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BALAMARA UNVEILS INCREASED 120.6Mt JORC RESOURCE FOR MARIOLA THERMAL COAL PROJECT

56% increase on previously reported resource following incorporation of recent drilling and analytical data as part of the Pre-Feasibility Study: 71% or 85.6Mt in the Indicated category

European-focused coal developer Balamara Resources (ASX: BMB) ("Balamara" or the "Company") is pleased to advise that it has taken the first step as part of its fast-track development strategy for the **Mariola Thermal Coal Project** in southern Poland with the announcement of an increased **120.6 million tonne (Mt)** JORC (2012) compliant Mineral Resource for the advanced thermal coal project.

Mariola is the most recent addition to Balamara's rapidly growing Polish coal portfolio, with the Company currently completing the acquisition of 100% of the Project after finalising due diligence and receiving shareholder approval for the transaction.

As part of this process, Balamara appointed Salva Resources Pty Ltd ("HDR") to conduct an update of the previous resource estimate for Mariola to form the foundation of a Pre-Feasibility Study ("PFS") for the Project.

The Mariola Project is located near the town of Katowice in southern Poland, where Balamara has its Polish offices. The Project lies in the heart of the Upper Silesian region, one of the largest coal-producing regions in Europe, where most Polish thermal power stations are strategically located to take advantage of nearby coal deposits (Figure 1).

HDR has completed an updated JORC (2012) compliant Mineral Resource estimate for the Mariola Thermal Coal Project as well as a separate additional Exploration Target, both of which are set out respectively in Table 1 and Table 2 below:

Table 1: Mineral Resource Estimate for the Mariola Thermal Coal Project as at 03 Dec 2014 (tonnes calculated on an air dried basis)

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

The estimate incorporates a minimum seam thickness of 0.6 m and a depth limit of not less than 80m below the topographic surface.
Inferred Resource rounded to the nearest 5 Mt

Table 2: Exploration Target for the remainder of the Mariola Tenement

	Mass (Mt)		Ash (adb)	Moisture (adb) %	GCV (adb) Kcal/kg	Volatile Matter (adb) %	Total Sulphur (adb) %
	Low	High	(%)				
Exploration Target*	4	12	13 to 27	10 to 15	5259 - 6453	25 to 34	0.4 to 4

** The potential coal quantity and quality (Table 2 above) within the Exploration Target is conceptual in nature as there has been insufficient exploration to date to define a Coal Resource and it is uncertain if further exploration will result in the determination of a Coal Resource.*

