

4 March 2015

## MARIOLA PRE-FEASIBILITY STUDY OUTLINES EXCEPTIONAL RETURNS FROM WORLD-CLASS 15-YEAR COAL PROJECT

*Highlights include A\$400M NPV and forecast cumulative free cash-flow of A\$1.13 billion from a capital outlay of just A\$100M*

### HIGHLIGHTS

- Pre-Feasibility Study completed for Mariola Thermal Coal Project.
- PFS demonstrates robust project economics and exceptional returns:
  - *Maiden Coal Reserve estimate* **39.5 Mt Probable**
  - *After-tax Net Present Value (NPV):* **US\$312.7M (A\$400m) @ 10.5% Discount rate (nominal, after tax)**
  - *Initial mine life:* **15 years**
  - *Cumulative Free Cash Flow:* **US\$881M (A\$1.13 billion)**
- Average life-of-mine total cash cost of US\$45/t, delivered to the ROM.
- Planned average production of 2.7Mtpa across current mine life, using highly efficient underground longwall extraction techniques.
- Capital development cost of US\$79M (A\$100M) inclusive of 25% contingency.
- Balamara to move ahead immediately with a Definitive Feasibility Study (DFS).

Balamara Resources (ASX: BMB) ("Balamara" or the "Company") is pleased to announce that it has taken a significant step towards realising its objective of becoming a substantial low-cost European coal producer after receiving the results of a highly successful Pre-Feasibility Study ("PFS") on its recently acquired **Mariola Thermal Coal Project** in southern Poland.

The PFS was prepared by internationally accredited mining & engineering consulting firm Salva Resources ("HDR") has outlined an exceptionally robust, long-life project capable of generating exceptional returns for Balamara shareholders.

Key highlights of the PFS include an after-tax Net Present Value of A\$400 million (US\$312.7 million) and projected cumulative free cash-flow over a 15-year mine life of A\$1.13 billion (US\$881 million).

This is based on the development of an underground mining operation using state-of-the-art longwall extraction techniques, with average production of 2.7Mtpa and an upfront capital development cost of just A\$100 million (US\$79 million), including a 25% contingency. This exceptional result has given Balamara sufficient confidence to move ahead with a Definitive Feasibility Study (DFS) on the Mariola Project, paving the way for development of



its first substantial coal asset in Poland. Balamara has appointed HDR to complete this DFS studies.

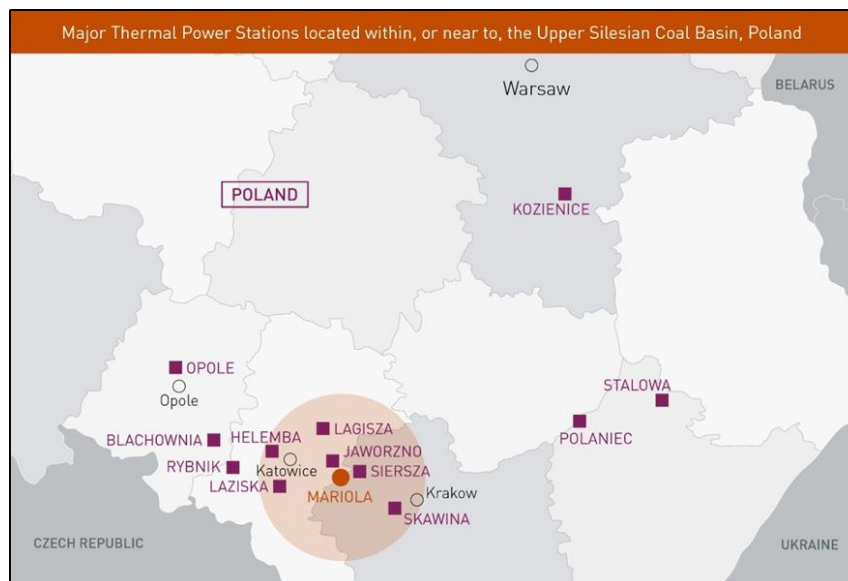
Commenting on the PFS results, Balamara's Managing Director, Mr Mike Ralston, said:

*"This is a tremendous result for our shareholders which clearly demonstrates the world-class nature of the Mariola asset and vindicates our decision to acquire 100 per cent ownership of this Project. The Mariola PFS has exceeded our expectations in almost every respect, demonstrating exceptional returns from what is clearly a Tier-1 asset with the potential to underpin a very robust, long-life underground coal mining operation."*

*"This supports Balamara's aggressive development strategy within the strong Polish coal sector. We are committed to transforming Balamara into a coal producer in the near term and Mariola represents the first phase of this initiative. We then have two other significant coal assets to follow."*

Mr Ralston added *"We have stated all along that we consider Mariola to be a world-class coal project and these results support that assertion, with the key financial highlights of the PFS demonstrating the potential to achieve exceptional returns from a relatively low upfront capital spend for an asset of this size and quality. Mariola clearly has the potential to generate substantial free cash over 15-year plus period, providing a strong foundation for our ambitions to build a world-class European coal company. On the strength of these results, the Balamara Board has agreed to move into the Definitive Feasibility Stage as soon as practically possible."*

The Mariola Project is ideally located close to existing infrastructure and near to 14 operating power stations within a 125kms radius, all located in the Upper Silesian Coal Basin of Poland.



**Figure 1: Location of Mariola Project in southern Poland on the doorstep of 14 operating power stations, including the adjacent Siersza (Tauron) Power Station, located approximately 2km from the Concession**



## Executive Summary of the Mariola Pre-Feasibility Study

The following table represents the key statistics relevant to the Mariola Coal Project, as determined by international mining & engineering consultant HDR:

Mariola Operating & Financial Figures	
<b>Mining Method</b>	Underground
<b>Life of Mine</b>	15 years
<b>Maiden Probable Coal Reserve Estimate</b>	39.5 Mt
<b>Coal Resources within Optimised Mine Plan</b>	40.9 Mt
<b>Annual Saleable Production (LOM Average)</b>	2.7 Mtpa
<b>Operating Cost (LOM Average, including rehabilitation)</b>	US\$45/t
<b>Project Capital Cost (Including contingency but excluding contractor/leased items &amp; sustaining)</b>	US\$79 M
<b>NPV 10.5% Discount (nominal, post tax)</b>	US\$313 M
<b>Post-tax IRR (nominal)</b>	214%
<b>Post-tax LOM Free Cash Flow (nominal)</b>	US\$881 M

Mariola Underground Mining Parameters	
<b>Mining Method</b>	Underground Longwall
<b>Mine Life</b>	15 years
<b>ROM Production (Average LOM)</b>	2.7mtpa

Mariola Costs & Revenue	
<b>Operating Cost</b>	US\$45/t
<b>Coal Sale Price</b>	US\$68/t
<b>Operating Margin (Average LOM)</b>	US\$23/t

### Cautionary Statement

The PFS Study referred to in this announcement is preliminary in nature as its conclusions are drawn on Measured Resource (0%), Indicated Resource (95.1%) and Inferred Resource (4.9%) classification, according to JORC 2012 guidelines.

There is a low level of geological confidence associated with inferred coal resources and there is no certainty that further exploration work will result in the determination of indicated coal resources or that the production target itself will be realised. The stated production target is based on the Company's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.



Further, the Company cautions that there is no certainty that the forecast financial information derived from production targets will be realised. All material assumptions underpinning the production targets and forecast financial information derived from the production targets are set out in this announcement.

The estimated coal resources underpinning this Study production targets have been prepared by competent persons in accordance with the current JORC Code 2012 Edition and the current ASX Listing Rules.

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## EXTRACTS FROM MARIOLA PRE-FEASIBILITY STUDY

The following information has been extracted from the PFS report:

### Location & Tenement Details

The Mariola thermal coal project is located in the Southern Poland within the Upper Silesian Coal Basin. The Project is located on latitude 50°13'01.58 N and longitude 19°23'56.80" E. The 1331 ha site is situated approximately 24 km east of Katowice and 40 km west of Krakow. Balamara Resources has acquired a 100% interest in the Mariola Concession through ownership of local Polish subsidiary Carbon Investment Sp. Z.o.o ("Carbon Investment").

The Mariola Concession is very well positioned from an infrastructure point of view as it is adjacent to a thermal coal fired power station 'Elektrownia Siersza' operated by the Polish energy giant Tauron Energy, as well as being readily accessible via road and rail. The nearest international airport (Krakow) is 38 km away and the nearest port is around 560km to the north. The nearest settlement is the small village of Trzebinia, located on the eastern edge of the concession.

There are numerous accessible tracks across the concession area itself, predominantly giving access to the afforested areas and the sand quarry, operated by Szczakowa. A west to east railway occurs in the north of the concession area running through Bukowno, which is a rail hub with rail connections to Olkusz, Kielce, Jaworzno and Katowice. Bukowno is also located along the Broad Gauge Metallurgy Line. The National Road Nr. 94 runs five kilometres north of town of Bukowno.

Table 1: Mariola Concession Details

Concession No.	Concession Type	Area	Status	Grant Date	Expiry Date	Owner
23/2013/p Siersza 2 (Mariola)	Exploration	13.31km <sup>2</sup>	Granted	15/10/13	15/10/15	Carbon Investment Sp. Z.o.o.

