploration data is provided.<br>• Additional exploration data including detailed geological and |

| Criteria | JORC Code explanation | Commentary |
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| | and rock characteristics; potential deleterious or contaminating substances. | geophysical logs are considered surplus to the CPR. |
| **Further work** | • The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).<br>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | • Recommendations that should be considered for the future progression of the LCP have been presented and fully justified in Section 6 of the CPR. |

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Database integrity** | • Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.<br>• Data validation procedures used. | • A complete geological database in electronic spreadsheet format has been provided to RHDHV by PDZ for the purpose of geological modelling using Vulcan™ software. This database including coal quality and seam interception data was originally constructed by PDZ using historical data collated from a number of local sources, including Polish Geological and National Archives.<br>• Full details of the data audit and verification procedures employed by RHDHV is provided in Section 4.2 of the CPR. In summary these procedures included a thorough check of spatial and structural data, stratigraphic/geological interpretations and a numerical assessment of coal quality data. Spot checking and cross-comparison between multiple sets of data was undertaken to ensure the most relevant and accurately sourced data was used as the basis for the geological model.<br>• Data audit and validation procedures have been applied equally to both historical and 2013-14 exploration data. |
| **Site Visits** | • Comment on any site visits undertaken by the Competent Person and the outcome of those visits.<br>• If no site visits have been undertaken indicate why this is the case. | • RHDHV geologist Sam Moorhouse visited the exploration site as part of a ground-truthing exercise in August 2014. Mr Moorhouse witnessed the PDZ drilling rigs in operation and was able to observe the overall site set up and facilities. Refer to Section 5.2.2 of the CPR for further details.<br>• Site investigation procedures were discussed with PDZ staff, including drilling, logging, sampling and testing procedures, as well as data transfer, recording and manipulation.<br>• Prior to this study the RHDHV consultant geologist has visited the exploration work being carried out by PDZ, the coal laboratory being used for their recent testwork, and Bogdanka mine, together with several mines and projects in the extension of the Lublin coal basin in adjacent Ukraine. |
| **Geological interpretation** | • Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.<br>• Nature of the data used and of any assumptions made.<br>• The effect, if any, of alternative interpretations on Mineral Resource estimation.<br>• The use of geology in guiding and controlling Mineral Resource estimation.<br>• The factors affecting continuity both of grade and geology. | • The coal resources have been classified as indicated and inferred resources in accordance with the JORC 2014 Guidelines for the Estimation and Classification of Coal Resources.<br>• Allowances have been made for geological uncertainty, 15% for Indicated and 20% for Inferred Resources.<br>• During geological evaluation RHDHV employed standard interpretive techniques to elucidate seam continuity and delimit seam properties. The interpretive techniques included preparation of; basic fence diagrams and cross sections, schematic stratigraphies, seam contour plots, ispoachs and structural features such as faults and key interburden units, such as massive sandstones.<br>• The geological continuity of the Lublin deposit has been considered in the CPR with reference to adjacent established mines, previous Resource estimations, general accuracy and reliability of the data and additional interpretive work undertaken by WAI, PDZ's in-house technical team, local Geological Enterprise 'POLGEOL S.A.' and RHDHV. These considerations are discussed in further detail in Table 5 of the CPR. |
| **Dimensions** | • The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. | • The nature and variation in the geological characteristics of the deposit including but not limited to seam extent, thickness, core recovery and coal quality variation are fully presented and described in Appendix E of the CPR. |
| **Estimation and modelling** | • The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme | • Continued geological interpretation pre- and post- modelling was carried out to assess any regions of specific geological characteristics or uncertainty. Three principal domains have been |

