

# ASX

## ANNOUNCEMENT



# CHINA ENFI AGREEMENTS TO DELIVER CYCLONE DFS

Diatreme Resources Limited is an Australian based diversified mineral explorer with significant projects in WA and QLD.

The Board and senior personnel exhibit wide experience, ranging through the exploration, development and financing phases of resource project management.

Australian Securities Exchange  
Codes: DRX

Board of Directors Non-Executive  
William Wang - Chairman  
Andrew Tsang  
Daniel Zhuang

Executive:  
Neil McIntyre – Chief Executive  
Tuan Do – CFO & Co. Secretary  
Ian Reudavey – Chief Geologist

Key Projects:  
• Cyclone Zircon Project  
• Tick Hill Gold Project  
• Cape Bedford Silica/HMS Project  
• Clermont Copper Project

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Link Market Services Limited  
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**11 January 2018**

- **Cooperation and Consulting Services agreements signed with China ENFI Engineering Corporation (ENFI) replacing previous MOU, for completion of Cyclone Zircon Project's definitive feasibility study (DFS)**
- **ENFI to assist Diatreme in sourcing project equity investors and product offtakers, together with potential project debt funding**
- **Agreements pave way for development of new mineral sands mine in WA's Eucla Basin, amid strengthening demand outlook**

Western Australia's next new mineral sands mine is a major step closer, with Diatreme Resources Limited (ASX:DRX) announcing today the signing of the necessary agreements for leading mining services company China ENFI Engineering Limited (ENFI) to complete a definitive feasibility study (DFS) for Diatreme's Cyclone Zircon Project.

Replacing the previous non-binding Memorandum of Understanding announced on 11 September 2017, Diatreme and ENFI have signed two contracts comprising:

- A **Cooperation Agreement**, under which ENFI will use its network within China's state-owned enterprise (SOE) and banking sectors to assist in sourcing project investors, offtakers and project debt funding;
- A **Consulting Services Agreement**, detailing the remaining DFS aspects to be completed by ENFI, including project costings and economics, engineering studies and implementation planning. Timeframe for DFS completion is estimated at five (5) months.

Commenting on the agreements, Diatreme's Chairman, William Wang said: "This is a historic day, not only for Diatreme but also for Australia's mineral sands industry. We are delighted to be working with a company of the size and expertise of ENFI as we advance our flagship project towards mining, for the benefit of all stakeholders."

ENFI is backed by one of China's largest state-owned enterprises (SOEs) involved in the mining services sector, being a wholly owned subsidiary of Metallurgical Corporation of China, part of the China Minmetals Group. Headquartered in Beijing, China Minmetals has 1.6 trillion renminbi (A\$314 billion) in total assets and ranked 120<sup>th</sup> in the Fortune Global 500.

The support of ENFI's commercial and Chinese SOE networks is expected to be crucial in securing the necessary project partners for Cyclone, including investors, offtakers and providers of project debt funding. ENFI has also been provided with the necessary Cyclone project information to undertake the outstanding items of the DFS, which when completed will provide lenders with the level of confidence required to finance the mine's development.

The agreements with ENFI follow Diatreme's successful de-risking of its flagship project, with the issuing of final environmental approvals from the Western Australian Government in January 2017, along with the determination of a suitable water supply, agreement with the Native Title holders and award of a Mining Lease.

Recent market commentary and analysis by industry researchers TZMI has pointed to increasing demand for heavy mineral sands such as zircon, along with constrained supply, which should ensure Cyclone comes into production amid a favourable pricing environment.

In September, major producer Iluka Resources increased its zircon reference price to US\$1,230 per tonne, with analysts suggesting zircon prices will exceed US\$1,300 in 2018. Research by Deutsche points to both zircon and titanium dioxide rising by a further US\$100/t in 2018, amid improved demand from China's construction sector and in other emerging economies.

"The agreements with ENFI represent the final push forward for our Cyclone project, with the potential for first production by the end of the decade in an environment of rising prices and constrained supply," said Diatreme's CEO, Neil McIntyre.

"We now have the right technical partner in place to deliver the right project at the right time, securing increased value for our loyal shareholders."

