

ANNOUNCEMENT TO THE AUSTRALIAN SECURITIES EXCHANGE: 29 AUGUST 2011

# FEASIBILITY STUDY COMPLETED CONFIRMING ROBUST CASH MARGINS FOR JOGJAKARTA IRON PROJECT

## Highlights:

- Feasibility Study completed on a 2 million tonne per annum iron sand mine for the Jogjakarta Iron Project
- Strong projected cash margins and low capital cost per annual tonne of production
- US\$24.20 per tonne operating cost (FOB) for 55% Fe concentrate
- US\$158.3 million capital cost
- Project IRR 44.5% (before tax)
- 163.5 million tonnes Probable Mining Reserve (surface sands) @ 13.7% Fe
- Final Project approvals well advanced
- Mining operations targeted to commence within 18 months

The Board of Indo Mines ("Indo Mines" or "Company") are pleased to announce the successful completion of a Feasibility Study for the Jogjakarta Iron Project ("the Project"), located approximately 30kms from the major Indonesian city of Jogjakarta. The Company was awarded a Contract of Works ("CoW") in November 2008 from the Indonesian Government to develop the Project.

The Company has a 70% interest in the Project, with the 30% joint venture partner, PT Jogja Magasa Mining, being a consortium of Indonesian business people including members of the Kingdom of Jogjakarta.

The staged development of the Project is initially focussed on the production of 2 million tonne per annum of iron concentrate to provide early cash flow to the Company, whilst finalising the technical design of a 1 million tonne per annum pig iron plant with the large European technology provider Outotec.

Commenting on the completion of the Feasibility Study, Managing Director and CEO, Martin Hacon said "I am delighted that the low cash cost position that we have been targeting has been highlighted in the Feasibility Study confirming our expectation that the Jogjakarta Iron Project will be one of the lowest cost iron ore producers in the world".

"This low cost position enables the Company to maintain strong cash margins throughout the commodity cycle for the life of the Project generating strong returns even during times of lower iron ore prices which appears to be the consensus pricing view amongst analysts".

"The Jogjakarta Project provides a starting point from which the Company is aiming to develop other iron projects both throughout Indonesia and the Asia Pacific region, positioning the Company to become the supplier of choice to the growing Indonesian and Asian Steel and Metals Industry."



**Figure 1.1: Project Location** 

Enquiries:

Martin Hacon – Managing Director & CEO Contact Details: Telephone: +64 2163 4419

Shane Cranswick – Company Secretary & CFO Contact Details: Telephone: +61 8 9322 1825

#### Overview

The Jogjakarta Iron Project is focussed on the initial development of a 2 million tonnes per annum iron concentrate mine and processing facility. The free flowing titano magnetite sand is extracted using simple mining techniques, with the iron recovered using magnetic separation to produce an iron concentrate product at 55% Fe. This product is used in the production of iron from Direct Reduced Iron (DRI) technology and blast furnaces.

The various aspects of the Feasibility Study were undertaken by specialist consultants including URS Corporation, CSA Global Pty Ltd, Ferrum Consultants, Engineering and Project Management Services, Resindo Resources Indonesia and Battery Limits.

The Project was independently modelled using discounted cash flow analysis based on adjusted consensus forecast iron ore pricing (Source: Metalytics) confirming the economic viability, including strong cash margins and modest capital cost. Key financial outcomes from the study are as follows:

Table 1.1 – Key Project Economics	
Capital Cost (inclusive of contingency and working capital)	US\$158.3m
Operating Cost (cash cost)	US\$24.20
IRR (before tax)	44.5%

At spot iron ore pricing and foreign exchange rates, the Project has an IRR of 83.1% (before tax).

It is anticipated that operation of the large scale iron sand mining will begin within 18 months from commencement of construction.

### Capital Costs

A summary of capital costs is provided in Table 1.2, showing a modest total of US\$158.3 million, inclusive of 15% contingency, as well as working capital requirements until first shipment of product. This cost also includes development of key infrastructure items for the Project, including the loading facility at Glagah.