Balamara advises that the title over Mariola concession is in good standing and that the company has complied with material, applicable provisions of the Polish Geological and Mining Law of 2011 and its implementing regulations, environmental law, forestry law and other relevant laws (as applicable).



## Geology and Geological Interpretation

The Upper Silesian Coal Basin ("USCB") represents a foreland basin which resulted from the Variscan orogeny. USCB sediments Carboniferous in age, ranging from Westphalian D (youngest) to Namurian A (oldest) (Table 2). Sediments within the USCB reach up to 8,500m thick. The Mariola Concession is found on the north-eastern limb of the USCB, approximately 24km east of Katowice, which is centrally located within the basin. Younger Quaternary and Triassic age rocks overly the coal bearing Carboniferous sediments within the concession, separated by an unconformity at the top of the Carboniferous. Younger overburden rocks range in thickness across the concession from under 5m up to around 70m thick. Igneous intrusions of the Permian, Triassic and Miocene age have intruded the basin and have influenced the coal rank in places. No occurrences of igneous rocks have been identified within the Mariola Concession area.

**Table 2: Stratigraphy of the Upper Silesian Coal Basin**

Quaternary	Holocene				
	Pleistocene				
Triassic	Keuper				
	Muschelkalk				
	Buntsandstein				
Carboniferous	Westphalian D	Upper Silesian Coal Basin	KRAKOW SANDSTONE SERIES	libiąskie strata – not occurring łaziskie strata	
	Westphalian C		MUDSTONE SERIES	orzeskie strata Upper załęskie strata Lower załęskie strata	
	Westphalian B		UPPER SILESIAN SANDSTONE SERIES	rudzkie strata	
	Westphalian A			siodłowe strata - not occurring	
	Namurian C				
	Namurian B				
	Namurian A				
			PARALIC SERIES	porębskie strata	
				grodzieckie strata	jakłowieckie strata
				florowskie strata	gruszowskie strata
				sarnowskie strata	pietrzykowskie strata

The position of faults within the concession have largely been interpreted by previous works from drilling, correlation of seams intersected and determining associated displacements between holes, using palynology. The mapping of faults in adjacent underground workings and projection of the faults into the Mariola Concession area has also been done during structural modelling of the deposit conducted by the Polish Government and updated by



Carbon Investments in 2013. The largest of the faults identified within Mariola are outlined below and shown in Figure 2.

- Boundary fault - intersects the entire central to western part of the mining area from north to south and downthrows to the west. The fault displacement varies from 160m in the northern part of the area to between 27m - 50m in the southern part;
- Siersza II fault - traverses the southern region of the Mariola concession in an east to west direction. The fault downthrows to the north with a variable magnitude ranging from 10m at the eastern end to 120m in the west; and
- Uskok Balinski – confined to the south west of Mariola and orientated northwest to southeast. The fault downthrows to the north with a 120m displacement.

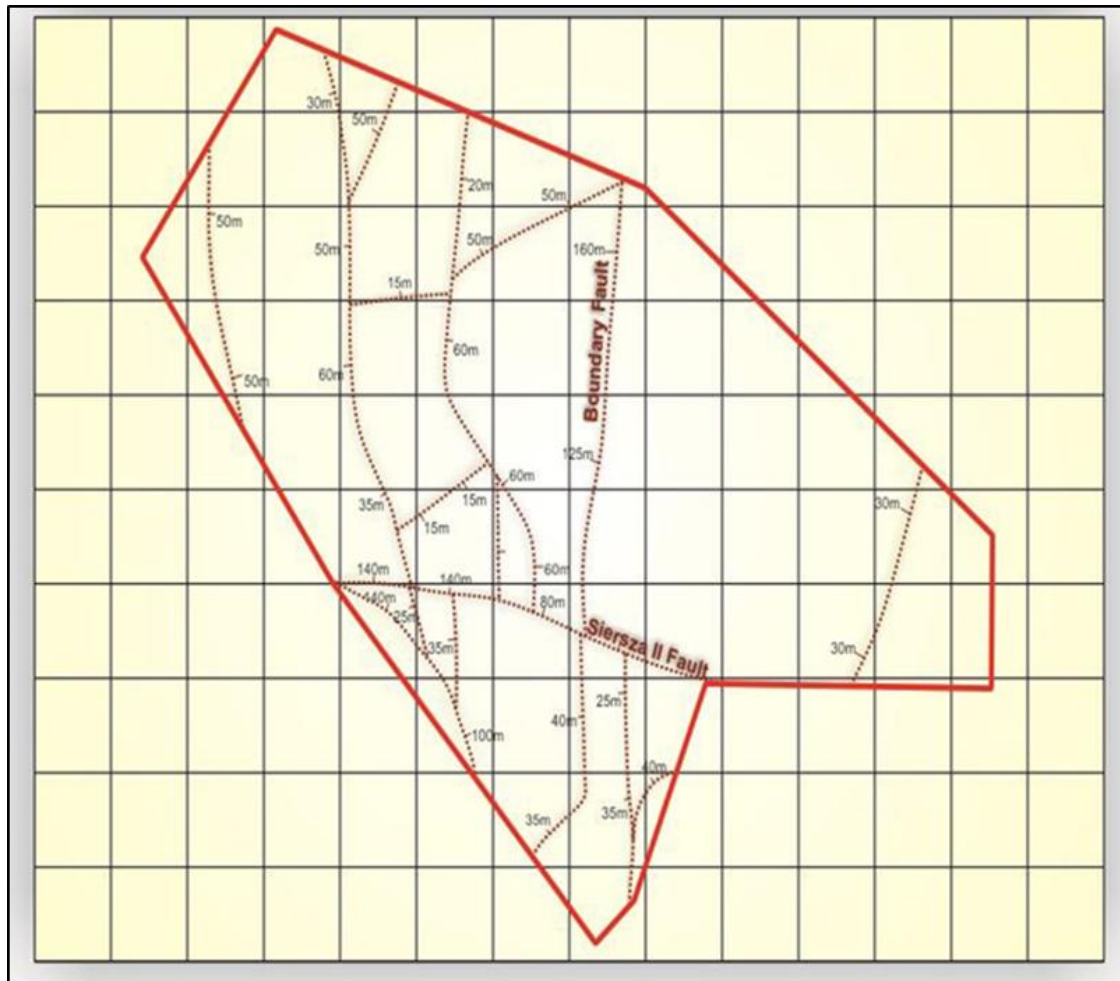


Figure 2: Major faults in the vicinity of the Coal Deposit





## Coal Resources

Coal Resources for the Mariola Project have been estimated in accordance with the guidelines contained within the Australian Guidelines for the Estimation and Classification of Coal Resources (2014 Edition) and are reported in accordance with the JORC (2012 Edition) Guidelines.

Data utilised by HDR for the purpose of resource estimation included but was not limited to:

- Drill hole collar information inclusive of total depth drilled per hole
- Drill hole lithological information inclusive of seam picks
- Coal sample table and associated raw coal qualities per sample
- Scanned copies of original drill logs, inclusive of down hole geophysical information and coal quality for holes where testing and/or down hole geophysical logging was performed
- A scanned copy of the hard copy print out of the coal quality database
- Vulcan geological model grids in ASCII format for all modelled seams
- Fault surfaces used during geological model construction in Vulcan, in DXF format
- Wireframes in DXF format of the topographic surface and the top of the Carboniferous Surface
- The concession outline in DXF format.

The resource model comprises of 20 seams to a maximum depth of 550m below the surface. Upon review of the data quality and seam thicknesses were reduced to 11 key seams for resource classification purposes.

These seams are intersected by a set of generally north-south and east-west trending regional faults with throws ranging between 10m to 160m. These faults have been identified from adjacent mine workings and projected into the Mariola concession. This has resulted in a number of horst and graben structures with relatively gently dipping seams.

The Coal Resource is based on historical drilling comprising of 178 drill holes, of which 150 drill holes intersected coal and have a total length of 26,275m. A recently completed hole to a total depth of 380m intersected 8 of the 11 seams reported in the resource estimation.

Coal quality testing took place on all seams greater than 0.4m in thickness, and included partings of up to 5cm in thickness. Whole core was delivered to the laboratory in Katowice for splitting, weighing and testing. Sampling was extensive with standard tests including but not limited to:





- Ash content
- Calorific value
- Coal type
- Sulphur content

Finite Element Analysis (FEM) interpolator was used for surface elevation, thickness and trend. An Inverse Distance Squared interpolator was used for coal quality throughout. A grid size of 25m for the topographic model, 25m for the structural model and 100m for the coal quality model was employed.

**Table 3: Mariola Coal Project Resource Estimation**

Resource Classification	Tonnage (Mt)	Ash (adb) %	Moisture (adb)%	GCV (adb) Kcal/kg	Volatile Matter (adb)%	Relative Density (adb)	Total Sulphur (adb) %
<b>Indicated</b>	85.6	15.5	11.5	6,118	31.7	1.41	1.59
<b>Inferred</b>	35	16	12	5,975	31	1.4	1.5
<b>Total</b>	<b>120.6</b>						

**No coal resources were reported above a depth of 80m below surface.** A minimum seam thickness limit of 0.6m has been used to define Resources as this is considered to be the minimum mineable thickness for applicable mining methods.

