

# Developing a global iron ore business

6 April 2011 ASX / MEDIA RELEASE

# SUNDANCE RESOURCES DELIVERS POSITIVE FEASIBILITY STUDIES FOR THE MBALAM IRON ORE PROJECT

Definitive Feasibility Study for Stage One and Pre-Feasibility Study for Stage Two define a high-quality iron ore Project of global significance that will generate substantial financial returns and position Sundance as a key industry player.

#### **HIGHLIGHTS**

- Estimated Net Present Value over US\$4B for total project (Stage One and Two).
- An Internal Rate of Return of 27% estimated on an un-geared basis.
- Definitive Feasibility Study (DFS) for Stage One based on forecast average production rate of 35 million dry tonnes per annum (Mdtpa) of Direct Shipping Ore (DSO) averaging 63.6% Fe.
- Pre-Feasibility Study (PFS) completed for Stage Two based on continued production of 35 Mdtpa of Itabirite hematite concentrate product at 66% Fe.
- Stage One capital expenditure of approximately US\$4.6B.
- Capital payback projected to be achieved in three years.
- Cash operating costs, pre-royalties, of US\$21.20 per tonne for Stage One.
- Initial JORC-Code compliant Maiden Reserve of 252 million product tonnes at 63.6% Fe.
- Reserve update to follow based on recent mineral resource upgrade.
- Sundance Board formally supports progressing the development of the Mbalam Iron Ore Project, paving the way for transition to production subject to entering into agreements with Government, obtaining Government approvals and securing project finance.
- First ore on ship anticipated in the last quarter of calendar 2014, positioning Sundance to become a significant global iron ore producer.

Sundance Resources Limited (ASX: SDL) ('Sundance' or 'The Company') has taken another step towards becoming a major producer and unlocking a new iron ore province after delivering the Definitive Feasibility Study (DFS) for Stage One, and the Pre-Feasibility Study (PFS) for Stage Two, of its Mbalam Iron Ore Project (Project) in the Republics of Cameroon and Congo in central West Africa.

The Mbalam Iron Ore Project is strategically located at the heart of an emerging iron ore province in central West Africa and is expected to generate strong cash margins and significant returns for Sundance shareholders and the Governments of the Republics of Cameroon and Congo. Sundance is well placed for first-mover advantage in this exciting new province, and the development of this integrated mine, rail and port project is expected to unlock its potential.

Stage One of the Project focuses on the production of DSO for approximately 10 years, with Stage Two covering the next 15 years of production of high-grade Itabirite hematite concentrate.

The DFS covers all aspects of Stage One including the geology, mining, infrastructure, engineering, construction and economics as they relate to development and production. The DFS now forms the basis for capital appropriation and will provide the budget input for the Project to move forward to a Final Investment Decision.

The PFS for Stage Two will progress to a DFS commencing in 2012, leading to mining of Sundance's broader Itabirite hematite resource which has a current resource estimate of 2.32 billion tonnes grading 38% Fe.

The completion of both feasibility studies paves the way for Sundance's transition from explorer to producer subject to entering into agreements with Governments, obtaining Government approvals and appropriate project finance. First production from Stage One is targeted for the last quarter of 2014, subject to achieving these milestones in a timely fashion.

Sundance CEO and Managing Director, Mr Giulio Casello, said the completion of the feasibility studies was an important milestone for Sundance shareholders and partners, for the people of Cameroon and Congo, and for the emerging iron ore province of central West Africa.

"This brings to fruition more than three years of hard work and positions Sundance to realise its vision of becoming a world-class iron ore producer," said Mr Casello.

"These two studies have defined a high-quality iron ore project of global significance that will generate substantial financial returns and position Sundance as a key player in the international iron ore space. In a very short amount of time we have defined a premium high-quality iron ore resource and completed a Feasibility Study that validates this as a technically and economically viable project with robust margins and long mine life.

"I would like to take this opportunity to congratulate our team on delivering this excellent result. We are all now focused on moving ahead as rapidly as possible to secure final approvals and obtain project funding to enable us to commence construction later this year.