| Criteria | JORC Code explanation | Commentary |
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| **techniques** | grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.<br>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.<br>• The assumptions made regarding recovery of by-products.<br>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).<br>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.<br>• Any assumptions behind modelling of selective mining units.<br>• Any assumptions about correlation between variables.<br>• Description of how the geological interpretation was used to control the resource estimates.<br>• Discussion of basis for using or not using grade cutting or capping.<br>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. | identified that require independent consideration during Resource definition, including (i) Seam inconsistency to the north, (ii) faulted region to the southeast and (iii) faulted region to the southwest. Domain 1 was excluded entirely from the Resource estimation, but represents an upside case for additional Resources following more detailed geological interpretation. Domain 2 was excluded entirely from the Resource estimation. Coal within Domain 3 was still modelled and included in the Resource estimation, however RHDHV invoked a condition of classification downgrading in this region whereby coal could be classified only as Inferred status, not Indicated or Measured. Additional domains within the Resource estimation area regarding seam splitting have also been identified within the Resource area, although these did not affect tonnage and quality estimations or the classification thereof;<br>• A detailed methodology of the geological modelling procedure is provided in Appendix D of the CPR. The Integrated Stratigraphic Modelling (ISM) process is considered the optimised approach for modelling coal deposits within Vulcan™;<br>• ISM comprises five principle phases that convert basic raw data (spatial and numerical) into a 3D geological Horizon Adaptive Rectangular Prism ("HARP") model – equivalent to a conventional block model but with additional flexibility on block shape. The HARP model provides information relating to coal extent, quality and quantity and allows a Resource to be accurately and reliably estimated;<br>• Stratigraphic surfaces were produced by a triangulation modelling method with a 1st order, linear trend;<br>• The base and roof of each block in the model is defined by 5 points. For the purpose of this study each block had a lateral extent of 25m x 25m;<br>• Proportional cell evaluation was used in preference to centroid evaluation. Proportional is considered the more accurate method and also produces slightly lower (~0.3%) tonnages;<br>• The radii function was used to digitise arcs around the remaining, selected boreholes with radii of 600m and 2,000m for Indicated (or equivalent to all remaining coal) and Inferred classifications respectively;<br>• Interpolation of the quality data was performed using the default inverse distance methodology, with a 0 trend order and 9 smoothing passes. A maximum of 10 samples were used to estimate each node on a grid. Default and null sample values such as -99 were excluded from the estimate;<br>• The coal thickness and elevation model was created separately to the coal quality grids, with the two being superimposed together at HARP model stage (Vulcan™ block model), to allow the production of both tonnages and the relevant coal quality grades;<br>• In built validation procedures in Vulcan™ were ran to ensure no duplicates, overlaps or extreme values were included in the modelling;<br>• Advanced geostatistical methods, i.e. variograms, were not considered appropriate for this study. The relevance of geostatistics to estimations in stratiform deposits such as coal is regularly debated. RHDHV's approach to estimation has been based on geological assessment of the lateral continuity of the seams across the deposit and attaining a good understanding of the stratigraphic and structural features at the site. Further, basing the model on advanced geostatistics was not considered appropriate due to the limitations of defining spacings (e.g. no downhole variogram can be produced); RHDHV consider geostatistical models to be more suitable for non-stratiform deposits where geology cannot be as easily understood, correlated, predicted, or extrapolated;<br>• Resource estimates are compared in Section 5.10 of the CPR but were shown to exhibit similar composition and results (tonnages, qualities and confidence levels) to the interim and final Resource models produced as part of the CPR. The similarities corroborate the interpretations and outcomes of the Report. |
| **Moisture** | • Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. | • The coal quality and tonnages were calculated on an air dried basis. |
| **Cut-off parameters** | • The basis of the adopted cut-off grade(s) or quality parameters applied. | • A quality cut-off – with previous studies having shown coal quality within the seams to be high and of good lateral consistency no quality restrictions or cut-offs were considered. It has been assumed that the impact of any variations in coal quality will be |

