

## Media Release



**Fortescue**  
The New Force in Iron Ore

# Maiden Reserve of over 700 Million Tonnes for Solomon Hub

## Highlights

- Reserve underwrites development to support 60mtpa mine plan
- Bottom decile cash cost at A\$20 - A\$25/tonne FOB
- Very low average strip ratio 1.5 : 1
- Conventional drill and blast mining
- Similar style of typical Pilbara fines product suited to Asian markets
- Major upside in Reserves, estimated from only 50% of resource base

**PERTH, 20 May 2011:** Fortescue Metals Group Ltd (Fortescue) is pleased to announce a maiden Reserve Estimate of 716 million tonnes (Mt) for the first stage of the Solomon Hub.

The Reserve comprises Brockman fines of 314Mt and CID fines of 402Mt of a style that is typical of Western Australia's Pilbara region and for which well established markets exist across the Asian steel sector.

"This maiden Reserve for the Solomon Hub underwrites the large scale development currently underway at Solomon to support the 60Mt per annum mine plan," Fortescue's Chief Operating Officer Nev Power said.

"As further drilling is undertaken and considering the low strip ratio and operating costs, the company expects this Reserve number to double over time," Mr Power stated. "The 90% conversion from pit model Resource to Reserve gives us great confidence for future additions to our overall Reserve portfolio".

An independent mine study identified the Solomon Hub as a low cost operation with an average strip ratio of around 1.5 to 1 and an ore body that can be mined with conventional drill and blast methodology. The study also identified a cash cost (FOB per wet tonne) ranging between A\$20 - \$25 per tonne, which would put Solomon at the bottom end of the cost curve.

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The Reserve was estimated from a Measured and Indicated Resource of 858Mt and a subsequent in-pit inventory of 795Mt which in turn converted at 90 per cent to the estimate figure.

The exploration team is continuing both wide space and infill drilling across the Solomon Hub that is expected to result in additional total Resources together with the upgrading of existing Inferred Resources to either Indicated or Measured status to facilitate future reserve studies.

The maiden Reserve was estimated from only 50 per cent of the current total Resources at the Firetail and Kings deposits noting that 882Mt of Inferred Resources were not available for the Reserve study pool.

The ores will be beneficiated through typical Pilbara processing techniques to upgrade the Reserve to a target product grade of 59% Fe for the Brockman and 57% Fe for the CID ores, which is in the middle of typical Pilbara ores sold into Asia.

The Brockman product has a reserve Fe grade close to Fortescue's well established Rocket Fines product from the Chichester Hub. The CID ores with a calcined Fe grade of approximately 64%, will demonstrate the same high "value in use" properties as Fortescue's Rocket Fines product.

The full detail of the Reserve statement is attached.

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**Media Contact:**

Elizabeth Gosch

Fortescue

Mobile: 0414 319 775

Phone: (08) 6218 8888

**Coffey Mining** ABN 52 065 481 209  
1162 Hay Street, West Perth WA 6005 Australia,  
PO Box 1671, West Perth WA 6872 Australia  
T (+61) (8) 9324 8800 F (+61) (8) 9324 8877  
coffey.com

## 1 PROJECT BACKGROUND

Fortescue Metals Group (Fortescue) has undertaken mining and other studies to ascertain the viability of an iron ore operation at their Solomon Iron Ore Project in the Pilbara region of Western Australia.

Coffey Mining Pty Ltd (Coffey Mining) were commissioned by Fortescue to undertake mine engineering studies comprising pit optimisation, mine design and mine production scheduling as part of its current evaluation of the Solomon Iron Ore Project (the Solomon Hub).

The deposits that were considered for this Ore Reserve determination are listed below.

- The Firetail deposit, consisting of two mining areas, North and South; and
- The Kings deposit, consisting of two mining areas - Valley of the Kings and Valley of the Queens.

The Solomon Hub will produce two fines products:

- A Brockman fines product, made up of bedded iron (BID) and detrital iron (DID), from both the Firetail and the Kings deposits and;
- A Channel Iron (CID) fines product from the Kings deposit.