"The development of the Mbalam Iron Ore Project will also bring significant economic and employment benefits to the countries of Cameroon and Congo, as well as provide the opportunity for the development of neighbouring iron ore deposits which could potentially see production in the region ramp up to 100 million tonnes per year. This will lead to a change in the global iron ore landscape."

The DFS confirms that Stage One of the Mbalam Iron Ore Project is an economically and technically robust DSO project which will produce a high quality product averaging 63.6% Fe at a rate of 35Mdtpa, generating substantial returns for Sundance, its shareholders and the Governments of Cameroon and Congo.

Further work will now be undertaken in a value engineering stage which Sundance expects will identify opportunities to reduce the estimated capital cost, increase reserves and optimise the schedule.

Sundance's strategy is to continue to provide resource and reserve updates to support a 10 year Stage One operation producing DSO sinter fines products followed by a nominal 15 year Stage Two operation producing iron ore concentrate from the Itabirite hematite.

The production profile indicates that current Ore Reserves provide feed for years one to eight, including ramp up. DSO feed for the remainder of Stage One (to year 10) will be sought from other DSO sources. It is expected that these additional DSO tonnes will come from a combination of:

- current Mineral Resources that are not yet converted to Ore Reserves, defined in the ASX release on 17 March 2011. (These Resources are expected to account for the major part of any increase);
- satellite deposits;
- extensions of existing mineralisation at Nabeba and Mbarga; and
- optimisation of sinter fines grades to include sub-grade material, which is currently excluded from the reserve estimates.

# **DEFINITIVE FEASIBILITY STUDY**

The following information refers specifically to Stage One of the Mbalam Iron Ore Project which is proposed to produce a high quality sinter fines product at a rate of 35 Mdtpa and involves:

- mining from two high-grade hematite deposits, primarily Mbarga and Nabeba;
- constructing a 510 kilometre long heavy haulage railway system dedicated to the transport of iron ore from Mbarga to the Cameroon coast with a 70 kilometre rail spur to Nabeba; and
- constructing a deep water port facility capable of accommodating bulk iron ore carriers of up to 300,000 Mt.

# Resources

The Global High Grade Resource Estimate used in the Definitive Feasibility Study is shown in the following table:

Resource	Tonnes	Fe in	SiO <sub>2</sub> in	Al <sub>2</sub> O <sub>3</sub> Product	P in	LOI in
Classification	Product	Product	Product	(%)	Product	Product
	(Mt)	(%)	(%)		(%)	(%)
Indicated	370.7	61.2	6.2	2.8	0.097	2.6
Inferred	75.6	55.8	9.5	3.5	0.109	4.2
Total High Grade Resources	446.3	60.3	6.8	2.9	0.099	2.9

Resource Estimation and Technical Geological consultants are Mr. Lynn Widenbar (MAusIMM), Mr. Peter Kitto (FAusIMM) and Ms. Sue Thornett (MAIG).

#### **Ore Reserves**

The JORC-Code Compliant Ore Reserve Estimate – Product Tonnes, as detailed below, was completed by AMC Consultants. All Reserves are in the Probable category.

Ore Reserve	Tonnes	Fe in	SiO <sub>2</sub> in	Al <sub>2</sub> O <sub>3</sub> Product	P in	LOI in
Classification	Product	Product	Product	(%)	Product	Product
	(Mt)	(%)	(%)		(%)	(%)
Probable	251.5	63.57	3.64	2.54	0.08	2.42

# **Capital Cost**

Capital development costs for the initial Stage One of the operation are estimated to be US\$4.6 billion (real), with payback of capital in three years from the start of production. A breakdown of total capital costs is shown in the table below. The construction indirect costs in this table have been allocated to the areas of activity.

