

#### Stock Data

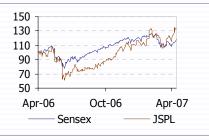
No. of shares : 31mn Market cap : Rs 86bn

52 week high/low : Rs 2,800/Rs 1,151 Avg. daily vol. (6mth) : 33,700 shares Bloomberg code : JSP IN Reuters code : JNSP.BO

#### Shareholding (%) Mar-07 QoQ chg

Promoters	59.0	(0.1)
FIIs	23.1	1.0
MFs / UTI	4.5	(0.8)
Banks / FIs	0.0	0.0
Others	13.3	(0.1)

#### **Relative Performance**



Source: ENAM Research, Bloomberg

## Jindal Steel & Power Ltd

Rs 2,785

Target Price: 3,243 Potential Upside: 16%

### Growth fuelled by coal

### **Financial summary- Consolidated**

Y/E March	Sales (Rs mn)	Adj PAT (Rs mn)	Consensus EPS* (Rs.)	EPS (Rs.)	Change (YoY %)	P/E (x)	RoE (%)	RoCE (%)	EV/EBITDA (x)	DPS (Rs)
2006	25,893	5,735	-	186.2	9	10.2	36.3	20.6	9.0	15.0
2007E	34,756	6,971	223.5	226.3	22	10.5	32.2	16.6	9.0	16.0
2008E	56,386	9,003	289.9	292.3	29	9.5	31.0	19.6	6.8	16.5
2009E	73,504	15,637	302.7	507.7	74	5.5	38.3	24.3	4.4	17.5

Relative to Sector: Outperformer

Source: \*Consensus broker estimates on standalone basis; Company, ENAM estimates



### **Table of contents**

	Slide No.
Investment Summary	3
Business Drivers	4
Iron and Steel Business	6
Industry Outlook	9
Power Business	12
<ul> <li>Financials &amp; Valuation</li> <li>Sum of Parts Valuation</li> <li>Comparative Valuation</li> <li>JPL – FCF Valuation</li> <li>Company Financials</li> </ul>	15 16 17 18 19
Risks to call	21
<ul> <li>Appendix</li> <li>Structure – JSPL</li> <li>Value Chain</li> <li>Steel Production Process</li> <li>ROE Sensitivity –Jindal Power</li> </ul>	23 24 25 26 27

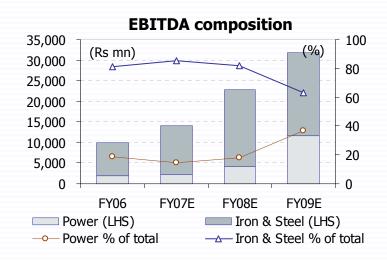


## **Investment Summary**

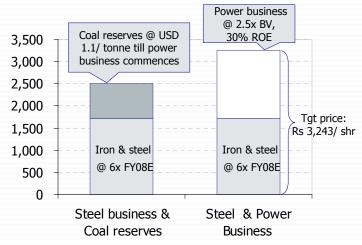
- Resource Advantage: Sizable iron ore & thermal coal reserves used in steel & power
- Sponge iron & steel business: ~25% cost competitive to BF producers (refer to slide 6)
  - Profitable and rapidly growing business (72% of FY06 EBIT)
  - Steel expansion: 2.5 mtpa steel capacity already in place;
     volumes to nearly triple in two years from current level
  - Value addition EAF steel (longs & structural) from sponge iron (captive iron ore & thermal coal, captive power)
  - Optimizing captive resources for further value addition (flat products - steel plates)
    - ▶ EAF+ BF (captive iron ore + imported coking coal)

### Power: offsetting steel cyclicality

- Hugely profitable power business (28% of FY06 EBIT)
- Power capacity to increase nearly four times from current 340 MW through subsidiary; setting up 1000 MW mega thermal power project using captive coal
- High ROE business (~30% ROE), merchant power plant outside the purview of regulated returns
- Valuations: Does not reflect upside of power project
  - At CMP of Rs 2,785 the stock trades at 9.5x FY08E consolidated earnings