## 2 ORE RESOURCES

For the purposes of the mining study, only the Firetail and Kings deposits were examined in this study. The total inventory of the Firetail and Kings Resources is 1.7 Billion Tonnes. Currently, only 50% of the Resources has been converted to Indicated or Measured Resources, primarily due to the size of the deposits and the drilling density needed to increase confidence in the remaining Resource.

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An Ore Resource for the Solomon Hub was developed by Fortescue and announced on 23 August 2010. The Ore Resource is outlined as shown in the table below.

<b>Solomon Project Reserves Statement August 2010 Resources</b>						
	<b>Mt</b>	<b>Fe (%)</b>	<b>SiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>P (%)</b>	<b>LOI (%)</b>
<b>Kings</b>						
Measured	66	57.6	5.67	1.73	0.047	9.85
Indicated	597	56.0	7.24	3.12	0.062	9.00
Inferred	715	55.6	7.63	3.340	0.066	8.86
<b>Sub Total</b>	<b>1,378</b>	<b>55.9</b>	<b>7.37</b>	<b>3.17</b>	<b>0.063</b>	<b>8.97</b>
<b>Firetail</b>						
Measured	42	59.7	5.05	2.49	0.139	6.43
Indicated	153	58.3	6.88	2.89	0.109	6.13
Inferred	167	57.8	6.76	2.96	0.110	6.92
<b>Sub Total</b>	<b>362</b>	<b>58.2</b>	<b>6.61</b>	<b>2.88</b>	<b>0.113</b>	<b>6.53</b>
<b>Solomon Total</b>	<b>1,740</b>	<b>56.4</b>	<b>7.21</b>	<b>3.11</b>	<b>0.074</b>	<b>8.46</b>

### 3 ORE RESERVES

The Ore Reserves that was determined for the Solomon Hub were based on the following data:-

- The Measured and Indicated Resources of 858Mt as developed by Fortescue and announced on 23 August 2010.
- Ground conditions influencing open pit wall stability were assessed by Snowden Mining Industry Consultants Pty Ltd.
- A mining study undertaken by Coffey Mining, which was completed in late 2010. This included current mining methods, costs, recovery and processing information.
- Mining and processing cost data as supplied by Fortescue, largely based on costs from the current Fortescue Pilbara operations and following the awarding a number of major mining equipment and mining contract tenders for the Fortescue Chichester operations.
- Metallurgical and recovery data as supplied by Fortescue, following metallurgical testing of Solomon Project diamond holes and Bauer drill bulk samples conducted to establish Run-Of-Mine (ROM) size distribution, upgradability and potential mass recovery.
- Hydrogeological and water extraction studies, including capital and operating cost estimates, as undertaken by Fortescue.
- A life of mine schedule that meets the required product specification requirements in a practical and achievable manner throughout the mine life.

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The key parameters on which the Solomon Ore Reserves have been predicated are summarised in the table below.

Solomon Project Reserves Statement Key Parameters		
Parameter	Unit	Value
Ore production rate	Mtpa	60
Channel Iron Deposit Fines(CID)	Mtpa	40
Brockman Fines	Mtpa	20
Iron ore price (Average) Fines	US¢/dmu	99
Average Mass Recovery – Firetail DID	%	75.5
Average Mass Recovery – Kings DID	%	75.5
Average Mass Recovery – BID	%	81.5
Average Mass Recovery – CID	%	84.2
Total Ore Production Cost, FOB	A\$/t ore	\$20 to \$25
Royalty	%	5.625

A diluted Resource model was generated, by combining the 5m(X) x 5m(Y) x 2.5m(Z) sub-cells in the Fortescue Resource models to;

- Firetail deposits: 25m(X) x 25m(Y) x 5m(Z);
- Kings deposits: 50m(X) x 25m(Y) x 5m(Z)

No additional dilution or ore loss, as a result of the mining process, was considered during pit optimisation and Ore Reserve estimation. Since the optimisation model was fully diluted for the chosen selective mining unit size, the ore recovery factor was set to 100% in the optimisation and Ore Reserve estimation.

Detailed marketing assessments have been undertaken which support consumption trends and other factors which may affect future iron ore supply and demand. All other factors, including risk assessments, environmental studies, legal, social and governmental issues have been accounted for and described in the Fortescue study.