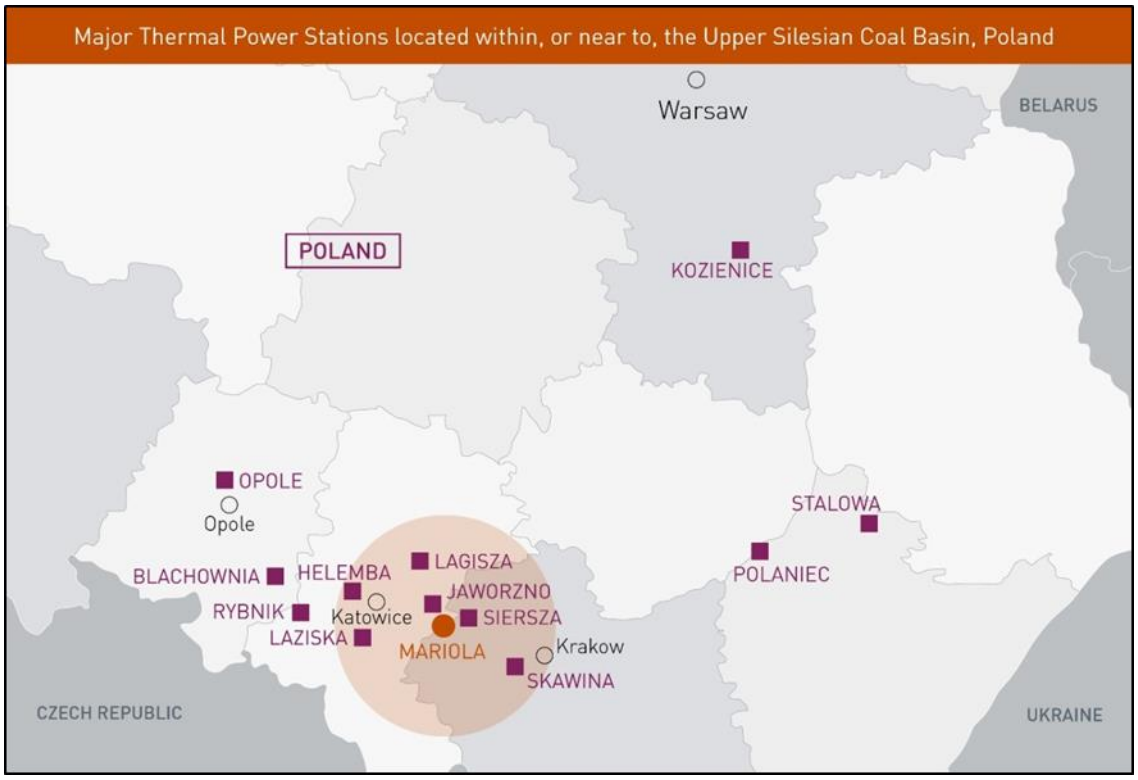

Figure 1 – Location of Mariola Project in southern Poland on the doorstep of 12 operating power stations, including the adjacent Siersza (Tauron) Power Station, located approximately 2km from the Concession.

The Exploration Target tonnage range targets the two deepest seams in the deposit, where drilling to date has achieved only limited sampling. Additional deep drilling would be required to potentially bring this Exploration Target into the Resource.

The updated Coal Resource and Exploration Target estimate has been compiled from historical drilling and one additional drill hole completed subsequent to the last resource estimate in 2014, under the supervision of geologists from Carbon Investment, the company which holds the Mariola Concession.

Coal Resources have been estimated and classified 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 Code (2012). The total resource of 120.6Mt represents a 56% increase over the previously reported total resource of 77.1 Mt. The updated Coal Resource has seen a significant proportion of the previously reported Exploration Target of 63-80Mt converted into JORC compliant resources. Consequently, the Exploration Target has now been reduced to between 4Mt and 12Mt. The increased Resource is mainly due to a revised interpretation of the minimum core recovery required for a coal quality point of observation. Previously, coal quality samples with a linear core recovery of 90% or greater were used to classify the resource. In this estimate, a statistical review of the relationship between coal quality and linear core recovery shows that there is no observable bias in the coal quality statistics per seam until much lower core recoveries of around 50% are reached.

Consequently, the core recovery threshold for a coal quality point of observation as been set at 70% in this estimate. This has resulted in the inclusion of some of the main seams within the deposit into the Resource, which had previously only been reported as part of the Exploration Target tonnage range.

Geology & Geological Interpretation

The resource model comprises 20 seams to a maximum depth of 550m 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 10m and over 100m. These faults have been identified from adjacent mine workings and projected into the Mariola tenement. 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. A plan showing the position of drill-hole collars and a NW-SE section through the deposit is shown in Figure 2.

Drilling, Sampling & Analysis

The Coal Resource and Exploration Target for Mariola is based on historical drilling (drilling mainly during the 1950's and 1960's) comprising 178 drill holes, of which 150 drill holes intersected coal and have a total length of 26,275m. Carbon Investment recently completed one additional drill hole which reached a total depth of 380m and intersected 8 of the 11 seams reported in the Resource.

The historical drilling was conducted by either the adjacent (now closed) Sierzsa Coal Mine or the Geological and Raw Rock Materials Company of Katowice. 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 Thermal Coal Project during a site visit conducted during November 2014, when original copies of a sub-set of the drill logs was inspected by HDR at the offices of the Polish Geological Institute in Warsaw.

Historical and recent drilling was by rotary coring methods. Cores were split and samples collected at a coal laboratory within Poland.

Coal Quality testing took place on all coal seams greater than 0.40m in thickness, and included partings up to 5cm 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:

- Ash Content;
- Calorific Value;
- Coal Type;
- Sulphur Content.