Resource Classification is based on an assessment of the variability of critical values (raw ash and seam thickness) through statistical analysis, geostatistical analysis and by an assessment of the degree of geological complexity (general seam dip and structure).

### Reserves

The Coal Reserve Estimation utilises the Coal Resource Estimation for Mariola (As announced on 5 December 2014 by Balamara) and the relevant economic parameters to determine the presence of underground reserves within the Indicated Resources. An economic model was devised for the mining operation at Mariola to ascertain its economic viability. XPAC software was used to schedule and estimate the quality of Coal Resources within the Optimised Mine Plan.

The life of mine (LOM) plan was completed based on the final underground design. This was conducted to ensure that the proposed mining method, production rate and scheduling was both practical and achievable. The mine schedule targeted production of 1.4Mt in year 1, 3.4Mt in year 2 followed by a steady production state of 3Mtpa for the life of mine.



Coal price estimates were based on Balamara's view on the current outlook for global thermal coal fundamentals including the demand and supply outlook for the sector. Capital and operating costs were derived by HDR for the Mariola Project based on a combination of existing contracts, budget quotes and HDR's in-house knowledge of Polish operations. These inputs are considered reasonable and suitable for the purposes of this study.

Modifying factors were considered in estimating of Coal Reserves from Resources. These modifying factors include: overall seam characteristics, major structure features like faults, roof and floor conditions, available information of geotechnical parameters, degree of gassiness of mine, surface constraints, processing factors, and costs and revenue.

The Coal Reserves were estimated by applying the appropriate modifying factors and exclusion criteria to Coal Resources. Coal Reserves were estimated applying appropriate density adjustment and mining loss and dilution parameters.

Coal Reserves have been reported in the Probable Category only due to the absence of Measured Resources. The final Coal Reserve for the Mariola Project is 39.5Mt within the Probable Category. No beneficiation of the coal product is planned other than crushing to a nominal top size. Run of Mine (ROM) reserves for the Mariola Project along with the estimated quality are presented below:

**Table 4: Mariola Coal Reserves**

Seam	Reserve (Mt)	RD (Adb)	VM (Adb)	IM (Adb)	Ash (Adb)	GCV (Adb)		TS (Adb)
	Probable	t/m <sup>3</sup>	%	%	%	MJ/kg	Kcal/kg	%
<b>S208</b>	7.3	1.47	32.78	9.88	22.78	23.16	5,532	1.90
<b>S209</b>	4.5	1.55	31.67	10.81	27.54	21.89	5,229	2.17
<b>S210</b>	5	1.60	25.41	11.65	32.93	19.21	4,588	1.20
<b>S214</b>	15.5	1.41	28.77	12.66	17.79	24.53	5,859	1.21
<b>S301</b>	7.2	1.46	28.59	13.22	20.16	23.67	5,653	1.62
<b>Total</b>	<b>39.5</b>	<b>1.47</b>	<b>29.39</b>	<b>11.91</b>	<b>22.16</b>	<b>23.15</b>	<b>5,530</b>	<b>1.52</b>

*Notes:*

*Adb: air dried basis*

*GCV: Gross calorific value*

*MJ/kg: Mega joules per kilogram*

*Kcal/kg: Kilocalories per kilogram*

The coal will be sold as a ROM product, therefore marketable Reserves will equal ROM Coal Reserves.



## Optimised Mine Plan

The final mine plan for the Mariola Mine was determined by the best fit within the limits posed by the concession boundary, major faulting, previous mine activity and surface infrastructure.

The mining schedule was developed using XPAC software. The Coal Resources within Optimised Mine Plan were utilised to prepare the mine schedule. The mining schedule includes the proportion of Coal Resources that are classified as Inferred Resources. The following table stipulates the current Inferred Resources utilised in the life of mine schedule and percentage of Inferred Resources included in the Optimised Mine Plan:

**Table 5: Resources within Optimised Mine Plan**

Scheduled Tonnes within Mine Plan (Mt)	Indicated Resources within the Mine Plan		Inferred Resources within the Mine Plan	
	%	Mt	(%)	Mt
<b>41</b>	95.1%	39	4.9%	2

The mine plan was based on using a longwall system with a cutting range of 1.3m to 4m. The mine schedule has been built on the assumption that this will be an operation utilising contract miners for development and the longwall package will be taken on lease. This will provide the ability to bring on and send away crews and equipment throughout the operating life. All coal development is on the floor of the seam with stone drive driven at a 1 in 5 grade. This is consistent with decline development and is within the capability of the monorail transport system preferred. Figure 3 shows the mine plan for first major Seam 208.

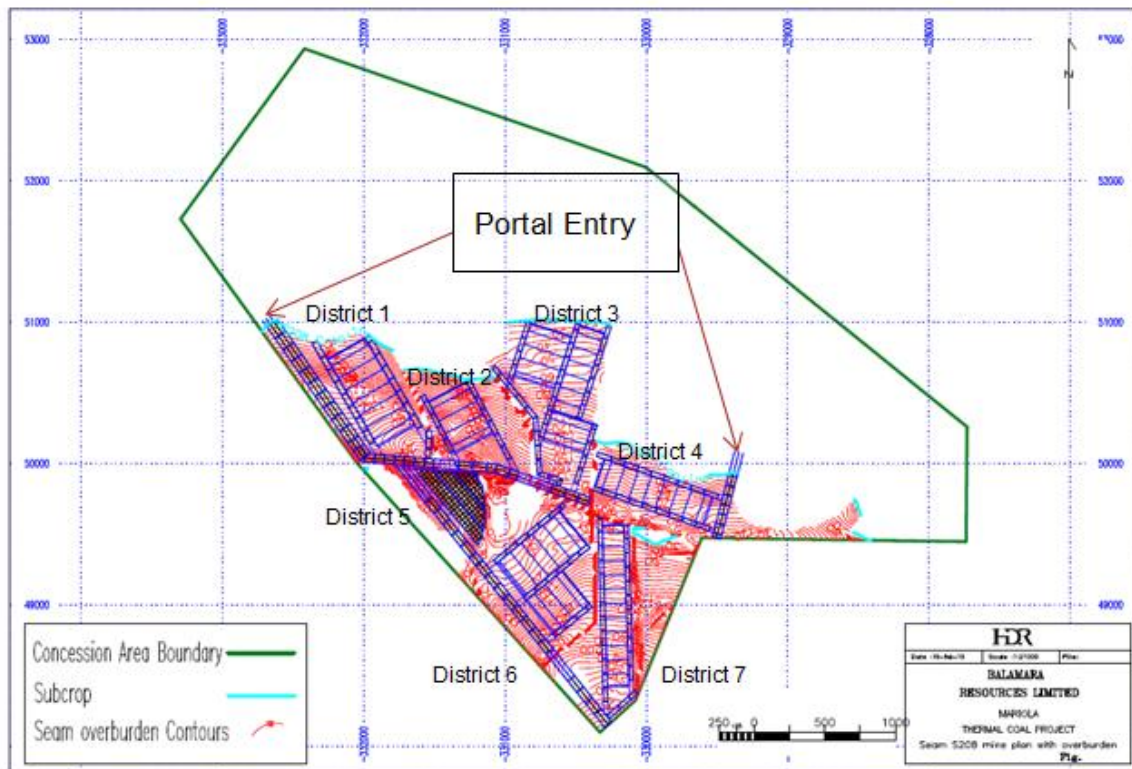


Figure 3: Seam S208 Mine Plan with Subcrop and Portal Entry

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The estimated coal resources underpinning this Study production targets have been prepared by competent persons in accordance with the current JORC Code 2012 Edition and the current ASX Listing Rules.



## Currency and Exchange Rates

The project capital costs are expressed in United States Dollars (US\$) with the following provisions;

- Costs are based on current market conditions as in Q1 2015
- Costs submitted in other currencies have been converted to US\$. Foreign currency exchange rates applied to the capital cost estimate relative to the US\$ are set out as US\$1.0=PLN 3.70
- No provision has been made for the variations in the currency exchange rates

## Capital Costs

The outcomes of the Pre-Feasibility Study indicate that Mariola can be developed for a capital cost of US\$79M, which includes a provision of a 25% contingency on all capital equipment's and totals US\$8.5M.

Balamara has received undertakings from underground contractors to provide equipment for mine development (including continuous miners, shuttle cars, etc.). The entire longwall package (including shears, shields, gate end conveyors and trunk conveyor) will be leased and is included within the operating cost within this study.

HDR has factored 5% of the invested capital apart as sustaining capital per annum for asset maintenance and replacement over the life of mine. Information utilised for these estimates has been provided based on quotes from Polish Longwall Mining equipment manufacturers and operators, local contractors, industry benchmarks, its internal database, Info-mine coal cost guide (adjusted to reflect local conditions) and other internal studies on the Mariola Project and previous estimates.