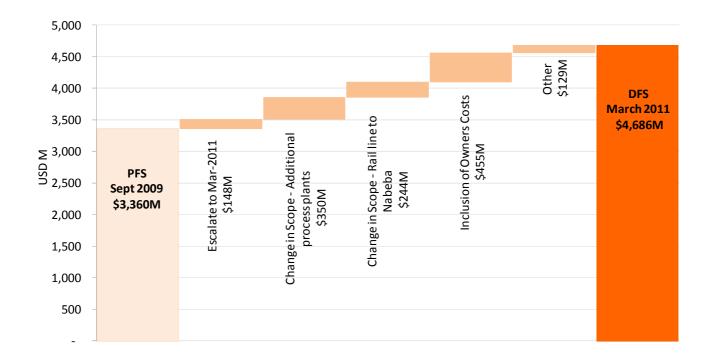
Costs (including construction indirects)	US\$M
Mining, Processing and Infrastructure	914
Rail	2,019
Port	537
Subtotal	3,471
EPCM, Owners costs and Contingency	1,214
Total (US\$M, real as at December 2010)	4,686

# **Comparison to PFS**

A Pre-Feasibility Study (PFS) was completed for Stage One in 2009. Since then the scope of the Project has changed with the inclusion of the Nabeba mine in the Republic of Congo and the associated rail spur line. These extra scope items added approximately US\$594M to the base cost.

Owner's costs were not included in the PFS which adds another US\$455M. Therefore an 8% price increase is seen in direct comparison from the PFS to the DFS.

A comparison of the PFS to the DFS is illustrated below.



### **Operating Cost**

The results of the DFS indicate that the Project will be robust, with a forecast average operating cost of US\$21.20 a tonne Free on Board (FOB) excluding royalties. The operating cost includes mining, crushing and screening, rail haulage and ship loading and in country administration and corporate costs.

# **Development Schedule**

Subject to entering into agreements with the Governments of Cameroon and Congo, obtaining the relevant approvals from those Governments and securing appropriate project financing, Sundance plans to commence construction in late 2011 and target commencement of shipping of iron ore from Mbalam in the last quarter of 2014.

# **Financials**

Financial outcomes from the feasibility studies for the Mbalam Iron Ore Project (Stages One and Two) include:

Project Economics		
NPV at 12.5% discount rate*	US\$4.3B	
IRR*	27.4%	
Capital payback period	3 years	
Project life	25 years	
Production rate	35 Mdtpa	
Total revenue generated (nominal)	US\$99B	
Long term Fe price (real, applied 2020 and beyond)	US105c/dmtu	

<sup>\*</sup>Nominal, post tax, ungeared

Revenues were based on iron ore pricing forecasts provided by <sup>©</sup>Metalytics Iron Ore Briefing Service. The forecasts reflect strong current and future demand for iron ore translating to continuing strong prices.

Project modelling has been performed on the basis that Sundance achieves a favourable Mining Convention in both the Cameroon and Congo, which includes:

- 2.5% Royalty;
- Governments to receive 10% equity free carried in line with Mining Codes;
- Concessional tax treatment in Cameroon and Congo; and
- Exemption of import duties for the life of the Project.

#### PRE-FEASIBILITY STUDY - STAGE TWO

At Mbarga the Itabirite Hematite Resource for Stage Two is defined as follows:

Resource	Tonnes	Fe in	SiO <sub>2</sub> in	Al <sub>2</sub> O <sub>3</sub> Product	P in	LOI in
Classification	Product	Product	Product	(%)	Product	Product
	(Mt)	(%)	(%)		(%)	(%)
Indicated	1,431	38.0	44.5	0.44	0.04	0.32
Inferred	894	38.0	44.1	0.54	0.05	0.43
Total	2,325	38.0	44.4	0.48	0.04	0.36

The Stage Two development is proposed to commence prior to the completion of Stage One to ensure no disruption to mining operations. The construction of Stage Two is expected to be funded from the cash generated from Stage One with a capital cost of approximately US\$3.1B. This includes \$400M for a 4Mtpa pellet plant. Cash operating costs, pre-royalties, are approximately US\$40 per tonne with the product expected to attract a revenue premium of approximately 20%.