| Criteria | JORC Code explanation | Commentary |
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| | | mitigated during mine design, scheduling and processing. |
| **Mining factors or assumptions** | • Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. | • At each stage of geological interpretation and modelling, RHDHV has consistently considered the potential of the deposit to be economically extractable.<br>• Previous studies suggest that the deposit has the potential to support an underground longwall mining operation, accessed and supplied via two shafts to depths of approximately 1000m. A previous Scoping Study concludes that the deposit could be exploited utilising plows or shearers depending on seam thickness. In general above seam thickness of 1,5m shearers are used and below 1.5m plows are to be used.<br>• A seam thickness cut-off of 1.0m has been applied manually in Vulcan™ using a thickness contour (string). Isopachs have been evaluated by RHDHV for each seam to identify isolated regions of anomalous coal to be removed, including; (i) small areas within thick coal that thin to slightly less than 1m – it was assumed this coal would still be mined and (ii) Small areas within thin coal where the seam thickens to greater than 1m – it was assumed this coal would not be extracted.<br>• Variables which have not been considered in this Report in regard to mining limitations include; restrictions due to seam dip, coal sterilisation where seams are in close proximity to each other and the extraction of both seams is not possible.<br>• Previous investigations have considered both the use of steel arches and rock bolting, however further work and consideration of detailed geotechnical laboratory analysis should be considered.<br>• A stand-off of from the Jurassic has been assumed to be 100m to account for uncertainties in the exact nature of the basal surface.<br>• It has been assumed that there would be no depth limitations on coal extractability. |
| **Metallurgical factors or assumptions** | • The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. | • Not applicable. |
| **Environmental factors or assumptions** | • Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. | • Modifying Factors, typically applied for the definition of Reserves (including geotechnical, hydrogeological, mining, processing, marketing, environmental and legal) have not been assessed in detail for the CPR but have been evaluated from a Fatal Flaw perspective, e.g. areas of natural conservation have been identified within the sphere of influence of the LCP and the mine plan should be designed to minimise any impact of such areas.<br>• Previous assessments of the deposit suggest that all Run of Mine coal (ROM) will be processed in a CHPP and the waste, of approximately 1.5M tonnes per annum, will be deposited in a suitable emplacement area. This will require an environmental permit but since the site is a previous mine it is not expected to encounter opposition. Transport of coal will be protected from causing environmental issues such as dust. Surface infrastructure has also been considered in a Scoping Study to avoid potentially sensitive areas. |
| **Bulk density** | • Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.<br>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.<br>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. | • The estimation of coal resources has utilised air dried density figures, provided by the laboratory test results. |
| **Classification** | • The basis for the classification of the Mineral Resources into varying confidence categories. | • The Mineral Resource Estimate has been classified and is reported as Indicated and Inferred coal resources based on the guidelines |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).<br>• Whether the result appropriately reflects the Competent Person's view of the deposit. | specified in the 2012 JORC code and the 2014 Edition of Guidelines for the Estimation and Classification of Coal Resources.<br>• RHDHV can confirm that the data quantity, quality, and provenance are of ample reliability to form the basis of a Mineral Resource Statement compliant with the principles of the JORC Code.<br>• The work undertaken by PDZ and subsequently RHDHV is sufficient to permit formal estimation of Resources. The reliability of the data, and the continuity of the geology, is represented in the Resource Classification (allocation of coal to Measured, Indicated and Inferred status), and also through the application of geological losses to these tonnages.<br>• As set out under the requirements of JORC and in order to satisfy the fundamental principles of the reporting code geological interpretation of the Lublin deposit, through the allocation of Points of Observation for the purpose of Resource Estimation, has been carried out on the expertise of the Competent Persons, drawing on both post experience of similar studies and knowledge of the Lublin coal basin seams. |
| **Audits or reviews** | • The results of any audits or reviews of Mineral Resource estimates. | • RHDHV has undertaken a comprehensive data audit and validation process on a proportion of historical and current exploration data and consider it to be sufficiently reliable for the purpose of developing a geological model of the Lublin deposit for resource estimation.<br>• Previous estimates have been undertaken by PolGeol in 1999-01 in accordance with the Polish system for each of the four main license areas. After consideration of the differences in estimation parameters the PolGeol estimate was predicted to be significantly higher, but within the same order of magnitude. This can be observed in the estimate produced which considers three times as many, albeit thinner and less laterally consistent, seams, and employs different criteria for defining what is a potentially workable seam. The Resource estimate carried out by WAI in October 2013 contained tonnages more directly comparable with the RHDHV. After deduction of geological losses in line with RHDHV's methodology the resultant tonnages could be compared and show that a difference of only ~18Mt was observed in the global estimate. Variations between individual seams were shown to be both increases and decreases, demonstrating that differences are caused by "random" factors rather than a particular difference in approach or methodology. |
| **Discussion of relative accuracy/ confidence** | • Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.<br>• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.<br>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. | • As discussed above, previous estimates have been undertaken, both historical and current, for the Lublin deposit and have been compared to the resource estimations made by RHDHV in this report, which has been determined to fall within the same order of magnitude;<br>• Advanced geostatistical methods, i.e. variograms, were not considered appropriate for this study. RHDHV consider geostatistical models to be more suitable for non-stratiform deposits where geology cannot be as easily understood, correlated, predicted, or extrapolated;<br>• Allowances have been made for geological uncertainty, 15% for Indicated and 20% for Inferred Resources. |

## Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
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| Criteria | JORC Code explanation | Commentary | |
|---|---|---|---|
| **Mineral Resource estimate for conversion to Ore Reserves** | • Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. | • The coal resource estimate for the Project was prepared by RHDHV and presented in the report titled "Resource Estimate for the Lublin Coal Project, dated 1 September 2015".<br>• Golder's estimation process was conducted using ABB Group's Minescape™ software (Minescape). RHDHV's geological model and geological confidence polygons provided in Vulcan™ were imported by Golder into Minescape. The associated mine plan layouts provided in AutoCAD™ format were also imported into the Minescape software.<br>• The relative accuracy of, and confidence in, the coal resource tonnage estimates are judged to be in conformance with current industry best-practices; they are of sufficient reliability to support the life-of-mine (LOM) plans and coal reserve estimates. | |
| | • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. | • Coal resources are reported inclusive of the coal reserves. | |
| **Site visits** | • Comment on any site visits undertaken by the Competent Person and the outcome of those visits. | • No site visits were undertaken by the competent person as only exploration drilling has been undertaken to date. However, all key members of the project team have visited the relevant areas associated with the proposed project. | |
| **Study status** | • The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. | • The Study is classified as a Pre-Feasibility Study (PFS) and has been undertaken by a team of industry professionals as listed below: | |
| | | • Golder Associates | • Geotechnical and Roof Support Analysis, Mine Planning and Mineral Reserve Estimation, Hydrogeology, Financial Modelling, Study Management, Risk Assessment and Health & Safety |
| | | • RHDHV | • Geology, Mineral Resource Estimation, Mine Site and CHPP, Mine Surface Infrastructure, Project Implementation Plan and Health & Safety |
| | | • Dargo Associates (UK) | • Coal Handling and Preparation Plant Design and Cost |
| | | • Deilmann Thyssen Schatbau (DTS), Germany and Poland | • Shaft Design, Shaft Sinking, Installation and Cost |
| | | • Bill Tonks Ventilation Services Ltd | • Ventilation |
| | | • Mota Engil Central Europe (MECE), Poland | • Railway Spur Infrastructure |
| | | • WS Atkins, UK, Multiconsult, Poland | • Hydrology, ESIA |
| | | • Sunbar, Poland | • Spatial Planning |
| | | • Energoprojekt, Poland | • HV Power Supply |
| | | • CRU | • Coal Market Studies |
| | | • Zespół Doradców Gospodarczych TOR, Poland | • Transport Logistics Study |
| | | • Deloitte, Poland | • Mining Salary Structure and Costs |
| | • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been | • Coal reserves are based on an independent evaluation of the coal geology and a PFS on the coal deposits contained within the mine lease area.<br>• An economic analysis was completed, including discounted cash flow (DCF). Sensitivities to price, operating costs and capital costs were analysed. | |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | considered. | • Coal reserves are presented on a recoverable run-of-mine basis, were adjusted with reasonable Modifying Factors for coal losses and dilution with out-of-seam material, and were derived from the controlled coal resources considering relevant modifying factors. |
| **Cut-off parameters** | • The basis of the adopted cut-off grade(s) or quality parameters applied. | • No coal quality cut-off parameters were applied.<br>• Due to longwall technology limits, coal seam areas of less than 1m thickness were not included within the mine plan. |
| **Mining factors or assumptions** | • The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). | • Grid files prepared from the geological database were used in the estimation of coal resources, including both seam thickness and elevation models encompassing the 389 and 391 seams.<br>• The grid models were developed using Vulcan software, then imported to Minescape software, which was used to develop LOM projections and production schedule plans. |
| | • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. | • The selection of the longwall mining method is predicated on a requirement for high bulk outputs to justify the capital investment requirements to access very deep seams.<br>• Following detailed analysis on geotechnical properties, based on a borehole sample, the mine layout has been developed using roof-bolted gate roads and leaving supporting pillars between longwall panels. This approach will require further analysis as more information is obtained. Lateral roadways will be driven using steel arches as the main support.<br>• Access to the coal seams will be through two vertical shafts, which will also provide the necessary ventilation quantities.<br>• Standard mining equipment, widely used on a global basis, will be deployed at Lublin. |
| | • The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling. | • Coal quality characteristics are based on laboratory results from samples taken from the coal seam. Geotechnical parameters are based on laboratory results from samples taken from the overlying and underlying strata. These samples were taken from core obtained during exploration drilling.<br>• A detailed geotechnical study was completed by Golder Associates in October 2015, reference Technical Memorandum Validation of pillar size and revised tonnage calculations for the modified mine plan. |
| | • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). | • Pillar design is based on geotechnical characteristics defined during exploration drilling and laboratory testing of a borehole sample of the coal seam, overlying strata, and underlying strata. |
| | • The mining dilution factors used. | • Because of the nature of longwall mining a fixed amount of out-of-seam mining has been applied to all longwall faces. This amounts to 10cm of roof and/or floor extraction. Out of seam material in gate-roads, main laterals, face installation headings and cross measure drifts have been fully accounted for in the RoM estimates. The out of seam dilution, therefore, averages 18% of RoM coal production by weight and ranges from 12% to 29% during full production years. |
| | • The mining recovery factors used. | • Resource recovery used in the PFS is based on pillar design which incorporates geotechnical parameters defined by laboratory testing, mining depth at specific locations, and on practices at adjacent mines. The derived overall mining recovery is estimated at 67% which is typical of longwall mining layouts. The average extraction ratio for all longwall panels and development laterals and gate roads is about 89%, which is again typical of longwall layouts. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | • Any minimum mining widths used. | • Because of the need to accommodate FSVs and conveyor structure a minimum width of gate-entries has been specified at 5.6m. |
| | • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. | • Very small areas along the edges of 27 longwall panels contain inferred resources. These amount to approximately 3Mt out of total available estimated RoM coal of over 176Mt. It is considered impractical to adjust the production schedule to isolate these resources at this stage. The coal tonnes contained within these areas have been treated as reject material in the financial analysis, so their only contribution to the project is cost associated with mining, transportation and washing. None of this material reports to saleable coal and the inclusion does not materially impact the project outcome. |
| | • The infrastructure requirements of the selected mining methods. | • Provisions for supporting infrastructure are included in the capital cost estimates and include the following:<br>- Offices and surface buildings<br>- Bath house facilities<br>- Power substation and connection to local utility<br>- Coal Handling and Preparation Plant and stockpile areas<br>- Shafts and winders for seam access<br>- Conveyor systems and transfer points for primary mined coal haulage to the shaft bottom<br>- Primary and auxiliary mine ventilation<br>- Rail load out facilities<br>- Road, water, waste and communications connections<br>- ROM and waste management systems |
| **Metallurgical factors or assumptions** | • The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. | • Processing will include crushing, heavy media separation, spiral separation, froth flotation and mechanical dewatering. The plant will have the capability for a percentage of the run-of-mine feed to bypass the plant in order to produce a different quality product. |
| | • Whether the metallurgical process is well-tested technology or novel in nature. | • Processes are typical of those used in the coal industry worldwide. |
| | • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. | • Processes have been simulated by numerous float/sink tests on coal cores from exploration drilling using specific gravity of 1.35 to 1.50 based on 38 samples. Results indicate an average 93% float recovery of the coal seam. |
| | • Any assumptions or allowances made for deleterious elements. | • No significant effects on product quality are anticipated from dilution material. Float product quality was used to model final product quality. |
| | • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole | • No bulk sample or pilot scale work has been completed. |
| | • For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet specifications? | • Average heat value and, ash, and sulphur contents of the test results for the 389 and 391 seams indicate suitability for international semi-soft coking coal markets and products for household coal, industrial coal and thermal coal. |
| **Environmental** | • The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. | • Prairie recently completed a number of major work programme items in relation to its ongoing Environmental & Social Impact Assessment ("ESIA") for the LCP. The ESIA, being conducted by Multiconsult (formerly WS Atkins), is an extensive study that includes a wide range of environmental monitoring programs, field surveys, ecosystem sensitivity assessments, socio-economic surveys and a detailed community study and stakeholder engagement plan. The scope of the ESIA has been defined to meet Polish, European Union and international standards, including compliance with the Equator Principles to support the future financing of the Project.<br>• Studies are being conducted in three parts to cover the mine site, infrastructure corridor and CHPP plant and will be integrated into the |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>ESIA.</td></tr>
<tr><td>Infrastructure</td><td><ul><li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li></ul></td><td><ul><li>The Project is located in the Lublin area, Poland; the required project infrastructure is readily available.</li><li>Good quality roads provide access to the site of the planned facilities.</li><li>High-voltage power is available and sufficient to operate the mine, plant and associated facilities.</li><li>Potable water for offices and bathhouse facilities is available from a nearby community.</li><li>Water needed for processing coal and underground use can be readily supplied from local utility company. Recycling reduces water consumption.</li><li>Lublin is an established coal mining region, and workers are readily available from nearby existing communities.</li><li>Social infrastructure such as schools, hospitals, and commercial establishments are available in the surrounding communities.</li><li>Suitable site for surface infrastructure has been identified and land purchase process has been initiated.</li></ul></td></tr>
<tr><td>Costs</td><td><ul><li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li><li>The methodology used to estimate operating costs.</li></ul></td><td><ul><li>Capital and operating cost estimates were prepared by Golder Associates and RDHDV.</li><li>Capital costs are mainly based on vendor quotations. Other costs are based on data bases from the contributing consultants and the client and benchmark prices obtained from global sources.</li><li>Generally, mobile equipment is assumed to be leased, with costs provided by equipment manufacturers.</li><li>Operating costs are derived from first principles and based on Golder and RDHDV information and on the productivity and mine plan components of the PFS.</li></ul>
> Estimated operating costs for steady-state operating years is shown below:
<table>
<tr><th>Average Annual Operating Costs<br><br>(steady-state)</th><th>US$ per tonne</th></tr>
<tr><td>Labour Costs</td><td>4.52</td></tr>
<tr><td>Materials and Consumables</td><td>5.34</td></tr>
<tr><td>Power & Utilities</td><td>3.60</td></tr>
<tr><td>Leased Equipment and Contractors</td><td>5.32</td></tr>
<tr><td>Subtotal Direct Mining Costs</td><td>18.79</td></tr>
<tr><td>CHPP , Waste Management and Logistics</td><td>2.92</td></tr>
<tr><td>Sub-total Direct Production Costs</td><td>21.71</td></tr>
<tr><td>SG&A</td><td>2.25</td></tr>
</table></td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | <table><tr><td>Mine Closure Fund</td><td>0.21</td></tr><tr><td>**Average Annual Operating Costs**</td><td>**24.16**</td></tr><tr><td>Royalties</td><td>0.80</td></tr><tr><td>**Average Annual Operating Costs**</td><td>**24.96**</td></tr></table> |
| | • Allowances Made For The Content Of Deleterious Elements. | • No impact to quality from deleterious elements is anticipated, therefore no allowances have been made. |
| | • The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products. | • Sales price assumptions for the Lublin product are based on a market study by CRU, titled “Lublin Coal Project - Metallurgical Coal Marketing Study”, January 2016. CRU also produced a report titled “Lublin Coal Project – Thermal Coal Outlook”, February 2016.<br>• The coal price used to generate the expected revenue for all fully-washed coal sold from Lublin and which ranges from $55.62 to $105.00 per tonne during the mine’s life.<br>• 100% of annual production is projected to be sold as fully washed coal.<br>• The market distribution of the saleable coal has been considered as shown below:<br><table><tr><th>Saleable Distribution</th><th>wt %</th><th>Ash (adb, %)</th><th>Moisture (ar, %)</th></tr><tr><td>Household Coal Sales</td><td>5.3</td><td>6</td><td>4</td></tr><tr><td>Industrial Coal Sales</td><td>12</td><td>6</td><td>7</td></tr><tr><td>Metallurgical Smalls</td><td>42</td><td>4</td><td>10.5</td></tr><tr><td>Export Thermal Smalls (API)</td><td>22.7</td><td>14</td><td>10</td></tr><tr><td>Domestic Thermal Smalls</td><td>18</td><td>25</td><td>10</td></tr><tr><td>**Total**</td><td>100</td><td>10.40</td><td>9.53</td></tr></table> |
| | • Derivation of transportation charges. | • Rail construction costs are based on the report, ‘Lublin Coal Project – Report on Railway Line Engineering and Construction Costs’, November 2015, Mota-Engil Central Europe S.A. The actual transport costs for the product are derived from a preliminary BOO report from Mota-Engil Central Europe. |
| | • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. | • Processing costs are based on experience at similar operations. Sales prices are based on average delivered quality. |
| | • The allowances made for royalties payable, both Government and private. | • A royalty of PLN3.200/t-saleable coal is based upon the prescribed calculation per the Polish Geological and Mining Law (GML), and |