Table 5: Capital Cost Estimates

Particulars	Cost (US\$ M)
Permitting Costs	1.0
Land usage and site development costs	2.0
Pre-Production mine development & ventilation	36.5
Underground mine electrical systems	8.0
Surface infrastructure	11.5
Auxiliary equipment & other capital	4.0
Raw coal handling systems	2.5
Infill drilling & project studies	5.0
Contingency	8.5
<b>Total Project Capital</b>	<b>79.0</b>
Leased longwall package including contingency (within operating cost)	49.4

### Operating Costs

Overall operating costs are a combination of mining costs, product handling costs, product transportation and general & administrative (G&A) costs. Cost estimates have been calculated based on existing contracts, earlier in house studies conducted by Balamara, budgetary questions, HDR project database and present cost rates for activities conducted by Balamara. Where specific data does not exist, cost allowances based on consumption and operating requirements from similar properties for which reliable data exists. Operating costs have been estimated and presented with a contingency allowance of 5%. All costs are presented in real terms (Q1 2015, US dollars). Items included in operating cost estimates include:

- Ongoing in seam development cost
- Labour cost; cost per tonne based on the manpower and wage rates
- Consumables; costs associated with consumables associated with the underground mining operation
- Power and utilities cost



- Coal handling and load out; cost per tonne for loading coal at mine site into train wagons
- Coal transport; cost per tonne associated with transport of coal to the end user
- Lease rental for longwall mining package; cost per tonne towards payment of lease or hire of equipment
- Royalty for funding National Fund for Environmental Protection and Water Management; hard coal attracts basic rate of 2% of revenue
- Corporate overheads.

**Table 6: Operating Cost Estimate**

<b>Cost Item</b>	<b>US\$/t ROM Coal</b>
<b>Mine development cost</b>	\$10.26
<b>Labour</b>	\$7.31
<b>Consumables</b>	\$10.20
<b>Power and other utilities</b>	\$3.35
<b>Coal handling and load out</b>	\$1.55
<b>Coal transport</b>	\$3.50
<b>Corporate overheads</b>	\$1.50
<b>Lease of longwall package</b>	\$4.00
<b>Contingency</b>	\$2.08
<b>Operating cost excluding royalty</b>	<b>\$43.76</b>
<b>Royalty for National Environment Fund</b>	\$1.37
<b>Operating cost including royalty</b>	<b>\$45.12</b>

### **Infrastructure & Logistics**

The Mariola project is located adjacent to a thermal coal fired power station 'Elektrownia Siersza' operated by TAURON. The site is accessible by both road and rail. There are numerous accessible tracks across the concession area itself, predominantly giving access to the forested areas and the remnant sand quarry.

A west to east rail track traverses the north of the concession area connecting to all major infrastructure projects.

Key site based considerations to infrastructure included environmental (specifically impact on air/water) monitoring, surface subsidence monitoring, mine services including water and power, waste management, communications, administration/personnel amenities and coal handling facilities.

Offsite infrastructure to be utilised include end users (power plants), train loading facilities and existing rail networks.





Figure 4: Existing Rail Network near the Mariola Project

Balamara is proposing to operate a train load out on a 24/7 basis to ensure the flexibility to operate within the train paths allocated to the haulage contractors.

### Coal Processing

The ROM Coal quality is acceptable to the local power plants and therefore the development scenario factors in a direct sale of ROM coal.

### Raw Coal Quality

The ROM (Run of Mine) produced from Mariola project has relatively moderate sulphur and lower ash content than other Polish mines. The average raw quality of the Coal Resource is considered suitable to allow for the marketing of the coal as a thermal coal in its raw form. The power plants located in the vicinity of the mine site can directly accept this type of coal.

Table 7: Mariola Raw Coal Quality

Resource Classification	Tonnage (Mt)	Ash (adb) %	Moisture (adb)%	GCV (adb) Kcal/kg	Volatile Matter (adb)%	Relative Density (adb)	Total Sulphur (adb) %
<b>Indicated</b>	85.6	15.5	11.5	6,118	31.7	1.41	1.59
<b>Inferred</b>	35	16	12	5,975	31	1.4	1.5
<b>Total</b>	120.6						

Due to the partings present between coal seams, dilution is likely to happen during the mining process. The dilution has been substantiated by the detailed life of mine plan; a total weighted average dilution has been estimated at 8% of total production of ROM coal from the mine.

### Coal Price Forecast

The predicted gross calorific value ("GCV") over the life of mine is almost identical to the average GCV of the coal types included in the Polish Steaming Coal Market Index ("PSCMI-1



Index"). Therefore in HDR's opinion, the price of Mariola project unwashed coal should be similar to that of the PSCMI-1 Index.

To determine the long term price outlook for the Mariola Coal, HDR has first determined the historical price differential from Newcastle Coal Index and the PSCMI-1 Index. HDR has adopted an average discount of 9.3% for PSCMI-1 as a broad guide based on the average differential for the past four years and utilised it to determine the long term price forecast for the PSCMI-1 Index.

**HDR has taken a conservative approach** and has taken this long term discount despite the fact that at present, PSCMI-1 is trading at a slight premium to the Newcastle Coal Index rather than a discount.

The price of the Mariola ROM Coal is expected to be identical to that of Polish Coal Index PSCMI-1 because of its almost identical calorific value.

**Table 8: Coal Price Forecast (Real Terms)**

	2015F	2016F	2017F	2018F	2019F	Long Term
<b>Price Forecast Newcastle, US \$/t</b>	67.8	71.4	73.2	74.7	76.8	75.4
<b>Price Forecast PSMCI-1 US \$/t</b>	61.5	64.8	66.4	67.8	69.7	68.4
<b>Price Forecast ROM, US \$/t</b>	<b>61.5</b>	<b>64.8</b>	<b>66.4</b>	<b>67.8</b>	<b>69.7</b>	<b>68.4</b>

### Coal Marketing

Balamara has provided substantial information with respect to end user levels of demand in the vicinity of the project area. Three power plans are located within a 15km radius of the project. The closest of which, Siersza Power Plant is located 2km to the west of the Project and previously purchased coal from a historical producer located adjacent to Mariola. Siersza currently consumes 2.5Mtpa of coal. Within 125Km of Mariola a total of 14 coal fired power plants consume annually 43.9Mt of coal.

Mariola has considerable logistical advantages due to having rail connections to cross border networks as well as major Baltic ports. At present coal is planned to be consumed domestically within Poland.



## Economic Modelling & Financial Analysis

Mariola Project is considered to be at an advanced stage of development with established resources and reserves in accordance with JORC (2012 Edition) Guidelines. To ascertain economic viability of the project, HDR has utilised the discounted Cash Flow (DCF) method. Net Present Value (NPV) has been derived from analysis of cash flows calculated for the project over the life of mine. The following considerations have been made with respect to the development of the model:

- The model is developed in nominal terms. All costs and prices were considered in real terms then converted to nominal terms
- The model assumes continuous cash in and outflows, which are reflected in mid point discounting during a period
- Cash flows were developed on a stand alone project basis
- Sunk costs (including acquisition costs) are excluded
- WACC was calculated as 10.3%. HDR has opted to discount all future cashflows at a discount rate of 10.5%

Table 9: Key Input Parameters

Key Parameter	Description	Unit	Value
<b>Peak Production Capacity</b>	Maximum annual production	Mtpa	3.76
<b>Life of Mine Considered</b>	Years of coal production	Years	15
<b>Discount Rate</b>	Discount rate (nominal terms)	%	10.5
<b>Corporate Tax Rate</b>	Polish rates for Corporate Tax	%	19
<b>Project Coal Price</b>	Average coal price for Mariola Coal	\$/t	68.36
<b>Capital - Project</b>	Total project capital expenditure	\$M	79.05
<b>Capital - Sustaining</b>	Total ongoing replacement capital	\$M	23.09
<b>ROM Coal Mined</b>	ROM Coal mined over life of mine	Mt	40.89
<b>Coal Sold</b>	Coal product sold over life of mine	Mt	40.89
<b>Unit Operating Costs</b>	Average operating cost (real terms)	\$/t	45.12



## Sensitivity Analysis

On the basis of the sensitivity analysis conducted the project is most sensitive to coal sales prices followed by changes in the operating costs.

Table 10: Impact of Project Sensitivities on NPV (US \$M)

Key Input Variables	Change in Input Parameter (%)				
	80%	90%	100%	110%	120%
Coal Price	76.3	194.5	312.7	430.9	549.0
Operating Cost	474.5	393.6	312.7	231.8	150.8
Project Capital	325.8	319.2	312.7	306.1	299.6
Discount Rate	378.1	343.5	312.7	285.1	260.4

## Funding Strategy

Once the Definitive Feasibility Study is nearing completion Balamara will seek a combination of debt and/or equity funding to cover both capital and operating costs necessary to bring Mariola into production. The substantial positive Project economics together with the short payback period suggest this Project may be an attractive proposition to investors and management will consider all options available within the market, including both financial and strategic parties.

Balamara's management has raised substantial capital for other resource projects in the past and has the experience required to deliver this funding for Mariola in the medium term.

