

## ASX ANNOUNCEMENT AND MEDIA RELEASE

22 January 2014

# KOGI FURTHER OPTIMISES BARGING STUDY

### Highlights

- Optimisation of barging study reduces operating and capital cost estimates
- Stockpile and re-handling of iron ore concentrate at Port Warri no longer required
- Transfer station at Escravos replaces the Port Warri stockpile
- Estimated barging and transhipping costs ~US\$19 / dmt (FOB)
- Highly competitive overall transport rate of 2.97 cents per tonne kilometre
- River transport is a distinct advantage of the Agbaja Iron Ore Project

Australian based iron ore development company, Kogi Iron Limited (ASX: KFE) ("Kogi", "Kogi Iron", or the "Company") and its 100% owned Nigerian operating company, KCM Mining Limited ("KCM"), are pleased to report the results of a recently completed optimisation of its Niger River Barging Study.

#### Niger River Barging Study

On 14 October 2013 the Company announced the results of the Niger River Barging Study, which was conducted by South African port and costal engineering consultants Prestedge Retief Dresner Wijnberg (Pty) Ltd ("PRDW"). The study investigated the feasibility of using river barges to transport iron ore concentrate from the Company's Agbaja Project via the Niger River to the Gulf of Guinea, then transhipment to large ocean going vessels ("OGVs"). The study concluded that river barging and transhipment was feasible and an economic transport option. The study recommended that iron ore concentrate be initially transported by river barge from a barge loading location south of Banda on the Niger River to the established port of Warri in the Gulf of Guinea where existing port infrastructure would be used to stockpile then re-load the concentrate onto a separate fleet of deeper draft ocean going barges for transhipment to OGVs moored offshore.

As part of the current Preliminary Feasibility Study ("PFS"), PRDW in conjunction with engineering consultants Wilson, Campbell & Associates ("WCA") have completed an optimisation of the Niger River Barging Study. The optimisation has resulted in the removal of the proposed re-handle of iron ore concentrate at Port Warri, bringing about a reduction in capital and operating cost estimates. The previously contemplated Port Warri stockpile and re-handle will be replaced with a river barge to ocean going barge transfer station at Escravos, in the Niger River delta ("Escravos Transfer Station").

#### **Optimised PFS Transport Solution**

The optimised transport solution involves iron ore concentrate being pumped from the Agbaja Plateau down to the Banda barge loading facility (located on the west bank of the Niger River close to Banda), a distance of ~22 km. The concentrate will then be filtered to reduce the moisture content to less than 10% and conveyed to a covered stockpile.

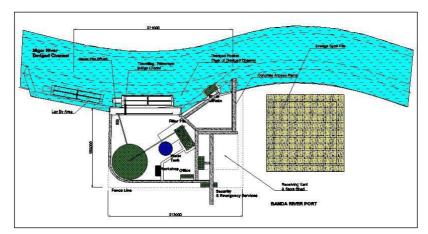
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Barge loading from the stockpile will take place using a travelling, luffing, telescoping barge loader filling Mississippitype barges in a four barge configuration.



Proposed Banda Barge Facility Layout



River Barge Route – Banda to Escravos

Each barge configuration will have dimensions of 21m by 286m long and are designed to carry loads of 4,800t to 8,000t, depending on river water levels. A configuration will be propelled by shallow draft four engine push boats with a preferred speed of 10 knots. Iron ore concentrate will be transported ~ 602km from Banda along the Niger River to the Escravos Transfer Station, a journey time of ~33 hours.



River Barging Configuration

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At the Escravos Transfer Station the concentrate will be transferred to a 20,000t ocean going sea barge. A stockpile arrangement (twin storage domes) may be required to ensure that each river barge configuration can be unloaded while the large ocean barge is travelling to the transhipment facility. The Escravos stockpile will allow the ocean barge to be loaded at a rate of 4,000t/hr and will minimise loading wait times and river barge cycles.

The 20,000t self-propelled and self-unloading ocean going barge will be capable of transferring the concentrate to a floating transhipment storage facility in the Gulf of Guinea approximately 33km offshore. The floating transhipment facility will have a storage capacity of 200,000t and allow for the loading of Panamax and Cape size OGV's for global export markets.



