

30 January 2020

The Company Announcements Office
ASX Limited
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SYDNEY NSW 2000

BYRO INDUSTRIAL MAGNETITE PROJECT

MARKET DEVELOPMENT

- Athena Resources has held discussions with members of the international Coal Preparation Congress, (ICPC) and attended the International Coal Preparation Conference in New Delhi hosted by the Coal Preparation Society of India, (CPSI) at the end of 2019.
- Athena Resources has held discussions with several international coal producers for supply of magnetite for Dense Media Separation.

MAGNETITE MARKET AND DEVELOPMENT FOR DMS

Athena has developed a premium grade magnetite Dense Media Separation (DMS), product, (announced on ASX platform 18 January 2020), suited to coal washing and is focusing market search towards key existing markets where we believe there is a strong and growing demand for magnetite DMS over the next decade.

Athena Resources has identified potential international markets to supply Byro magnetite DMS product from the Byro Industrial Magnetite Project including China, South East Asia, India, South Africa and Australia. The Company engaged in discussions with the International Coal Preparation Congress (ICPC) towards making connections with potential consumers for the Byro DMS for a coal washeries product.

The ICPC is a non-government body which has representatives from 15 countries.

Representatives of Athena Resources attended the ICPC Congress in New Delhi, hosted by the Coal Preparation Society of India, (CPSI) in November 2019.

The CPSI is associated with and supported by major industry bodies like Federation of Indian Mineral Industries (FIMI), Sponge Iron Manufacturers Association (SIMA), Association of Power Producers (APP), ASSOCHAM of India, World Coal Association (WCA), IEA Clean Coal Centre (UK).

CPSI's efforts are directed towards the cleaning of coal and introduction of clean coal technologies so that India can meet its emissions reduction target committed at the Paris Climate Treaty.

The CPSI conference was attended by the Indian Ministries of Coal, Power, New and Renewable Energy, Environment, Forest & Climate Change, Steel and Mining, Science & Technology, Earth Sciences and Economic Diplomacy & States Division, External Affairs.

Industry groups also attended including the Monnet Group, Jindal Steel, Bharat Coking Coal India (BCCL), The Singareni Collieries Company Ltd (SCCL) and major power producer National Thermal Power Corporation, (NTPC).

Over 100 presentations from highly regarded industry professionals and universities from around the world including the CSIRO and The Australian Coal Preparation Society (ACPS) were delivered at the conference. Key points delivered from the congress regarding coal washing in India by 2030 are summarised below.

Current Indian thermal coal production is reported by CPSI at 600Mtpa. Thermal coal demand in India is also estimated by the CPSI to be 1150–1750 Mtpa by 2030. New legislation in India now requires 100% of thermal coal to be washed. Currently only 20% of

Indian coal is washed, magnetite consumption is forecast to increase as coal production increases and coal preparation moves towards 100% washed.

Development of the coal washing industry in India will be undertaken by a variety of new and existing technologies. These include dry beneficiation, coal gasification, coal blending and changing import volumes. For this reason, it is difficult to accurately forecast the exact usage of magnetite or the split between these technologies. However, magnetite in dense media cyclone (DMC) will continue to be the most cost-effective and successful method for washing Indian coal. Within India there is a paucity of indigenous magnetite for not only supply and demand but also quality.

Magnetite consumption figures were quoted in India washeries ranging from **0.5Kg to 1.5Kg** per tonne of washed coal. The volume of magnetite used varies dependent on coal quality and efficiency of the washeries.

Through technology developed in China and Australia, it is hoped to reduce magnetite consumption in Indian washeries to below **1Kg/t**.

Estimated magnetite consumption in Indian is based on information supplied by the CPSI for DMS and DMC washeries is in the order of **150,000tpa to 200,000tpa** for **122Mtpa** of washed coal, (20% of 600Mtpa).

Current thermal coal production (600Mtpa if 100% washed using DMC-magnetite processes) would require **750,000tpa** magnetite.

The Indian government and Coal India expect the coal industry to develop new washeries and upgrade existing washeries to meet regulatory demands and cope with increasing supply demand.

Forecast thermal coal requirement by 2030 is **1150–1750 Mtpa**, **100% washed** if using DMC-magnetite processes, would require an estimated **2.2 Mtpa**. This is a burgeoning market that is currently under supplied with quality magnetite product.

The ICPC Conference clearly forecast the opportunity for change in coal washing practices in India. This was underpinned by many Government and NGO coal and power producers at the conference. Development in India is underway and hoped to be completed in three years, suited to the timing of development of the Byro Industrial Minerals Project at FE1.

The congress concluded there is a large market opening in India, for a potential requirement in excess of **1Mtpa** high-quality magnetite for DMS and DMC if washeries upgrade is successful. Athena is continuing discussions with organisations and traders globally around growing magnetite demands. The purpose of the discussions to potentially supply the Byro magnetite DMS product into world markets and assisting with the Indian shortfall.

This paragraph contains certain statements that may constitute “forward looking statements”. Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward-looking statements.

Magnetite supply to clean coal producers is highly competitive and price sensitive. The competitive benefits of the Byro DMS are quality, grade and use of streamlined existing

processing technologies. This is underpinned by the nature of the Byro primary ore allowing economical operation within a price sensitive market.

Athena identified a number of DMS consumers in India, Indonesia, US and China attending the CPSI Conference and through meetings generated interest for the Byro DMS product.

Coal washeries performance criteria is dependent on multiple variables. The most important is the quality of the coal and consistency of coal feed quality entering a plant. Indian wash plants are aging and built based on a coal reserve which was of higher quality to the remaining high ash reserve. New washeries are required and are being built. The poor-quality coal in India requires a high-quality magnetite to ensure precise separation. The Byro DMS product is currently being tested and evaluated for customer's specific requirements.