## Environment, Staffing, Training & Community

Balamara advises that there are no protected areas such as national parks, nature reserves or national monument sites within the proposed mine site area. The mining activity is not likely to have any adverse impact towards the local community.

Mariola will employ approximately 700 trained staff upon reaching steady state production. Balamara is seeking to employ a high contingent of local Polish employees. A small percentage of expatriate employees will be utilised to provide critical core business positions. With increasing local experience and skills it is envisaged that the expatriate involvement in the operation will diminish.



Training and development is essential towards the support and success of the project and Balamara is dedicated to providing safety and technical training to its employees and contractors. The influx of available jobs and supporting industries in the region is recognised as having the potential of delivering significant socio-economic benefit to the local community.

### **Permitting**

Balamara will be undergoing all necessary permitting as required in Poland to bring Mariola into production over the next 12-18 months. This includes necessary environmental approvals which are critical in order to submit an application for a mining license thereafter.

This permitting process has been underway in Poland for over one year already with various studies taking place as required to facilitate applications. Balamara is seeking all permits and licenses as required to bring Mariola into production before the end of 2016 and at present there is no reason to believe that these will not be granted, provided Balamara delivers on all requirements and adheres to the legal process within Poland.

### **Competent Persons Statement**

The information within this announcement relating to coal resources has been derived from the announcement released to the ASX on 5 December 2014. Balamara confirms that it is not aware of any new information or data that materially affects the information included in the prior announcement and, in the case of coal resources that all material assumptions and technical parameters underpinning the estimates in the prior announcement continue to apply and have not materially changed.

The information in this announcement that relates to Coal Resources has been prepared by Mr. Craig Williams (Principal Consultant, Geology) who is a subject specialist and a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting Exploration Results, Coal Resources and Coal Reserves'. The information in this announcement that relates to Coal Reserves have been prepared by Mr. Guy Boaz (Principal Consultant, Mining) who is a subject specialist and a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting Exploration Results, Coal Resources and Coal Reserves'. Mr. Williams and Mr. Boaz consents to the inclusion of such information in this Report in the form and context in which it appears.



## Forward Looking Statements

This release includes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as “may”, “will”, “expect”, “intend”, “plan”, “estimate”, “anticipate”, “continue” and “guidance”, or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs. Forward looking statements in this release include, but are not limited to, the capital and operating cost estimates and economic analysis from the Pre-Feasibility Study.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company’s actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grade of resources or reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relation issues and litigation.

Forward looking statements are based on the company and its management’s good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the company’s business and operations in the future. The company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the company’s business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the company or management beyond the company’s control.

Although the company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events that are beyond the reasonable control of the company. Accordingly readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward looking statements or to advise of any change in events, conditions or circumstances on which any statement is based.



## ASX Additional Information - Material Assumptions

<b>Project:</b>	<b>Mariola</b>
<b>PFS Capital &amp; Operating Cost Accuracy Variance</b>	±30%
<b>Mining Method</b>	Underground- Longwall
<b>Processing Method</b>	ROM - Unwashed Coal
<b>Long Term Index Price</b>	US \$68.4/t
<b>Long Term Product Pricing</b>	US \$68.4/t
<b>Index Price - Year 1 (PSMCI-1)</b>	US \$66.4/t
<b>Index Price - Year 2</b>	US \$67.8/t
<b>Index Price - Year 3</b>	US \$69.7/t
<b>Index Price - Year 4</b>	US \$68.4/t
<b>Product Price - Year 1</b>	US \$66.4/t
<b>Product Price - Year 2</b>	US \$67.8/t
<b>Product Price - Year 3</b>	US \$69.7/t
<b>Product Price - Year 4</b>	US \$68.4/t
<b>Product Price- steady state</b>	US \$68.4/t
<b>Average LOM Operating Costs (ROM)</b>	US \$45.12/t
<b>Run of Mine (ROM)</b>	40.9 Mt
<b>LOM Production</b>	40.9 Mt
<b>Production - Year 1</b>	1.4 Mtpa
<b>Production - Year 2</b>	3.4 Mtpa
<b>Production - Year 3</b>	3.3 Mtpa
<b>Production - Average LOM</b>	2.7 Mtpa
<b>Life of Mine</b>	15 Years
<b>Initial Capital Expenditure (Year 1 Production)</b>	US \$44.7 M
<b>Total Capital Expenditure</b>	US \$ 79.0 M
<b>Leased Capital Items</b>	US \$49.4 M
<b>Sustaining Capital Expenditure (LOM)</b>	US \$23.1 M
<b>Closure Allowance</b>	US \$1.37/t
<b>Construction Period</b>	1 year

### SUMMARY OF COAL RESERVE ESTIMATE AND REPORTING CRITERIA

This ASX announcement has been prepared in compliance with the JORC (2012 Edition) and the ASX Listing Rules. Balamara has included the Table 1 Checklist of Assessment and Reporting Criteria for Mariola as prescribed by the JORC (2012 Edition) Guidelines and ASX Listing Rules.

The following is a summary of the pertinent information used in the calculation of the Coal Reserve, with full details provided in Table 1.





### **Material Assumptions**

The material assumptions within the Mariola PFS which support the Coal Reserve Estimation, Production Targets, and the forecast financial information derived from the Production Targets, are disclosed in the body of this announcement and outlined in the ASX Additional Information - Material Assumptions section.

The mining costs used by HDR in the calculation of the Coal Reserve Estimation are based on the physicals derived from the LOM schedule developed by HDR. Mining costs were obtained from mining contractors in Poland and HDR's in-house experience in operating in Poland.

### **Criteria Used for the Classification of Coal Reserves**

Coal Reserves were estimated by applying appropriate modifying factors and exclusion criteria to the Coal Resources. Coal Reserves were estimated by applying appropriate density adjustment and mining loss and dilution to the stated Indicated Coal Resources inside the Coal Resource within the Optimised Mine Plan. Coal Reserves were calculated only on the Indicated portion of the coal resource estimation. The final Coal Reserve for the Mariola Project is 39.5Mt within the Probable Category. No beneficiation of the coal product is planned other than crushing to a nominal top size.

### **Mining Parameters**

The PFS for Mariola was completed in March 2015 by HDR which incorporates a Coal Reserve, Mine Plan and Financial Model. The optimized mine plan is based on a Coal Reserves of 38.9 Mt and Inferred Resource of 2.0 Mt outside Coal Reserve.

### **Mining Method and Assumptions**

The mine plan was based on using a longwall system with a cutting range of 1.3m to 4m. The mine schedule has been built on the assumption that this will be an operation utilising contract miners for development and the longwall package will be taken on lease. This will provide the ability to bring on and send away crews and equipment throughout the operating life. All coal development is on the floor of the seam with stone drive driven at a 1 in 5 grade. This is consistent with decline development and is within the capability of the monorail transport system preferred.

### **Estimation Methodology**

XPAC software was utilised to generate a schedule and estimate the quality of Coal Resources within the schedule. A financial model was constructed and sensitivity analysis was conducted on capital costs, operating costs and coal price.



## Infrastructure

The ability to transport the maximum scheduled production of coal from the operation is present through the existing rail network located adjacent to the project.

## Economic

The financial evaluation undertaken as part of the PFS indicated an NPV of US\$313M and an IRR of 214%.

Table 11: Key Financial Parameters for Mariola

Key Financial Parameters	
Discount Rate (nominal, after tax)	10.5%
Life of Mine (initial)	15 years
Annual Saleable Production (LOM Average)	2.7 Mtpa
Initial Capital Expenditure (Year 1)	US\$ 44.7 M
Capital Expenditure (Year 2)	US\$6.7 M
Capital Expenditure (Year 3)	US\$1.6 M
Capital Expenditure (Year 4)	US \$3.9 M
Sustaining Capital Expenditure	US \$23.1 M
Closure Allowance	US \$1.37/t
Operating Cost (LOM Average, including rehabilitation)	US\$45/t
Post-tax LOM Free Cash Flow (nominal)	US\$881 M

## Marketing

Based on the level of domestic demand from nearby operators and further supported by ongoing discussions with adjacent end users of coal, suitable market capacity exists for the stated Production Target referred to in this announcement.