Stage Two involves the development of the processing plant and expansion of the Mbarga mine to extract the Itabirite hematite. The removal of the high grade hematite resource in Stage One will act as the prestrip for the Itabirite mining as the Itabirite is directly below the high grade hematite resource. The processing will include a proven grind and float beneficiation to produce a premium concentrate product with approximately 47% weight recovery.

Target Itabirite concentrate product specifications utilised for the PFS were 66%Fe with 3.5% Silica. Flotation optimisation test work continued after the Itabirite PFS design basis was set, this testwork indicates the potential to achieve an improved concentrate quality.

A number of sites were identified for potential hydro power to deliver the estimated 350MW of electricity required.

#### **NEXT STEPS**

With the completion of these studies, Sundance is well positioned to progress the development of the Project. For the remainder of 2011 the following will be the focus areas:

- The DFS has identified a number of opportunities to reduce the total capital requirements and increase reserves. A value engineering study will now be commissioned to capture these opportunities prior to Final Investment Decision.
- ➤ Discussions with potential strategic partners are progressing well and we look forward to concluding these discussions in the first half of 2011.
- Excellent relationships with the Governments of Cameroon and Congo continue and we expect to have Conventions completed after entering into an agreement with a strategic partner or having a clear path to project financing.

Sundance Resources looks forward to Final Investment Decision and the start of construction before the end of the year.

#### **ENDS**

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#### The Mbalam Iron Ore Project

The Mbalam Iron Ore Project ('Project') is located in an area that straddles the border of both Cameroon and Congo in central West Africa approximately 485km east of the coastal city of Kribi in south-west of Cameroon.

The Project comprises Exploration Permit 92 ('EP92') located in the East Province of the Republic of Cameroon, and Mining Research Permit 362 ('MRP362') and Mining Research Permit 363 ("MRP363"), located in the Sangha Province of the Republic of Congo. EP92 is owned by Cam Iron SA, a company incorporated in the Republic of Cameroon. Cam Iron SA is a 90%-owned subsidiary of Sundance. MRP362 and MRP363 are owned by Congo Iron SA, a company incorporated in the Republic of Congo. Congo Iron SA is an 85%-owned subsidiary of Sundance.

The Governments of Cameroon and Congo have enacted modern mining codes to attract mining investment. These mining codes provide for the Governments to take a 10%, free carried, equity stake in the Project upon the granting of Mining Permits. Sundance is currently negotiating Conventions to enable the granting of Mining Permits with both the Cameroon and Congolese Governments. The Convention covers agreements with the Government with respect to land access, tax and royalty regimes amongst other things.

#### **Forward-Looking Statement**

Certain statements made during or in connection with this communication, including, without limitation, those concerning the economic outlook for the iron ore mining industry, expectations regarding iron ore prices, production, cash costs and other operating results, growth prospects and the outlook of Sundance's operations including the likely commencement of commercial operations of the Mbalam Iron Ore Project and its liquidity and capital resources and expenditure, contain or comprise certain forward-looking statements regarding Sundance's exploration operations, economic performance and financial condition.

Although Sundance believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other Government actions, fluctuations in iron ore prices and exchange rates and business and operational risk management. For a discussion of such factors, refer to Sundance's most recent annual report and half year report. Sundance undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.

#### **Competent Persons Statement**

The information in this release that relates to Mineral Resources is based on information compiled by Mr Robin Longley, a Member of the Australian Institute of Geoscientists, and Mr Lynn Widenbar, a member of the Australasian Institute of Mining and Metallurgy. Mr Longley is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation and type of Deposit 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".

Mr Longley consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears. Mr Widenbar is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation and type of Deposit 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". Mr Widenbar consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this release that relates to Ore Reserves is based on information compiled by Mr Bruce Gregory, a member of the Australasian Institute of Mining and Metallurgy. Mr Gregory is employed by AMC Consultants Pty Ltd and is a consultant to the Company. Mr Gregory has sufficient experience which is relevant to the style of mineralisation and type of Deposit 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". Mr Gregory consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