### **SOP Valuations (Rs/share)**



Source: ENAM Research

## **Business Drivers**



### **Business Drivers: Steel & Power**

### **Steel Product Mix**

(mn tonnes)	FY06	FY07E	FY08E	FY09E
Parallel Flange Beam - Volume (mn tonnes) - Gross Realization (Rs/ tonne)		0.0	0.0	0.6 29,000
Plates - Volume (mn tonnes) - Gross Realization (Rs/ tonne)	-	-	0.5	0.8 28,546
Semi/ Finished Steel product - Volume (mn tonnes) - Gross Realization (Rs/ tonne)	0.2	0.5 28,143	0.5 28,509	0.7 28,778

### **Power Business**

	FY06	FY07E	FY08E	FY09E
JSPL power - External sales - Units (mn Kwh) - Realization (Rs/ Kwh)		1,270 2.3	2,024 2.4	1,701 2.4
JPL External sales - Units (mn Kwh) - Realization (Rs/ Kwh)	- -	- -	-	3,942 2.5

### **Consolidated EBITDA**

(Rs mn)	FY06	FY07E	FY08E	FY09E
Iron & Steel EBITDA	8,194	11,959	18,767	20,165
Power EBITDA - JSPL EBITDA - Jindal Power EBITDA		<b>2,079</b> 2,079	<b>4,057</b> 607 3,449	510
Consolidated EBITDA	10,070	14,039	22,823	31,768
% of consol EBITDA - Power - Iron & Steel	18.6 81.4	14.8 85.2	17.8 82.2	36.5 63.5

Please refer to Appendix 1 for JSPL Structure

Source: Company, ENAM Research; Note: JSPL = Jindal Steel and Power Ltd; JPL = Jindal Power Ltd

Capacity expansion and higher volume of value added products to drive growth

## **Iron & Steel Business**

# Iron & Steel: Highly cost competitive, favorable product mix ahead



### Process advantage

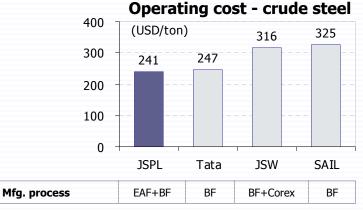
- EAF+BF: EAF captive iron ore & captive coal/ power,(advantage of coal reserves to last for more than 20 years)
  - ▶ BF using captive iron ore , imported coking coal
- Highly competitive in steel production, ~25% more cost competitive than integrated producers, using BF route
- Iron ore, ~25% of total requirements are met by captive mines
  - ▶ Long term agreements for balance requirements at ~Rs 1,100 per tonne

### Logistics advantage

- Coal mines 55km away, estimated reserves of more than 100mn tonnes
  - High ash coal being washed in coal washery (6mtpa capacity)
  - Washery rejects being utilized to generate power
- Iron ore mines are 200km away with estimated reserves of more than 200mn tonnes
  - Captive power located within the plant area

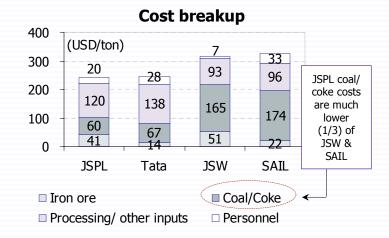
### **Level of integration**

		JSPL	Tata	JSW	SAIL
Iron Ore	- Fully - Partly	- √ (25%)	✓ -	- √(25%)	✓ -
Thermal Coal	- Fully - Partly	✓ -	✓ -	-	✓ -
Coking Coal	- Fully - Partly	-	<i>-</i>	-	~
Coke	- Fully - Partly	- <	~	- ~	- <
Power	- Fully - Partly	√ -	- <	√ -	<i>-</i>



**BF:** Blast furnace; **EAF:** Electrical Arc Furnace – DRI+Pig iron

Please refer to Appendix 2 for JSPL Value chain & Appendix 3 for steel production using blast furnace and electric arc furnace



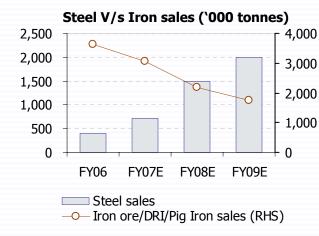
Source: Company, ENAM Research



## Iron & Steel Strategy: Expansion Plans

### Current Expansion: Significant scale up at existing location

- Higher value addition, less iron ore/ metallic and more steel
- Product mix improvement: Currently in long products, foray into flats (plates)
- Input integration to reduce cost
  - Sinter plant of 2.5mtpa set up to utilize cheaper iron ore fines
  - Coke oven plant capacity expanded to 0.8mtpa to reduce purchase of costlier coke
  - Power: Captive power plant capacity utilizing waste heat & fuel gases expanded to 340MW