**TABLE 1 JORC 2012**

Criteria	Explanation	Comment
Sampling techniques	<p>Nature and quality of sampling (e.g. cut channels, random chips etc.) and measures taken to ensure sample representivity.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>Testing took place on all coal seams greater than 0.40 m in thickness, and included partings up to 5 cm in thickness. Whole cores were delivered to the laboratory in Katowice for splitting, weighing and testing. Sampling was extensive, with standard tests including, but not limited to:</p> <ul style="list-style-type: none"> <li>• Ash content;</li> <li>• Calorific value;</li> <li>• Coal type;</li> <li>• Sulphur content.</li> </ul> <p>Detailed records were kept of core recoveries, which has allowed for statistical analysis of the influence of core recovery on coal quality which allowed for assessment of sample representivity during Resource estimation.</p>
Drilling techniques	<p>Drill type (e.g.. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka etc.) and details (e.g.. 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.).</p>	<p>204 drill holes were drilled across and adjacent to the tenement. These varied in depth from 14.50 m to 1016.50 m and were drilled between 1914 and 1968 with a single additional hole to 380 m drilled in 2014.</p> <p>The majority of the drilling was completed by rotary core drilling, using core diameters which varied in width from 470 mm for the initial meterage to 86 mm at significantly deeper depths (however, the majority of drill diameters were between 160 mm and 86 mm).</p>
Drill sample recovery	<p>Whether core and chip sample recoveries have been properly recorded and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	<p>The majority of drilling was done in the 1950s and 1960s when technologies that allow for modern day high core recoveries were not available.</p> <p>However, detailed records were kept of core recoveries, which has allowed for statistical analysis of the influence of core recovery on coal quality, which allowed for assessment of sample representivity during resource estimation.</p> <p>Statistical analysis shows that a bias towards higher ash in the sample occurs at core recoveries below 70%. Consequently, a minimum core recovery of 70% has been used for the inclusion of samples in the estimate and for the determination of points of observation for resource classification purposes.</p>



Criteria	Explanation	Comment
Logging	<p>Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>Within Poland, there is a formal process for the collection, interpretation and representation of coal exploration data which is administered by the Polish Geological Institute. As part of this system, all final drill hole logs are signed off by a competent person authorised by the Polish Geological Institute. This system was observed to have been in place for all holes drilled within the Mariola Project during a site visit conducted during November 2014, when original copies of a subset of the drill logs was inspected by HDR at the offices of the Polish Geological Institute in Warsaw.</p> <p>Final drill logs include information on detailed lithological logging of the drill core, geophysical logging if done, core recoveries, coal quality (although not always present) and the final interpretation by the competent person in terms of seam stratigraphy. Approximately 22% of the drill hole logs contain information on down hole geophysics.</p> <p>The detail contained in these logs is considered sufficient for the purpose of resource estimation.</p>
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>Measures taken to ensure that the sampling is representative of the in situ material collected.</p> <p>Whether sample sizes are appropriate to the grainsize of the material being sampled.</p>	<p>As part of the standard coal exploration practice set out by the Polish Geological Institute, all coal sampling is conducted by a coal quality laboratory where the core is received, logged in detail as regards coal type, split and then sent for analysis.</p> <p>The exact nature of QAQC measures used by the laboratories concerned is not known.</p>
Quality of assay data and laboratory tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</p>	<p>Due to the historical nature of the majority of the sampling, HDR cannot confirm if the laboratories used for chemical analyses during the drilling, complied with International Standards and best practice procedures.</p> <p>Currently all coal quality sampling is conducted by the Główny Instytut Górnictwa (GIG) - Central Mining Institute at Plac Gwarków 1, Katowice, Poland.</p> <p>The Institute has received international accreditation, specifically in currently meets the requirements of the PN-EN ISO 9001:2009, PN-EN ISO 14001:2005 as well as PN-N-18001:2004 as confirmed by the certificate issued by the Polish Centre for Testing and Certification (PCBC S.A.).</p>
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry</p>	<p>There are no twinned intersections or evidence of verification sampling of significant intersections.</p> <p>Hard copy assay reports are not available for the historical data but a print out of the electronic database that stored this information is available.</p>



Criteria	Explanation	Comment
	<p>procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	Documentation regarding the capture of data into this database and QAQC measures in place are not available.
Location of data points	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>No information is available regarding the surveying organisation and equipment used to survey the borehole locations.</p> <p>The Polish CS1992 coordinate system (Lwowskie Geodetic System) was used within the modelling and all subsequent plans.</p> <p>The topography for the concession area was captured, by means of an image of topographic contours converted a digital format by digitising, prior use in the modelling software.</p> <p>When the newly drilled hole was imported into the geological model, a seam elevation difference of around 20 m is evident as compared to surrounding historical holes.</p> <p>This is considered by HDR to reflect a certain degree of uncertainty in the collar coordinates for the historical holes. This is not considered to have a significant impact on resource tonnage calculations but will impact potential mining. A dedicated programmed of RC drilling to confirm seam elevations at targeted locations are recommended in this regard prior to mining.</p>
Data spacing and Distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</p> <p>Whether sample compositing has been applied.</p>	<p>There are a large number of drill holes across the site, 151 of which have been utilised within the 3D geological model. Of these 151 boreholes, 116 have coal seam information and are found within the lease area, these 116 boreholes are spread across a lease area of 13.33 km<sup>2</sup>, giving an average of approximately 9 boreholes per square kilometre, giving good coverage. The spacing varies from approximately 15 m to 800 m between boreholes.</p> <p>Most samples cover the entire seam in question. In limited instances more than one sample per seam have been composited using length and density weighting for resource estimation purposes.</p>
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>All holes have been drilled and modelled as vertical. No verticality records exist or were provided for all drilling done on the tenement.</p> <p>No bias introduced by orientation of drill holes – modelling software takes into account the orientation of the seams in relation to the drilling and determines both true and vertical thickness for the seams.</p>
Sample Security	The measures taken to ensure sample security.	No documentation is available on the sample security measures taken during the historical drilling campaign.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits and reviews conducted on sampling techniques and data other than normal data checks conducted prior to resource modelling by HDR as well as a consulting firm



Criteria	Explanation	Comment
		who conducted the previous estimate.
Mineral tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>Carbon Investments were awarded the exploration concession for the Sierza II, Mariola I deposit area in 2013 (23/2013/p) covering an area of 13.33 km<sup>2</sup>. A digital version of this concession boundary was provided to HDR via a data pack from the previous consultants.</p> <p>HDR have not independently verified this tenure and were not asked to do so as part of this resource estimate.</p>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>A total of 204 historical exploration drill holes have been drilled in and around the tenement. 178 have original records available. The Polish State Geological Institute undertook the drilling and documentation of these boreholes, which were drilled between 1914 and 1970, with the majority of the boreholes drilled during the 1950s and 1960s.</p> <p>A further confirmation exploratory borehole has been drilled by Carbon Investments during 2014. The results of this drilling (1 hole) have been incorporated into the current estimate.</p>
Geology	Deposit type, geological setting and style of mineralisation.	<p>The resource model comprises 20 seams to a maximum depth of 550 m below surface, which upon review of data quality and seam thicknesses were reduced to 11 'key' seams for resource classification purposes, namely; S207A, S207B, S208, S209, S210, S214, S301, S302, S303, S306 and S324 together with associated daughter seams to these parent seams. These seams are intersected by a set of generally north south and east west trending regional faults with throws ranging between 10 m and over 100 m. These faults have been identified from adjacent mine workings and projected into the Mariola tenement.</p> <p>This has resulted in a number of horst and graben structures within which the seams are relatively gently dipping, which will allow for extraction using underground longwall mining methods.</p>
Drill hole information	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul> <p>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</p>	<p>This report pertains to resource estimation not exploration results. As such the details of the 151 drill holes used in the estimate are too numerous to list in this table.</p>



Criteria	Explanation	Comment
	Competent Person should clearly explain why this is the case.	
Data aggregation methods	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations and cut-off grades are usually material and should be stated.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>All samples have been composited over full seam thickness using length and density weighting and reported using Minescape modelling software.</p> <p>Review of coal quality and seam thickness data was done prior to compositing and a few outlier values, which probably relate to data transcription errors were removed prior to compositing</p> <p>Full seam compositing removes the influence of high quality samples.</p> <p>No metal equivalents used.</p>
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').</p>	The orientation of sampling (vertical) is not seen to introduce any bias as all drilling is vertical and seams mostly gently dipping.
Diagrams	Where possible, maps and sections (with scales) and tabulations of intercepts should be included for any material discovery being reported if such diagrams significantly clarify the report.	See figures in this release.
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 practised to avoid misleading reporting of Exploration Results.	No reporting of exploration results.
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 and rock characteristics; potential deleterious or contaminating substances.	No additional information used for the purpose of the estimate.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out	Further work will be necessary to improve the confidence in the elevation of the seams as well as in the in situ moisture content of the seams in order to allow for a Preston





Criteria	Explanation	Comment
	drilling).	Sanders conversion of air dried density to in situ density.  This will likely entail targeted RC drilling to confirm seam elevations and limited core drilling to allow for determination of seam bed moisture.
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.  Data validation procedures used.	A borehole database was provided to HDR, which was constructed and developed by Carbon Investments from the original hardcopy data. This database includes information from the boreholes within and surrounding the deposit area, as well as all the coal quality information available.  Approximately 10% of the hard copy drill hole logs were verified by HDR against the digital database. Further to this, histograms of seam thickness intercepts per seam were constructed and a few outlier values were corrected where related to transcription errors or related to incorrect interpretation in the opinion of HDR. Verification of coal quality data was performed by means of scatter plots and histograms only to ensure internal consistency. A minor number of outlier values were removed. A density ash regression was used to insert density values were none existed for around 33% of the coal quality sample data used in the estimate.
Site Visits	Site Visits undertaken by the Competent Person and the outcome of these visits. If no site visits have been undertaken, indicate why this is the case	Craig Williams, Competent Person for the Resource and a full time employee of HDR visited the site during November 2014.  The site visit entailed discussion around the format and quality of the data captured by Carbon Investments, and discussion around previous mining activities on the adjacent property and the likely mining method going forward. A visit to the site to inspect the collar position of the newly drilled hole and a visit to the nearby power station that is likely to receive coal from the deposit was also made.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.  Nature of the data used and of any assumptions made.  The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	The geological structure for the concession area was provided on a plan by Carbon Investments, originally produced by the Polish Government. This detailed structure plan, with no new information since its development, was used by HDR to create the 3D geological model of the faults. The completed HDR model is similar to that originally developed by the Polish Government.  Due to the high volume of drill hole data available and the knowledge of regional faults from adjacent mining activities, the structural model is considered to be internally consistent and a valid interpretation of the coal seam stratigraphy and regional faulting over the tenement.  The presence of smaller scale faults (1 m to 2 m) may still go undetected as vertical drilling is not effective in identifying such small scale structures. This is a common feature of coal exploration around the world.  Although the geological model from the historical drilling is internally consistent, the addition of the single new hole to the model highlighted potential locational errors in the historical data, which impacts on the accuracy and hence confidence in the estimation of seam elevations. It is considered that errors of up to around 20 m may be present