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>presented by Prairie’s Polish legal counsel.</td></tr>
<tr><td rowspan="2">Revenue factors</td><td><ul><li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li></ul></td><td><ul><li>Average projected product coal quality is consistent with both the site-specific laboratory data available for the Project and adjacent mining operations currently producing in the same seams.</li><li>Average coal sales prices as defined above.</li><li>All prices are based on 2016 constant United States dollars.</li><li>Processing costs based on producing five products as described above.</li><li>Materials handling costs are included in the DCF model.</li></ul></td></tr>
<tr><td><ul><li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li></ul></td><td><ul><li>Coal sales prices as defined above.</li></ul></td></tr>
<tr><td rowspan="3">Market assessment</td><td><ul><li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li></ul></td><td><ul><li>Coal price forecasts, transportation, and market assessment were based on a report by CRU titled “Lublin Coal Project - Metallurgical Coal Marketing Study”, January 2016.</li><li>CRU also produced a report titled “Lublin Coal Project – Thermal Coal Outlook”, February 2016.</li></ul></td></tr>
<tr><td><ul><li>A customer and competitor analysis along with the identification of likely market windows for the product.</li></ul></td><td><ul><li>The Project is well-positioned to take advantage of the ~300Mt of black coal consumed in the European Union plus Turkey each year. Ukraine is another regional market that is showing significantly increased demand for imported hard coal, which could be supplied from the LCP.</li><li>Likely customer and market windows have been analysed by CRU in the coal marketing reports.</li></ul></td></tr>
<tr><td><ul><li>Price and volume forecasts and the basis for these forecasts.</li></ul></td><td><ul><li>Annual production will range from approximately 4.67 to 6.79 million marketable tonnes at full production.</li><li>The Company commissioned independent market analysis for the LCP and the results have been incorporated into this Study. The average selling price assumed in the Study is US$79.6 per tonne FOR (long term real), based on the product mix and price assumptions indicated in the Table below. Price forecasts presented below are on a free on rail basis at the mine gate. Generally, the FOR prices have been linked to long-term price forecasts for standard international coal benchmarks such as the NSW FOB Semi-soft coking coal benchmark and the API2 index. Appropriate coal quality and value in use adjustments have been applied, as well as netbacks to account for freight differentials, including rail freight, sea freight and port handling charges.</li></ul>
<table>
<tr><th>Coal Type</th><th>Average Volume (Steady State) Mtpa</th><th>2024 FOR Price (Real) US$/t</th><th>2036 FOR Price (Real) US$/t</th></tr>
<tr><td>Semi-soft Coking</td><td>2.66</td><td>84.10</td><td>92.00</td></tr>
<tr><td>Household</td><td>0.34</td><td>105.00</td><td>105.00</td></tr>
<tr><td>Industrial</td><td>0.76</td><td>86.24</td><td>85.79</td></tr>
<tr><td>Low Ash API Spec.</td><td>1.44</td><td>55.60</td><td>54.20</td></tr>
<tr><td>High Ash</td><td>1.14</td><td>75.10</td><td>74.60</td></tr>
</table></td></tr>
</table>