## CYCLONE ZIRCON PROJECT

### De – Risking Process

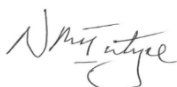
The Cyclone Project, following an extensive work and regulatory program has now been effectively de-risked following final grant of the environmental licence. The de-risking process has mitigated key project risks identified in the PFS and during the early stage of the DFS. DRX can now move confidently towards completing final aspects of the DFS, subject to market conditions remaining favourable, with the knowledge and comfort provided by the de-risking process.

In summary, the key risks that have been mitigated and related management measures are listed below:

- **Water Supply** - Water supply discovered and test bore completed at the Cyclone mine site (refer ASX announcement 11 November 2013); detailed water supply design to be completed in the DFS.
- **Native Title and Mining Agreement** - Agreement executed with the Native Title holders on 15 November 2014 (refer ASX announcement 17 November 2014).

- **Mining Lease** - Granted by the WA Department of Mines and Petroleum on 18 November 2014 (refer ASX announcement 24 November 2014).
- **Mine Life** - Acquisition of Cyclone Extended has increased the mine life to 14 years at a mining rate of 10 million tonnes per year (refer ASX announcement 14 December 2015).
- **Independent Update and Assessment** - The Project Enhancement and Update Study by Sedgman Limited undertaken in June 2016 has revealed cost reductions and demonstrated robust financial results (refer ASX announcement 15 June 2016). Sedgman has highlighted other opportunities for improving project economics.
- **Environmental Approval** - Granted by WA Environment Minister (State) 9<sup>th</sup> January 2017.
- **China ENFI Agreements** – Signed in January 2018, under which one of China's largest mining services providers will undertake the remaining aspects of Cyclone's commercial studies to DFS standard, while also assisting in sourcing potential project investors, offtakers and project lenders.

For further information, please contact:



Neil McIntyre, CEO

### About the Cyclone Zircon Project

Discovered in 2007, the Cyclone Zircon deposit is located along the Barton shoreline within the Wanna Lakes area of the northern Eucla Basin, 25 kilometres from Western Australia's state border with South Australia and 220 kilometres north of the transcontinental railway.

Following the acquisition of the Cyclone Extended Heavy Mineral Resource, the Cyclone Project's JORC Mineral Resource (Measured and Indicated) has been estimated at comprising 211 million tonnes at 2.3% heavy minerals (1% cut-off grade) containing 4.8 million tonnes HM (refer ASX announcement 9 April 2015). This includes a Measured Resource of 156Mt at 2.4% HM and an Indicated Resource of 55Mt at 1.8% HM (both at 1% HM cut-off grade).

In November 2014, Western Australia's Department of Mines and Petroleum granted a Mining Lease (ML69/141) for the project, which followed the signing of a Project Agreement with the traditional owners, the Spinifex People. In January 2017, the project received final ministerial consent allowing for the development of a mineral sands mine and associated infrastructure.

A Definitive Feasibility Study is underway along with further project specific commercial and operational enhancement studies, with Cyclone representing potentially the largest undeveloped zircon project in the Eucla Basin.

### About China ENFI Corporation (ENFI)

One of China's premier design institutes, Beijing-based ENFI has large geological, mining engineering and metallurgical teams as well as significant plant design, procurement and construction capabilities. It has achieved significant success working in a number of countries in Africa, Asia, the Middle East and South America and owns a number of global patents concerning processing technologies.

ENFI is backed by one of China's largest state-owned enterprises (SOEs) involved in the mining services sector, being a wholly owned subsidiary of Metallurgical Corporation of China, part of the China Minmetals Group. Headquartered in Beijing, China Minmetals has 1.6 trillion renminbi (A\$314 billion) in total assets and ranked 120<sup>th</sup> in the Fortune Global 500 (refer <http://www.minmetals.com/english/>).

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**Competent Person Statement**

*The information in this report, insofar as it relates to Mineral Resources is based on information compiled by Mr Ian Reudavey, who is a full time employee of Diatreme Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Reudavey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Reudavey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

*The information in this report, insofar as it relates to Ore Reserves is based on information compiled by Mr Phil McMurtrie, who is a director of Tisana Pty Ltd (a consultant to Diatreme Resources Limited), and a Member of the Australasian Institute of Mining and Metallurgy. Mr McMurtrie has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McMurtrie consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*