Criteria	Explanation	Comment
		<p>in the estimation of seam elevations in parts of the model</p> <p>It is furthermore considered that the projection of faults from adjacent mine workings will involve a certain degree of uncertainty in the exact position of the fault in the order of around +/- 20 m</p> <p>The drilling of the new hole confirmed seam thicknesses and raw coal quality for the major seams intersected in the vicinity of this hole. Therefore, uncertainty around the seam elevation and position of faults is considered to affect the relative position of the seams in space however overall coal tonnage and quality as expressed in the coal resource estimate is not considered to be materially affected as seam thickness and quality was confirmed by the new hole.</p>
Dimensions	<p>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.</p>	<p>See figure in ASX release.</p> <p>The tenement has dimensions of around 3 km (short axis) and 6 km (long axis) orientated in a NW-SE direction. Coal seams subcrop as close as 11 m to the surface along the NE side of the tenement and extent to modelled depths of around 550m.</p> <p>Resource reported only from 80 m below surface to 550 m due to potential environmental permitting restrictions.</p>
Estimation and modelling techniques	<p>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points.</p> <p>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</p> <p>The assumptions made regarding recovery of by-products.</p> <p>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</p> <p>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</p> <p>Any assumptions behind modelling of selective mining units.</p> <p>Any assumptions about correlation between variables.</p> <p>Description of how the geological interpretation was used to control the resource estimates.</p> <p>Discussion of basis for using or not using grade cutting or capping.</p> <p>The process of validation, the checking process used, the comparison of model data</p>	<p>FEM interpolator was used for surface elevation, thickness and trend. Inverse distance squared was used for coal quality throughout.</p> <p>Based on experience gained in the modelling of over 40 coal deposits around the world, the FEM interpolator is considered to be the most appropriate for structure and inverse distance the most appropriate for coal quality.</p> <p>Grid cell size of 25 m for the topographic model, 25 m for the structural model and 100m for the coal quality model.</p> <p>Previous estimates conducted by Wardell Armstrong and the Polish Governments agree within just over 10% or less on total tonnes to surface. Differences are related to different modelling strategy (HDR's numbers are less as seams, where not present in a hole are set to pinch out instead of extending the seam to the edge of the tenement).</p> <p>Wardell Armstrong has estimated in general slightly poorer coal quality (higher raw ash). This was due to the fact that samples with poor core recovery were not removed prior to coal quality modelling.</p> <p>Visual validation of all model grids performed.</p> <p>Raw sulphur is around 1.5% on average, consideration of acid mine drainage will be made during the reserving stage.</p> <p>No block model was used – all calculation based on grids.</p> <p>No assumptions made regarding correlation or selective mining units.</p> <p>Visual validation of all model grids performed.</p>



Criteria	Explanation	Comment
	to drill hole data, and use of reconciliation data if available.	
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<p>All tonnages estimated on air dried moisture basis (air dried density used).</p> <p>Although the Coal Guidelines recommend the use of the lower in situ density at a higher in situ moisture basis, the lack of information on in situ moisture did not allow a Preston Sanders correction to be made to convert from air dried density to in situ density.</p> <p>Regression formulas are available that convert moisture holding capacity (MHC) to in situ moisture; however, no MHC information is available. The relationship between total moisture and in situ moisture is not consistent as the relationship between the two is highly dependent on how the samples were handled prior to delivery to the laboratory.</p> <p>Therefore, it was considered better to use the more accurately known air dried density than to try and correct to in situ moisture using a poorly understood relationship between total moisture and in situ moisture.</p> <p>As the average total moisture for all samples is around 15% and the average air dried moisture is around 11%, if there is a close relationship between total moisture and in situ moisture, then the overestimation of tonnage due to the use of an air dried density is likely to be in the order of around 2%.</p>



Criteria	Explanation	Comment
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	Resources based on a minimum seam thickness of 0.6 m, which is the economic limit on seam thickness set by the Polish Government for seams that will be mined using underground mining methods.  In addition to this, no Coal Resources were reported above a depth of 80 m below the surface, due to advice from Balamara Resources, who indicated that it is unlikely that environmental approvals will be obtained for underground mining of seams less than 80 m below the surface. No cut-off limits were placed on coal quality as the average raw coal quality per seam is considered to be within an acceptable range for marketing of the coal as a thermal coal. No restriction on the interburden thickness between seams was applied to the resource after discussion with local mining engineers who indicated that simultaneous extraction of seams through the use of a stacked longwall system is technically feasible in situations where the interburden between seams is less than 10 m.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. Where no assumptions have been made, this should be reported.	HDR is in the process of conducting a pre-feasibility study for Mariola to convert Resources to Reserves.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources. Where no assumptions have been made, this should be reported.	The average raw coal quality of the Coal Resource is considered suitable to allow for marketing of the coal as a thermal coal in its raw form. Coal Resources have therefore been classified on this basis. However, it is likely that beneficiation of the coal would be conducted by washing the coal to increase its value. In Poland, analysis of what is termed enriched coal (washed coal) is done to determine the likely product coal quality. HDR could not find information on washed coal yields in laboratory reports of enriched coal qualities for the Mariola Project. Laboratory testing to date of enriched coal samples from the Mariola Project shows that after washing, a product ash content of around 6% is achievable.
Environmental Factors	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 greenfield 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.	HDR has not conducted any environmental assessment in the concession area. Balamara Resources is currently completing environmental assessments.



Criteria	Explanation	Comment
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.	See discussion on density with regard to moisture basis in this table.
Classification	<p>The basis for the classification of the Mineral Resources into varying confidence categories.</p> <p>Whether appropriate account has been taken of all relevant factors i.e. relative confidence in tonnage/grade computations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data.</p> <p>Whether the result appropriately reflects the Competent Person(s)' view of the deposit.</p>	<p>Resource Classification is based on an assessment of the variability of critical variables (raw ash% and seam thickness) through statistical analysis, geostatistical analysis and by an assessment of the degree of geological complexity (general seam dip and structure).</p> <p>A limited geostatistical study, which looked at the spatial continuity of the composite raw ash% in one of the main seams in the resource (S301), was conducted to identify the relationship between data spacing and confidence in the estimate.</p> <p>Raw ash% was selected as the statistics indicate that coal quality is likely to be more variable than seam thickness and hence the most variable critical variable was used to assess the confidence in the resource estimate.</p> <p>Results from the variography and population statistics for the S301 seam raw ash% were used to perform a drill hole spacing analysis (DHSA) study. This study shows that the relative error in the estimation of raw ash% for this seam is likely to be in the order of up to 10% at a spacing of up to 750m, up to 20% for a spacing of up to 1250 m and up to 50% for a spacing of up to 2250 m, on a global basis over a five year mining period, assuming a production rate of around 4 Mtpa (Note this assumed production rate is a rough estimate for the purpose of the DHSA and should in no way be used for reserving or valuation purposes).</p> <p>It is considered on this basis that the following distances between points of observation should be used for resource classification purposes:</p> <ul style="list-style-type: none"> <li>Measured: 750 m</li> <li>Indicated: 1,250 m</li> <li>Inferred: 2,250 m.</li> </ul> <p>Due to uncertainty in the accuracy of historical survey methods, there is considered to be additional uncertainty in the seam elevations. Projection of faults mapped in adjacent mine workings also involves a level of error. Both of these are positional errors considered to be of the order of around 20 m. In HDR's opinion, this will not have a major impact on resource tonnes and quality as it is an underground deposit and the structural model is internally consistent. However, it may impact eventual mining. There is also an estimated around 2% overestimation of tonnes due to the use of an air dried density instead of an in-situ density.</p> <p>For this reason, no Measured Resources have been estimated even though the classification spacing above would allow for some Measured Resources at the current data spacing. Targeted drilling to confirm seam elevations, fault positions and collect information on in situ moisture are considered necessary before Measured Resources can be defined.</p>