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Fines |
| **Economic** | • The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. | • The pre-tax, ungeared NPV of the projected cash flows from the year 2018 is US$1,772 million at an 8% (real) discount rate.<br>• The internal rate-of-return is 29.7%.<br>• Capital is projected to be committed beginning in 2018.<br>• All costs and prices are based on 2016 constant United States dollars.<br>• Total Initial Direct Capital Cost = $554.2 million, including indirect costs = US$631.7 million.<br>• Average run-of-mine (ROM) Coal Production Steady State = 7.97Mtpa.<br>• Total ROM Coal Produced Life-of-Mine = 176.7Mt.<br>• Effective CHPP Yield = 78.8%.<br>• Life of Mine = 24 years.<br>• Average Clean Coal Production Steady State = 6.34Mtpa.<br>• Total Saleable Coal Produced LOM* = 139.14Mt.<br>• Start of Construction = 2018.<br>• Start of Production Ramp-Up = 2023.<br>• Average Sales Price Received (per tonne) = 2024 is $77.46/tonne and 2036 is $80.23/tonne.<br>• Average Cash Operating Costs = $24.96 per tonne.<br>• Average Annual Operating Earnings before Interest, Taxes, Depreciation and Amortization (EBITDA) (steady state) = $348 million.<br>• Confidence - +/- 20%. |
| | • NPV ranges and sensitivity to variations in the significant assumptions and inputs. | • The sensitivity study shows the post-tax ungeared NPV at the 8-percent (real) discount rate when Base Case opex, capex, coal recovery, sales prices and personnel costs are increased and decreased in 10% increments to +/- 20%. |