Source: Company , ENAM Research

### **□** In addition, JSPL is exploring the following projects which have not been factored in

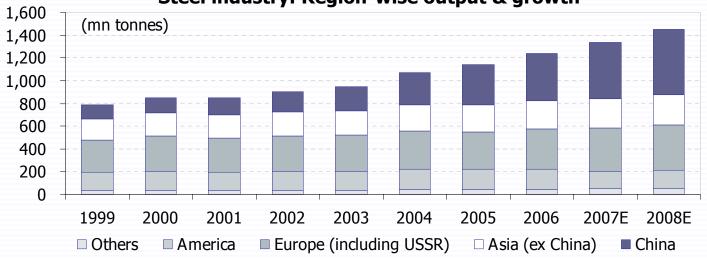
- Greenfield opportunities in India
  - 6mtpa steel plant planned in Orissa at an investment of Rs 135bn
  - 5mtpa steel plant planned in Jharkhand at an investment of Rs 115bn
- Global opportunities Bolivian iron ore mines
  - Agreement with the Bolivian Government to exploit the El Mutun iron ore mines, estimated to contain 40bn tonnes of iron ore of medium-grade quality (~50% Fe content). JSPL has rights to exploit 50% (20bn tonnes of iron ore).
  - Project would involve an investment of USD 2.1bn over 8 years in an integrated steel plant producing 1.7mtpa of long products, DRI of 6mtpa, pellet plant capacity of 10mtpa and a 450MW power plant
  - Project would be executed on a modular basis with initial cash flows from the project used to support future investments, thus reducing the risks

## **Industry Outlook**



### **Steel Outlook Remains Favourable**





Source: IISI, ENAM Research

**Steel Industry: (% growth)** 

Growth %	1999	2000	2001	2002	2003	2004	2005	2006	2007E	2008E
Asia (ex China)	0.9	10.7	(0.8)	4.7	(2.0)	9.7	3.6	3.9	4.0	4.5
China	8.2	2.6	18.6	20.8	20.8	27.4	26.0	18.5	18.0	16.0
Europe (including USSR)	0.8	8.8	(1.4)	1.2	2.3	7.2	(2.0)	6.4	6.0	5.0
America	(8.0)	5.9	(9.9)	4.2	3.3	5.8	(3.9)	2.2	(10.0)	3.0
Others	(0.1)	2.8	6.1	6.3	2.3	12.4	7.6	2.0	5.0	5.0
TOTAL	1.5	7.4	0.3	6.3	5.2	12.4	6.6	8.8	7.3	8.8

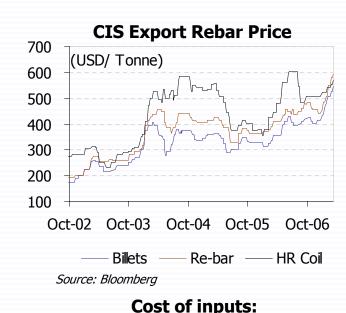
Source: World Steel (IISI), Eurofer, OECD, ENAM Research

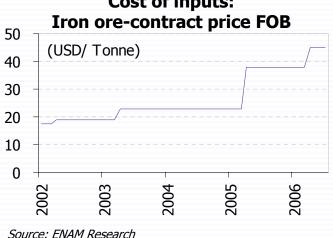
Industry consolidation and production cutbacks are likely to provide stability to steel prices in the medium term



### **Steel Prices Could Rule Firm**

- In the first two months of CY07, strong growth in steel output in China & Europe offset the slowdown in America leading to an overall growth of 10.5% YoY over the corresponding period in CY06
- Steel prices have remained firm over the last few months after recovering sharply from their lows in early 2006
- ⇒ In the short term, global tightening could result in lower growth, resulting in a subdued pricing outlook
- In the medium term, however, cost of production is likely to remain high on account of iron ore tightness, and higher energy costs
- Industry consolidation and production cutbacks would be key price drivers. We believe higher cost pressures coupled with consolidation would keep steel prices in the new band of USD 500-600 per tonne in the medium term