Criteria	Explanation	Comment
		The data spacing ranges for the other two resource categories (Indicated and Inferred) are considered to adequately reflect the current degree of confidence in the underlying estimate on a global basis using the data provided to date. However, significant local variation to estimated values may arise which should be addressed by adequate quality control procedures.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or reviews of this estimate have been done to date.
Discussion of relative accuracy/confidence	<p>Where appropriate a statement of the relative accuracy and/or confidence 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 which could affect the relative accuracy and confidence of the estimate.</p> <p>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages or volumes, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</p> <p>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</p>	<p>Results from the variography and population statistics for the S301 seam raw ash% were used to perform a Drill Hole Spacing Analysis (DHSA) study. This study shows that the relative error in the estimation of raw ash% for this seam is likely to be in the order of up to 10% at a spacing of up to 750m, up to 20% for a spacing of up to 1250m and up to 50% for a spacing of up to 2250m, on a global basis over a 5 year mining period, assuming a production rate of around 4 Mtpa (Note this assumed production rate is a rough estimate for the purpose of the DHSA and should in no way be used for reserving or valuation purposes).</p> <p>There is considered to be additional uncertainty in the estimate which results from the considered up to 20m uncertainty in seam elevation and position of regional faults.</p> <p>There is approximately a 2% overestimation of tonnes due to the use of an air dried density instead of an in-situ density.</p>
Mineral Resource Estimate for conversion to Ore Reserves	<p>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</p> <p>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</p>	The basis of the estimate is "Mariola JORC Resource Statement" as at 3 December 2014. Coal resources is inclusive of Coal reserves
Site Visits	<p>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</p> <p>If no site visits have been undertaken indicate why this is the case.</p>	Craig Williams, a full time employee of HDR and Competent Person for the Resource visited the site from Thursday 20 November to Friday 21 November, 2014.
Study Status	<p>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</p> <p>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</p>	The Reserve Estimates have been calculated on the basis of the modifying factor determined after successful outcome of prefeasibility study.



Criteria	Explanation	Comment
	economically viable, and that material Modifying Factors have been considered.	
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied	<p>Cut-off parameters for the coal seam thickness to be exploited by longwall mining method has been taken as 1.3 m. - 4 m. Maximum cutting height for mine development has been taken as 3.2 m.</p> <p>The mining operation was scheduled to minimise dilution so that the coal quality parameters are acceptable to the local coal fired power station.</p>
Mining factors or assumptions	<p>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).</p> <p>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.</p> <p>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</p> <p>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</p> <p>The mining dilution factors used.</p> <p>The mining recovery factors used.</p> <p>Any minimum mining widths used.</p> <p>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</p> <p>The infrastructure requirements of the selected mining methods.</p>	<p>The mining method selected is the longwall method of secondary extraction. Primary development is achieved through the use of continuous miners in the coal and roadheader in fault driveage. Geotechnical assumptions are based on historic mining activity including the assumption for the angle of subsidence of 58'. Full seam extraction is assumed and a dilution factor of 2.5% used except in areas of cutting through roof material. In these areas the resulting roof rock is used for the dilution.</p>





Criteria	Explanation	Comment
Metallurgical Factors or assumptions	<p>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</p> <p>Whether the metallurgical process is well-tested technology or novel in nature.</p> <p>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</p> <p>Any assumptions or allowances made for deleterious elements.</p> <p>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.</p> <p>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications.</p>	<p>No coal processing is considered. The ROM coal quality based on the geological model and takes into consideration the moisture and ash impact of additional stone as a result of dilution. The resulting ROM production is deemed acceptable for consumption for the local power station market.</p> <p>The coal reserve estimation is based on the mineralogy as reported in the coal resource model.</p>
Environmental	<p>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.</p>	<p>There are no protected areas such as national parks, nature reserves or national monument sites within the proposed mine site area.</p> <p>On 6 November 2014, The Directorate for Environmental Protection, Government of Poland gave Carbon Investment Sp. Z.o.o the necessary clearance to commence further works (ref number- DIŚ-WGI.403.77.2014.pd). The proposed underground mining operations at the Mariola Project will not have any large source of air polluting emissions.</p> <p>Areas within the Mariola Project have never been subjected to the influence of mining activities. A large part of the concession is undeveloped and consists of state forests and scrubland.</p> <p>The effects of mining activities on the surface will be limited by use of barrier pillars beneath important surface structures, correctly managing scheduling of mining activities, regular surveys and strata controls.</p>
Infrastructure	<p>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.</p>	<p>The Mariola Project is very well positioned from an infrastructure point of view as it is adjacent to a thermal coal fired power station 'Elektrownia Siersza' operated by TAURON as well as being readily accessible via road and rail. Industrial water will be taken from natural tributaries, which flow close to the concession through a system of water intake to the main drainage pumping station at surface, from where it will be pumped by pipelines to the proposed pit water clarifier. The whole of the unused water will be treated and will be discharged into Jaworznik river.</p>



Criteria	Explanation	Comment
Costs	<p>The derivation of, or assumptions made, regarding projected capital costs in the study.</p> <p>The methodology used to estimate operating costs. Allowances made for the content of deleterious elements.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co-products.</p> <p>The source of exchange rates used in the study.</p> <p>Derivation of transportation charges.</p> <p>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</p> <p>The allowances made for royalties payable, both Government and private.</p>	<p>The competent person has relied on quotations received by Balamara Resources from Polish longwall mining equipment manufactures and operators, local contractors, industry benchmarks, HDR's internal database, Info-mine coal cost guide (adjusted to reflect local condition) and other internal studies on the Mariola Project and the previous estimates.</p> <p>A contingency factor of 25% has been taken in capital cost estimates.</p> <p>Coal price forecasts have been made on the basis of coal price outlook provided by Consensus Economic Inc., which includes future coal price forecast provided by industry analyst and experts</p> <p>The marketing study including demand and supply of thermal coal conducted by Balamara Resources.</p> <p>Current exchange rate is calculated on the basis of monthly exchange rate published by European Commercial Bank.</p> <p>No refining is required. In consonance with existing Polish law, National Fund for Environment Protection and Water Management has been taken as 2% of total revenue.</p>
Revenue Factors	<p>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.</p> <p>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products</p>	<p>The estimates for the future revenue are not based on binding contracts like off take agreement between Balamara Resources to any local power plants.</p> <p>However, based on the current situation of the Polish mining industry where coal production is expected to fall in future, Balamara Resources is likely to find adequate end users for its coal.</p>
Market Assessment	<p>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</p> <p>A customer and competitor analysis along with the identification of likely market windows for the product.</p> <p>Price and volume forecasts and the basis for these forecasts.</p> <p>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</p>	<p>A market study to determine current demand- supply for the Mariola ROM coal has been carried out by Balamara Resources. The coal price forecast is based on the future price estimated on the basis of the price differential between Newcastle Coal Index and Polish Coal Index PSCMI.</p> <p>The market study included identification of potential customers, projection of total future requirement of domestic coal fired plant.</p>



Criteria	Explanation	Comment
Economic	<p>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.</p> <p>NPV ranges and sensitivity to variations in the significant assumptions and inputs</p>	<p>A 10.5% discount rate was taken in the Economic model. This is based on the estimated weighted average cost of capital (WACC) for the Mariola Project.</p> <p>Variation of input parameters were considered and project sensitivity is determined for each of the input parameter.</p>
Social	<p>The status of agreements with key stakeholders and matters leading to social licence to operate</p>	<p>Balamara Resources is in the process of acquiring a 100% interest in the Mariola Project through a merger between Balamara Resources' local Polish subsidiary and Carbon Investments. The Directorate for Environmental Protection, Government of Poland gave Carbon Investments the necessary clearance to commence further works</p>
Other	<p>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</p> <p>Any identified material naturally occurring risks.</p> <p>The status of material legal agreements and marketing arrangements.</p> <p>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable 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 party on which extraction of the reserve is contingency.</p>	<p>HDR has addressed and assessed all activities and technical matters that might reasonably be considered relevant and material to such an assessment conducted to internationally accepted standards. Based on observations and a review of available documentation, HDR has, after reasonable enquiry, been satisfied that there are no other relevant material issues outstanding;</p>
Classification	<p>The basis for the classification of the Ore Reserves into varying confidence categories.</p> <p>Whether the result appropriately reflects the Competent Person's view of the deposit.</p> <p>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</p>	<p>All resources considered for inclusion within the reserve are in the "Indicated" category. All reserves as stated are "Probable". No Probable Coal Reserves have been derived from Measured Coal Resources.</p>
Audit & Reviews	<p>The results of any audits or reviews of Ore Reserve estimates.</p>	<p>No audits and reviews have been conducted other than internal checks conducted by HDR and review by client prior to release.</p>



Criteria	Explanation	Comment
Discussion of Relative accuracy/confidence	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The Coal Reserve estimate is based on the reported Coal Resource as reported in the Mariola JORC Resource Statement as at 3 December 2014. Quantitative geotechnical data was not available but the local district has a long history of mining in these seams, including the use of longwall mining as modelled here. Some conservatism was integrated with regard to seam separation until the geotechnical information has been upgraded.</p> <p>This statement is based on a high level pre-feasibility study on a greenfield site where assumptions have been made based on historic information from neighbouring operations. Further work is required to improve the confidence level and develop the geotechnical model as well as improving the seam gas knowledge.</p>