**Opex**

| | | 0.8 | 0.9 | 1.0 | 1.1 | 1.2 |
|---|---|---|---|---|---|---|
| Discount rate in real terms | 4.0% | 2,953,161 | 2,780,372 | 2,607,558 | 2,434,718 | 2,261,852 |
| | 6.0% | 2,165,901 | 2,031,364 | 1,896,807 | 1,762,231 | 1,627,634 |
| | 8.0% | 1,602,201 | 1,495,458 | **1,388,700** | 1,281,925 | 1,175,135 |
| | 10.0% | 1,191,903 | 1,105,755 | 1,019,594 | 933,421 | 847,235 |
| | 12.0% | 888,660 | 818,058 | 747,447 | 676,824 | 606,192 |

**Capex**

| | | 0.8x | 0.9x | 1.0x | 1.1x | 1.2x |
|---|---|---|---|---|---|---|
| Discount rate in real terms | 4.0% | 2,722,589 | 2,665,073 | 2,607,558 | 2,550,042 | 2,492,527 |
| | 6.0% | 2,005,628 | 1,951,218 | 1,896,807 | 1,842,396 | 1,787,986 |
| | 8.0% | 1,491,881 | 1,440,290 | **1,388,700** | 1,337,109 | 1,285,518 |
| | 10.0% | 1,117,631 | 1,068,613 | 1,019,594 | 970,576 | 921,558 |
| | 12.0% | 840,770 | 794,108 | 747,447 | 700,785 | 654,123 |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|

**Coal recovery**

Discount rate in real terms

| | (4.0%) | (2.0%) | 0.0% | 2.0% | 4.0% |
|---|---|---|---|---|---|
| 4.0% | 2,362,788 | 2,485,173 | 2,607,558 | 2,729,943 | 2,852,328 |
| 6.0% | 1,708,690 | 1,802,749 | 1,896,807 | 1,990,865 | 2,084,924 |
| 8.0% | 1,241,532 | 1,315,116 | **1,388,700** | 1,462,283 | 1,535,867 |
| 10.0% | 902,582 | 961,088 | 1,019,594 | 1,078,101 | 1,136,607 |
| 12.0% | 653,034 | 700,241 | 747,447 | 794,653 | 841,859 |