Proposed Escravos Transfer Station

Proposed Floating Transhipment Facility in Gulf of Guinea



Ocean Barge Route – Escravos to Transhipment Facility

## Estimated Barging Costs

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As part of the PFS, barging costs have been estimated to include the loading of river barges at Banda, river travel, transfer costs at Escravos, ocean travel to the floating transhipment facility, subsequent loading of OGV's and owner operating costs. The Free on Board (FOB) operating cost estimate including the lease of river and ocean barges, as well as the transhipment facility and owners costs is detailed in Table 1.



PFS Barging and Transhipment Cost Estimates	
	US\$ per dmt
	(10% moisture)
River Barging Operation	10.60
Ocean Barging Operation	2.82
Transhipment and Loading	4.42
Kogi Iron costs	0.93
Total	18.77
Cost per tonne kilometre	2.97 cents

Table 1 PFS Barging and Transhipment Cost Estimates

Kogi Iron Managing Director Iggy Tan said: "The Company is pleased with the outcome of the barging optimisation work which demonstrates that barging transportation of iron ore concentrate is not only a readily available and effective transport solution, but a most economic option. Barging is widely accepted as a lower cost form of bulk commodity transport compared to both rail and trucking, so the proximity of river transport remains a unique competitive advantage of the Agbaja Iron Ore Project. Our estimated FOB transport cost of just under 3 cents/tonne per kilometre, or around \$19.00 per tonne of concentrate, puts us in good stead for a highly competitive overall operating cost estimate in our PFS."







For more information, please contact:

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#### About Kogi Iron (ASX: KFE)

Kogi Iron Limited is a Perth-based company with the objective of becoming an African iron ore producer through the development of its 100% owned Agbaja iron ore project located in Kogi State, Republic of Nigeria, West Africa ("Agbaja" or "Agbaja Project"). The Company is conducting a Preliminary Feasibility Study on a potential iron ore operation at the Agbaja Plateau initially utilising barging transport of its iron ore product along the Niger River to Warri Port and world export markets. The Company will continue to advance access and usage agreements for an existing under-utilised heavy haulage railway that runs from near the Agbaja Project to Port Warri. This existing railway remains an important part of a longer term transport solution for an expanded production profile.



In recent years Nigeria has sought to diversify its economy, which is dominated by hydrocarbons, into minerals and related industries. Nigeria is the largest country by population in Africa with a GDP growth rate of 7.2% in 2013. The country has very transparent and consistent mining regulations and very favorable fiscal terms for foreign investment in mining.

The Company holds a land position of approximately 400km<sup>2</sup> covering 16 tenements, with the main focus being EL12124 which covers a large part of the Agbaja Plateau. The Agbaja Plateau hosts an extensive, shallow, flat-lying channel iron deposit with Indicated and Inferred Mineral Resource of 586 million tonnes with an in-situ iron grade of 41.3% reported in accordance with the JORC Code (2012). This mineral resource covers approximately 20% of the prospective plateau area within EL12124.

#### Forward-looking Statements

This announcement contains forward-looking statements which are identified by words such as 'anticipates', 'forecasts', 'may', 'will', 'could', 'believes', 'estimates', 'targets', 'expects', 'plan' or 'intends' and other similar words that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known risks, uncertainties, assumptions and other important factors, many of which are beyond the control of our Company, the Directors and management. We cannot and do not give any assurance that the results, performance or achievements. These forward-looking statements are subject to various risk factors that could cause actual events or results of the events or results estimated, expressed or anticipated in these statements.

#### **Competent Person's Statements**

The information in this announcement that relates to the Mineral Resource for the Agbaja Project is extracted from the report entitled "Mineral Resources at Agbaja Increase 20% to 586MT Includes an Indicated Resource of 466MT" created on 10 December 2013 and is available to view of the Kogi Iron web site <u>www.kogiiron.com</u>. The Company confirms that it is not aware of any new information or data that materially affect the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modifies from the original market announcement.

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