Mine scheduling was undertaken using the MineSight Software Scheduling Optimiser, with the aim of confirming the ability to produce 60Mtpa of final product. The schedule was based on annual reporting periods, giving a mine life of 10 years.

The Project has an overall strip ratio of 1.53 with the respective deposits having a strip ratio of 0.54 for Firetail and 1.94 for the Kings deposit.

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The Ore Reserves that have been declared are based on the following Fe cut-off grades

<b>Solomon Project Reserves Statement Kings Deposit Cut Off Grades</b>	
<b>Ore Type</b>	<b>Cut Off Grade (Fe%)</b>
Brockman Iron Deposit	52
Detrital Iron Deposit	52
Channel Iron Deposit-Lower	52
Channel Iron Deposit-Upper	50
Hardcap	52

<b>Solomon Project Reserves Statement Firetail Deposit Cut Off Grades</b>	
<b>Ore Type</b>	<b>Cut Off Grade (Fe%)</b>
Brockman Iron Deposit	50
Detrital Iron Deposit	50
Channel Iron Deposit-Lower	54
Hardcap	50

An Ore Reserve statement for the Solomon Iron Ore Project as of May 2011 is provided in the table below. This Reserve has been prepared in accordance with the rules and regulations of the Australasian Joint Ore Reserves Committee (JORC) 2004. Ore Reserves can be classified as either Proven or Probable. The Ore Reserves are the economically mineable part of the Measured and/or Indicated Mineral Resource. Ore Reserves cannot be derived from an Inferred Mineral Resource. All stated Ore Reserves are of the Probable category.

<b>Solomon Project Reserves Statement Reserve Statement</b>					
<b>Deposit</b>	<b>Probable Ore Reserves<sup>(1)</sup></b>				
	<b>Mt</b>	<b>Fe (%)</b>	<b>SiO2 (%)</b>	<b>Al2O3 (%)</b>	<b>P (%)</b>
Firetail	200.9	57.7	7.73	2.83	0.114
Kings	257.9	55.8	7.77	3.01	0.055
Queens	257.4	55.6	7.51	2.94	0.058
<b>Total Solomon</b>	<b>716.3</b>	<b>56.3</b>	<b>7.66</b>	<b>2.93</b>	<b>0.073</b>

Note: 1. Head grades shown.

Solomon Project Reserves Statement Reserve Statement						
Material Type	Probable Ore Reserves <sup>(1)</sup>					
	Mt	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	LOI (%)
Detrital Iron Deposits (DID)	131.7	56.2	10.42	4.79	0.046	3.62
Bedded Iron Deposits (BID)	182.1	57.6	7.67	2.61	0.121	6.64
Channel Iron Deposits (CID)	402.5	55.7	6.76	2.47	0.060	10.71
<b>Total Solomon</b>	<b>716.3</b>	<b>56.3</b>	<b>7.66</b>	<b>2.93</b>	<b>0.073</b>	<b>8.37</b>

Note: 1. Head grades shown.

Based on the mass recovery data as summarised previously, the Solomon Project fines product tonnes and grades are shown in the table below.

Solomon Project Reserves Statement Product Summary						
Product	Mt	Fe (%)	SiO <sub>2</sub> (%)	Al <sub>2</sub> O <sub>3</sub> (%)	P (%)	LOI (%)
Brockman Fines	269	58.9	6.59	2.70	0.086	5.287
CID Fines	318	57.1	5.23	1.91	0.060	10.806

The CID fines product gives a calcined iron grade of approximately 64%Fe.

The reported Reserves have been compiled by Mr John Hearne. John Hearne is a Fellow of the Australian Institute of Mining and Metallurgy and an employee of Coffey Mining. He has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking, to qualify as a Competent Person as defined in the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves' of December 2004 ("JORC Code") as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, the Australian Institute of Geoscientists and the Minerals Council of Australia. John Hearne gives Fortescue Metals Group Ltd consent to the inclusion of the matters based on this information in the form and context in which it appears.

For and on behalf of Coffey Mining Pty Ltd

**John Hearne**  
**Regional Manager – WA**