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. Due to the total coring drilling methodology employed throughout for both historical and recent drilling, no statistical relationship was observed between core recovery and the logged seam thickness.

Histograms of coal seam thicknesses for all seams reported in the resource were used to identify outlier thickness values which were removed from the database prior to the construction of the resource model. Similarly, scatter plots of all coal quality attributes and histograms of the raw ash% per seam were used to identify and remove spurious coal quality values prior to conducting the resource estimate. The number of corrections to the database that needed to be made was minimal and this reflects that the database had been thoroughly validated by previous consultants and by the current operators prior to receipt of the database by HDR.

Estimation Methodology

The 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 cell size of 25 m for the topographic model, 25 m for the structural model and 100m for the coal quality model was employed.

Criteria for Resource Classification & Cut-off's Applied

No Coal Resources are reported above a depth of 80m below the surface due to the fact that environmental approvals are unlikely to be obtained for underground mining of seams less than 80m 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. A minimum seam thickness limit of 0.6 m has been used to define Resources as this is considered to be the minimum mineable thickness when using underground methods.

No restrictions on the interburden thickness between seams were 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.

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).

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.

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.

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 not be used for valuation purposes).

It is considered on this basis that the following distances between points of observation should be used for resource classification purposes:

- Measured: 750m
- Indicated: 1250m
- Inferred: 2250m

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 20m. 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 2% overestimation of tonnes due to the use of an air dried density instead of an in-situ density.

For these reasons, no Measured Resources have been estimated, even though the classification distances given 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.

Mining, Metallurgical and Marketing Parameters

The average raw coal quality of the Coal Resource (Table 1 above) 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.

JORC Table 1

JORC Table 1, attached to this release, provides a checklist of assessment and reporting criteria and provides information on drilling and sampling techniques, data QAQC and the estimation and classification of Coal Resources according to JORC Code (2012) guidelines.

Comments

Balamara's Managing Director Mike Ralston said the completion of an updated Mineral Resource estimate was a major step forward for the Mariola Project, confirming the presence of a substantial, high quality thermal coal deposit capable of underpinning a robust long-term coal business.

"This work has resulted in a significantly enhanced resource, adding substantial value to our priority project which, due to its exceptional location and infrastructure characteristics, is expected to be our first asset to move into development and production.

"The updated mineral resource will form the basis of the Pre-Feasibility Study currently underway, which is expected to be completed towards the end of 1Q 2015. That will establish a clear development pathway for us to fast-track Mariola towards production in 2016," Mr Ralston added.

ENDS

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Competent Persons Statement:

The information in the report, to which this statement is attached, that relates to the Coal Resources and Exploration Targets of the Mariola Thermal Coal Project, is based on information compiled and reviewed by Mr Craig Williams, who is a Member of the Australian Institute of Mining & Metallurgy and works full time for HDR, an independent consulting firm.

Mr Williams, Principal Consultant - Geology and a full time employee of HDR, has sufficient experience that is relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Williams consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