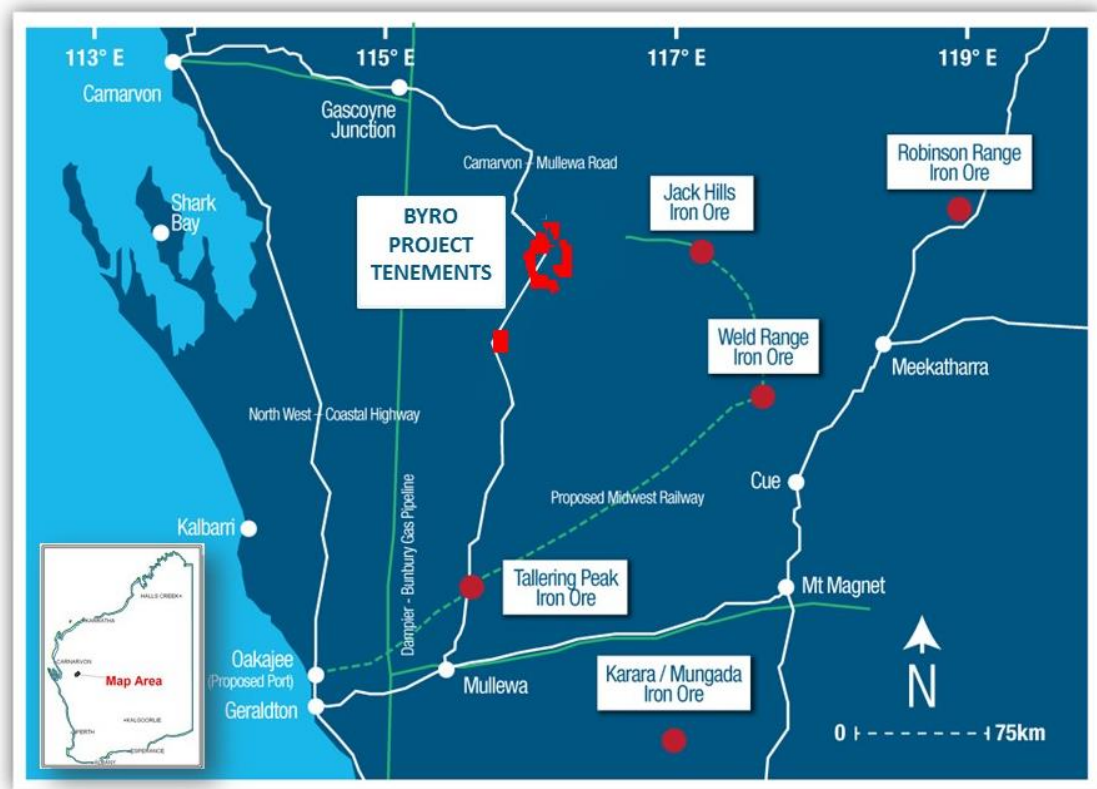
Following consumer interest, Athena delivered coal wash DMS samples to consumers in India, China, Indonesia and Thailand. Consumers in these countries have agreed the Byro DMS product is of standalone quality. The coal washing and DMS markets are highly competitive and politically sensitive. For this reason, the potential consumers we are in contact with require us to maintain confidentiality throughout the evaluation process.

Athena Resources is optimistic about discussions with consumers with indications being provided that following successful tests, development of pre-sale agreements may be possible. At this stage Athena has not entered into any memorandums or agreements and there is no assurance it will do so or what form an agreement might take.

Reasonable efforts have been taken to include reliable data and information. Athena Resources does not assume responsibility for the validity of all the information contained in this announcement. Investors are cautioned about making investment decision based on current discussions and information reported from the CPSI Congress.

About Athena Resources Limited.

Athena Resources Limited (ASX: AHN), which is based in Perth was listed on the ASX in 2006 and currently has 300,605,208 million shares on issue. Athena owns a 100% interest in the Byro Project through its subsidiaries Complex Exploration and Byro Exploration where it is exploring for copper, nickel, PGE's and iron ore. The Figure below, shows the current tenement holdings.

Regional Project Location

Edmond Edwards Executive Director of Athena has authorised release of this announcement to the ASX.

Yours faithfully

Ed Edwards
Executive Director
ATHENA RESOURCES LIMITED

INTEREST IN MINING TENEMENTS**Athena Resources Limited 100%****Byro**

E09/1507	E – Exploration License
E09/1552	
E09/1637	
E09/1781	
E09/1938	
M09/166	M- Mining Lease
M09/168	

Cautionary Notes**Forward Looking Statements**

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Athena has not entered into any memorandums or agreements with DMS consumers and there is no assurance it will do so or what form an agreement might take. Investors are cautioned about making investment decision based on current discussions.

JORC Code Compliance Statement

Some of the information contained in this announcement relates to historic data that have not been updated to comply with the 2012 JORC Code. Some background information referred to in the announcement was prepared and first disclosed under the JORC Code 2004 edition. It has not been updated since to comply with the JORC Code 2012 edition on the basis that the information has not materially changed since it was last reported.

Competent Persons Statement

The information included in the announcement was compiled by Mr Liam Kelly, an employee of Athena Resources Limited. Mr Kelly is a Member of the Australasian Institute of Mining and Metallurgy, and has sufficient relevant experience in the styles of mineralisation and deposit styles under consideration to qualify as a Competent Person as defined in “The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012 Edition)”. Mr Kelly consents to the inclusion of the information in the announcement in the context and format in which it appears and that the historical information was compliant with the relevant JORC Code, 2004 Edition, and new information announced in this report is compliant with the JORC Code 2012 Edition.

Competent Persons Disclosure

Mr Kelly is an employee of Athena Resources and currently holds securities in the company.