**Coal price**

Discount rate in real terms

| | 0.8x | 0.9x | 1.0x | 1.1x | 1.2x |
|---|---|---|---|---|---|
| 4.0% | 1,608,716 | 2,108,137 | 2,607,558 | 3,106,979 | 3,606,400 |
| 6.0% | 1,129,174 | 1,512,991 | 1,896,807 | 2,280,624 | 2,664,440 |
| 8.0% | 788,283 | 1,088,491 | **1,388,700** | 1,688,908 | 1,989,116 |
| 10.0% | 542,367 | 780,981 | 1,019,594 | 1,258,208 | 1,496,822 |
| 12.0% | 362,570 | 555,008 | 747,447 | 939,885 | 1,132,323 |

**Personnel cost**

Discount rate in real terms

| | 0.8x | 0.9x | 1.0x | 1.1x | 1.2x |
|---|---|---|---|---|---|
| 4.0% | 2,672,540 | 2,640,049 | 2,607,558 | 2,575,067 | 2,542,576 |
| 6.0% | 1,947,674 | 1,922,241 | 1,896,807 | 1,871,373 | 1,845,940 |
| 8.0% | 1,429,320 | 1,409,010 | **1,388,700** | 1,368,389 | 1,348,079 |
| 10.0% | 1,052,623 | 1,036,109 | 1,019,594 | 1,003,080 | 986,566 |
| 12.0% | 774,739 | 761,093 | 747,447 | 733,800 | 720,154 |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| **Social** | • The status of agreements with key stakeholders and matters leading to social license to operate. | • Stakeholder support has been strong during the project development and permitting processes. The Prairie Mining team in Poland all received accreditation from the Association for Public Participation. Prairie has a formal Stakeholder Engagement Plan and a Grievance Mechanism following World Bank/ IFC best practice guidelines. |
| **Other** | • To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves.<br>• Any identified material naturally occurring risks. | • No material naturally occurring risks have been identified. |
| | • The status of material legal agreements and marketing arrangements. | • Mining and water quality permit applications are currently being prepared. Hydrological baseline water studies are continuing. A Deposit Development Plan for submission to the Polish government for grant of a mining concession has been drafted by Polish mining consulting firm Geo Eco Werk. |
| | • The status of government agreements and approvals critical to the viability of the project, such as mineral tenement status and government and statutory approvals. There must be reasonable | • Up until April 2018, Prairie Mining holds the exclusive right to be granted a Mining Concession over the Lublin Deposit<br>• In order to be granted a Mining Concession Prairie Mining has to have an Environmental Decision Approved, Spatial Planning |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third part on which extraction of the reserve is contingent. | approved over the areas for mine site surface infrastructure and lodge a Deposit Development Plan with the Ministry of Environment<br>• > These processes have been underway for more than 12 months and Prairie is well advanced in making preparations to submit these documents for approval to various Polish government authorities. |
| **Classification** | • The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). | • Indicated resources have been converted to probable reserves.<br>• None of the probable coal reserves have been derived from measured resources.<br>• The results of this PFS define an estimated initial coal reserve estimate of 170Mt (adb).<br>• The results of this PFS define an estimated 139Mt (ar) of probable marketable coal (after the application of all mining factors). |
| **Audits or reviews** | • The results of any audits or reviews of Ore Reserve estimates. | • Coal reserve estimate has been prepared by Golder Associates and reviewed internally. |
| **Discussion of relative accuracy/ confidence** | • Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. | • The PFS is based on a mine plan, project schedule and estimated capital and operating costs with an estimated accuracy of +/-20%.<br>• The accuracy of and confidence in the tonnage estimates provided herein are judged to be in conformance with current industry best practices.<br>• Based on the sensitivity analysis conducted, the Project's NPV is most sensitive to changes in sales value. Because of this, detailed sales and marketing analysis were undertaken to verify the data used in the study. |
| | • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. | • All modifying factors have been applied to design the proposed Lublin Coal Project on a global scale as current local data reflects the global assumptions. |
| | • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. | • Ongoing efforts should be made to prepare and submit remaining permit applications necessary for construction and operation of the Project to the appropriate government and state agencies. |
| | • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. | • There has been no production to date, so no comparison to production or reconciliation data cannot be made directly. However, the Lublin Coal Project is adjacent to the Bogdanka coal mine that has been operating since 1982 and is presently the lowest cost hard coal mine in Europe. It is expected that geological and mining conditions will be similar at the Lublin Coal Project, and the owners study team includes technical personnel who have direct operating experience at the Bogdanka mine. |