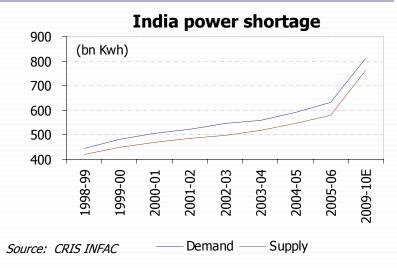
Domestic steel prices could however be capped at current levels due to government pressure

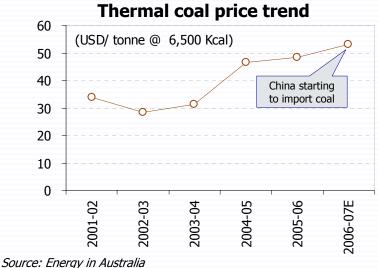
## **Power Business - Jindal Power**



## Jindal Power - New Profitable Growth Engine

- JPL, a subsidiary of JSPL (99.8 % stake) is setting up a coal based 1000MW thermal power plant
  - Merchant power plant , outside the purview of regulated returns, leading to higher ROE
  - Phase I (250MW) is expected to start by June 07 with 250MW added every quarter adding to 1000MW by March 2008
- Scalable project, capacity could be doubled to 2000MW on the back of strong cash flows from plant and existing infrastructure:
  - Sufficient land availability, coal washeries
  - Water dam across river Kurket, 25kms from power plant
- **○** Total project cost at ~Rs 43bn
  - Debt/ Equity to be 70:30 to enhance ROE
  - Project has achieved financial closure
  - Orders for the entire project have been placed
- JPL has already entered into contracts for sale of 350MW power with JSPL @ Rs 2.1/ kwh
  - Tying up power off-take agreements for the balance 650MW. These are likely to be at a much higher rate
- ⇒ JSPL has purchased an effective stake of ~28% in 4000MW Sasan ultra mega power project at a minor investment of Rs 1.26 mn





Power business to offset cyclicality of steel business and drive future profits



## **Power: Cost Competitive & Scalable**

### Captive coal mines at distance of only 8kms from project site

- Captive coal mines with ~ 250mn tonnes reserves of coal with lease period of 30 years
- Pit head based power plant, reducing freight costs and leading to lower inventory requirements
- Coal mining has already commenced

### Competitive project costs

- No external EPC (Engineering, Procurement and Construction) & O&M (Operations & Maintenance) contractor, thus reducing project costs as well as operating costs of the plant
  - JSPL with its experience in installation, operation & maintenance of captive thermal power plants would assist in setting up and operating the plant

### Low cost power producer

 Variable cost of generation with coal estimated at Rs 0.7/ KwH, and total cost at (incl interest & depreciation)
 Rs 1.4/ KwH ( at 80% PLF)

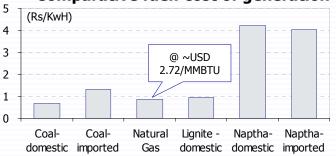
Please refer to Appendix 4 for ROE sensitivity to the PLF and average selling price of power

### Coal mining blocks allocated

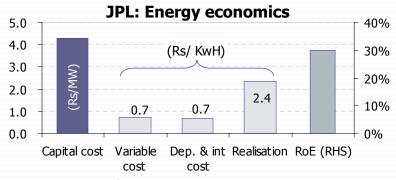
Name of the party	Date of allotment Mining lease		Geological Reserves (mn Mt)
JPL	01.07.2006	Gare- Palma sub - block IV/2Chattisgarh	123
JPL	01.07.2006	Gare- Palma sub - block IV/3Chattisgarh	123

Source: Coal India

### Comparative fuel: cost of generation



Source: CRIS INFAC



Source: ENAM Research; Note: at 80% PLF

## Financials & Valuation



### **Sum of Parts Valuation**

### **JSPL Steel Business**

FY08E PAT (Rs mn)	8,762			
P/E Multiple	5	6	7	8
M Cap (Rs mn)	43,808	52,570	61,332	70,094
Value/shr of JSPL (Rs)	1,422	1,707	1,991	2,276

### **JSPL Power Business**

FY09E BV (Rs mn)	18,918			
P/B Multiple	2.00	2.50	3.00	3.50
M Cap (Rs mn)	37,837	47,296	56,755	66,214
Value/shr of JSPL (Rs)	1,228	1,536	1,843	2,150
RoE (%)	30%			
10 yr G Sec. Yield	8.2%			