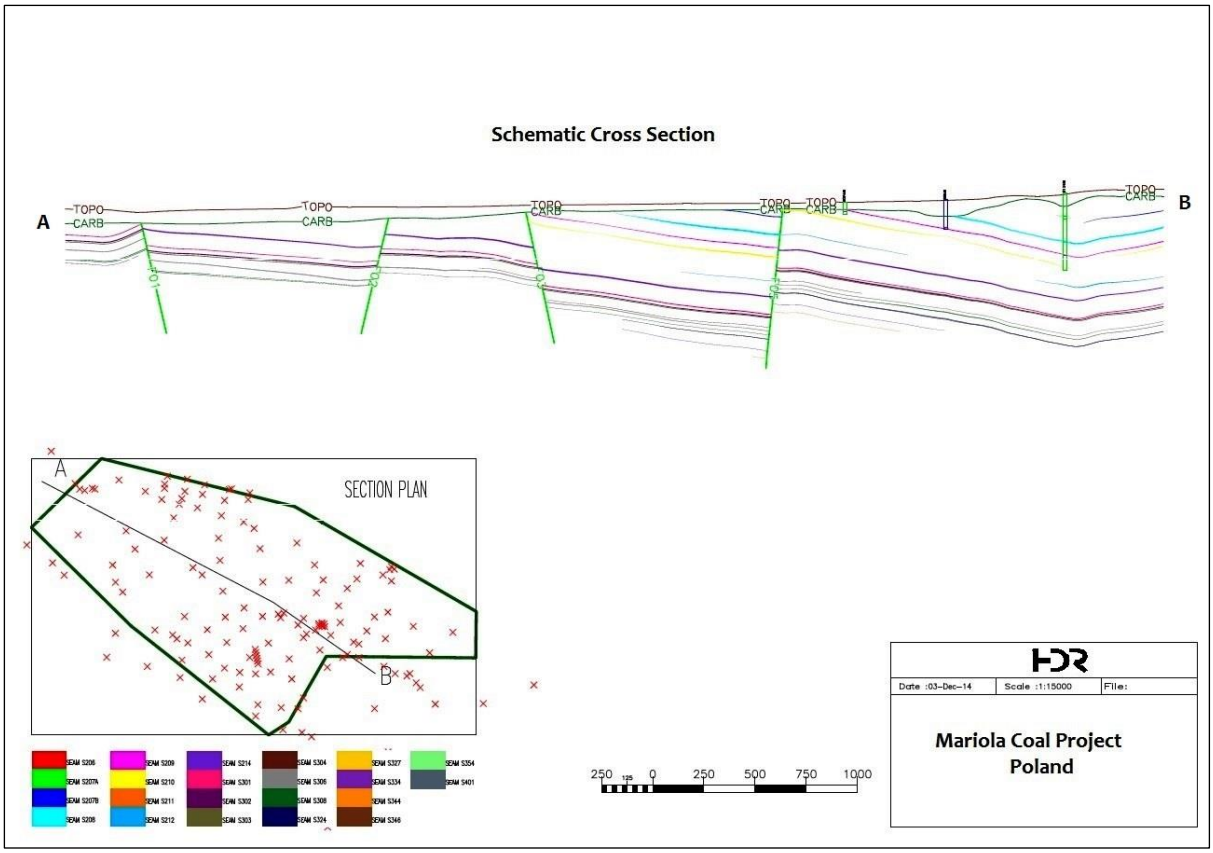

Figure 2 – Long Section and drill hole location plan.

JORC Table 1

Criteria	Explanation	Comment
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips etc.) and measures taken to ensure sample representivity. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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.	Testing took place on all coal seams greater than 0.40m in thickness, and included partings up to5cm 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: • Ash Content; • Calorific Value; • Coal Type; • Sulphur Content. Detailed records 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.
Drilling techniques	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.).	204 drill holes were drilled across and adjacent to the tenement. These varied in depth from 14.50m to 1016.50m and were drilled between 1914 and 1968 with a single additional hole to 380 m drilled in 2014. The majority of the drilling was completed by rotary core drilling, using core diameters which varied in width from 470mm for the initial meterage to 86mm at significantly deeper depths (however, the majority of drill diameters were between 160mm and 86mm).
Drill sample recovery	Whether core and chip sample recoveries have been properly recorded and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	The majority of drilling done in the 1950's and 1960's when technologies which allow for modern day high core recoveries were not available. 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. 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.

Criteria	Explanation	Comment
Logging	Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. The total length and percentage of the relevant intersections logged.	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 Thermal Coal 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. 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. The detail contained in these logs is considered sufficient for the purpose of resource estimation.
Sub-sampling techniques and sample preparation	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. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected. Whether sample sizes are appropriate to the grainsize of the material being sampled.	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. The exact nature of QAQC measures used by the laboratories concerned is not known.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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.	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. Currently all coal quality sampling is conducted by the Główny Instytut Górnictwa (GIG) - Central Mining Institute at Plac Gwarków 1, Katowice, Poland. The Institute has received international accreditation, specifically in currently meets the requirements of the following standards 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.).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	There are no twinned intersections or evidence of verification sampling of significant intersections. Hard copy assay reports are not available for the historical data but a print out of the electronic database which stored this