Table 1.2 – Capital Costs	
	US\$M
Direct Costs	108.3
Indirect Costs	22.9
Contingency	16.5
Working Capital	10.6
Total Capital Cost	158.3

For the 2 million tonne output of iron concentrate, this capital cost results in a low capital cost per annual tonne of production of US\$79.15.

#### **Operating Costs**

The Feasibility Study has confirmed the expected low operating cash cost of US\$24.20 per tonne FOB vessel, exclusive of government royalties.

This low operating cost will enable the Project to deliver strong cash margins throughout the life of the mine, both at current iron ore prices and the lower long term pricing view amongst analysts.

#### Mining and Reserve

The Company will commence the dry mining of surface sands on the CoW area. CSA Global has defined a Probable Ore Reserve of 163.5 Mt at an average grade of 13.7% Fe for the surface sands accessible above an assumed water table. In defining this reserve, CSA Global relied on metallurgical and financial information relating to the deposit as supplied by Battery Limits, the lead consultant of the Feasibility Study.

All of the material within the mining boundary is mineralised with grades well above the calculated cut-off grade enabling bulk mining methodology to be applied, with minimal feed grade control required. Mining has been scheduled to produce 2.0 Mt of concentrate per annum at 55%Fe.



Figure 1.2: Dry Mining Method

The sand tailings are pumped back to the mine pit to refill the mined-out areas. Fine tailings produced by the Secondary Concentrator Plant will also be returned to the mined-out area. The fine tails will be open-pipe discharged across placed Primary concentrate sand tailings, filling to the original topographical profile. These fines will be incorporated into the upper levels of the sand tails. Independent studies carried out by the University of Jogjakarta have confirmed crop productivity improvements of up to 40% from the returned tails when compared to the original base sand.

#### Infrastructure

The Project is close to the major city centre of Jogjakarta hosting a large national airport, accommodation and health care facilities. Given the size of the commercial and industrial centre, the city is well placed to support the operation, inclusive of goods, services and labour supply.

The Java-Bali Power Interconnection passes the Jogjakarta area capable of providing power to the site supplied by the government-owned and operated Perusahaan Listrik Negara.

The port of Glagah is located on the western boundary of the Project area. The port facility is under construction and will provide a location from which concentrate will be barged and transshipped for FOB sales.

#### **Pricing and Marketing**

Iron concentrate has been produced and exported from New Zealand in commercial quantities for over 30 years for use in both blast furnaces and DRI facilities in Japan and China.

The pricing mechanism is index linked to the Australian Pilbara (62% Fe) high grade fines price inclusive of an adjustment factor to reflect the additional processing costs relating to the  $TiO_2$  and  $Al_2O_3$  content of the iron sand concentrate.

The Company has been approached by and is continuing discussions with major international steel businesses interested in securing domestic supply of iron concentrate and pig iron for potential Indonesian steel making investments and export supply to existing facilities.

#### Optimisation

Following the positive Feasibility Study outcomes, the Company has commenced an optimisation process focussing on the potential transition to dredge mining of the lower level sands to significantly extend the mine life. Initial results indicate that there may be further operating cost savings from adopting this methodology. The Company is also investigating the leasing of key capital items of plant and equipment.

#### Financing

Preliminary discussions have commenced in regard to the financing of the Project and the Company is seeking to optimise the capital structure so as to enhance shareholder value. Further information in regard to the financing will be provided as soon as applicable.

The information in this report that relates to exploration results, mineral resources or ore reserves is based on information compiled by Ms Joan Bath, who is a member Australian Institute of Mining and Metallurgy. Ms Joan Bath is a full-time employee of CSA Global, a consultant of Indo Mines Limited. Ms Joan Bath has sufficient experience, which is relevant to the style of iron ore mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ms Joan Bath consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.