Criteria	Explanation	Comment
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	information is available. Documentation regarding the capture of data into this database and QAQC measures in place are not available.
Location of data points	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. Specification of the grid system used. Quality and adequacy of topographic control.	No information is available regarding the surveying organization and equipment used to survey the borehole locations. The Polish CS1992 coordinate system (Lwowskie Geodetic System) was used within the modelling and all subsequent plans. 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. When the newly drilled hole was imported into the geological model, a seam elevation difference of around 20m is evident as compared to surrounding historical holes. 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.
Data spacing and Distribution	Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied.	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 13.33km², giving an average of approximately 9 boreholes per square kilometre, giving good coverage. The spacing varies from approximately 15m to 800m between boreholes. Most samples cover the entire seam in question. In limited instances more than one sample per seam have been composted using length and density weighting for resource estimation purposes.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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.	All holes have been drilled and modelled as vertical. No verticality records exist or were provided for all drilling done on the tenement. 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.
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 who conducted the previous estimate.

Criteria	Explanation	Comment
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 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.	Carbon Investments have been awarded the exploration concession for the Sierzsa II, Mariola I deposit area in 2013 (23/2013/p) covering an area of 13.33km². A digital version of this concession boundary was provided to HDR via a data pack from the previous consultants. HDR have not independently verified this tenure and were not asked to do so as part of this resource estimate.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	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 1950's and 1960's. 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.
Geology	Deposit type, geological setting and style of mineralisation.	The resource model comprises 20 seams to a maximum depth of 550m 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. 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.
Drill hole	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: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	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.

Criteria	Explanation	Comment
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations and cut-off grades are usually material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	All samples have been composited over full seam thickness using length and density weighting and reported using Minescape modelling software. 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 Full seam compositing removes the influence of high grade samples. No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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').	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 drilling).	Further work will be necessary to improve the confidence in the elevation of the seams as well as in the insitu moisture content of the seams in order to allow for a Preston Sanders conversion of air dried density to insitu density. This will likely entail targeted RC drilling to confirm seam elevations and limited core drilling to allow for determination of seam bed moisture.

Criteria	Explanation	Comment
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, geologist and Competent Person for the Resource visited the site from Thursday 20 November to Friday 21 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 (1-2 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 in the estimation of seam elevations in parts of the model 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

Criteria	Explanation	Comment
		around +- 20m 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.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	See figure in ASX release. The tenement has dimensions of around 3km (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. Resource reported only from 80m below surface to 550m due to potential environmental permitting restrictions.
Estimation and modelling techniques	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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	FEM interpolator used for surface elevation, thickness and trend. Inverse distance squared used for coal quality throughout. Based on experienced 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. Grid cell size of 25 m for the topographic model, 25 m for the structural model and 100m for the coal quality model. Previous estimates conducted by Wardell Armstong 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). 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 have not been removed prior to coal quality modelling. Visual validation of all model grids performed. Raw sulphur is around 1.5% on average, consideration of acid mine drainage will be made during the reserving stage. No block model was used – all calculation based on grids. No assumptions made regarding correlation or selective mining units. Visual validation of all model grids performed.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method	All tonnages estimated on air dried moisture basis (air dried

Criteria	Explanation	Comment
	of determination of the moisture content.	density used). Although the Coal Guidelines recommend the use of the lower insitu 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. Regression formula's are available which 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. Therefore it was considered better to use the more accurately known air dried density than to try and correct to insitu moisture using a poorly understood relationship between total moisture and insitu moisture. 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%.
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, 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	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

Criteria	Explanation	Comment
	made, this should be reported.	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	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 is currently completing environmental assessments.
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	The basis for the classification of the Mineral Resources into varying confidence categories. 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. Whether the result appropriately reflects the Competent Person(s)' view of the deposit.	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). 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. 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. 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). It is considered on this basis that the following distances between points of observation should be used for resource classification purposes:

Criteria	Explanation	Comment
		• Measured: 750m • Indicated: 1250m • Inferred: 2250m 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 20m. 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. 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. 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 grade 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	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. 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	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). 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. There is approximately a 2% overestimation of tonnes due to the use of an air dried density instead of an in-situ density.