### **Value per Share of JSPL**

(Rs)		P/E for Steel Business (x)					
		5	6	7	8		
. X	2.0	2,651	2,936	3,220	3,504		
s foi wer ess	2.5	2,958	3,243	3,527	3,811		
P/E Pov Isino	3.0	3,265	3,551	3,834	4,118		
Bu	3.5	3,572	3,858	4,141	4,426		

Target price of Rs 3,243 based on SOP



## **Comparative Valuation**

### **Steel Companies**

_	EBITDA - Rs mn				EPS - Rs		P/E (x)			EV/EBITDA (x)		
	CY06/ FY07	CY07/ FY08	CY08/ FY09	CY06/ FY07	CY07/ FY08	CY08/ FY09	CY06/ FY07	CY07/ FY08	CY08/ FY09	CY06/ FY07	CY07/ FY08	CY08/ FY09
Steel companies	1102		1100	1102		1100	1107			1102		
Jindal Steel & Power Ltd	14,039	22,823	31,768	226.3	292.3	507.7	10.5	9.5	5.5	9.0	6.8	4.4
Tata Steel Ltd *	68,739	70,100	86,032	71.1	71.5	75.6	7.1	7.1	6.7	4.7	4.6	3.8
Steel Authority Of India	91,035	101,628	117,170	13.7	15.4	18.3	9.0	8.0	6.7	5.5	4.9	4.3
JSW Steel Ltd	25,984	30,945	36,227	64.9	78.6	96.7	8.3	6.8	5.5	5.3	4.4	3.8
Monnet Ispat & Energy Ltd	2,102	3,726	3,012	34.8	46.7	N.A.	7.3	5.4	N.A.	6.1	3.4	4.2

**Power Companies** 

· · · · · · · · · · · · · · · · · · ·												
	PAT - Rs mn				ROE %		Pric	rice/Book (x)		P/E (x)		
	CY06/ FY07	CY07/ FY08	CY08/ FY09	CY06/ FY07	CY07/ FY08	CY08/ FY09	CY06/ FY07_	CY07/ FY08	CY08/ FY09	CY06/ FY07	CY07/ FY08	CY08/ FY09
Power companies												
NTPC Ltd	66,738	75,008	85,927	14.3	14.8	15.6	2.7	2.5	2.2	19.9	17.7	15.5
Tata Power Co Ltd	5,660	5,880	6,103	11.1	10.6	10.3	1.9	1.8	1.6	19.2	16.9	13.5
CESC Ltd	2,379	2,517	3,014	11.9	12.0	12.7	1.9	1.7	1.5	14.9	13.5	11.8
Reliance Energy Ltd	7,233	8,027	8,562	9.4	9.6	10.4	1.4	1.3	1.2	15.6	14.3	13.4

Source: Bloomberg, Enam Research \* Note: Tata steel forward estimates are on standalone basis excluding Corus



## Free cash flow to Equity – Jindal Power

Terminal Value assumed to be NIL

Tax rate assumed to be MAT for ten years from FY09 onwards and then at full tax rate

(Rs mn) Year	FY06	FY07E 0	FY08E 1	FY09E 2	FY10E 3	FY11E 4	FY12E 5	FY13E 6	FY32E 25
PBT excluding other income Other income	-	-	367 -	6,353 145	7,680 168	8,291 191	8,994 214	9,269 476	8,786 10,494
Add: Depreciation Less: Tax Cash Profit	- -	-	743 (125) 985	1,982 <mark>(729)</mark> 7,751	2,022 ( <mark>880)</mark> 8,989	2,062 <mark>(952)</mark> 9,592	2,103 (1,033) 10,278	2,146 (1,093) 10,798	(6,555) 12,725
Add/Less :- Working Capital Investment	206	(1)	(489)	(1,010)	(93)	(9)	(9)	(9)	(14)
OCF of the firm Less :- Capex Add/Less :- Debt Inflow/ (Outflow)	206 ( <mark>7,570)</mark> 5,835	(1) (14,784) 10,384	497 (20,646) 15,765	6,741 (440) (4,000)	8,895 (881) (7,500)	9,583 (899) (8,000)	10,269 (917) (9,000)	10,789 (935) (4,531)	12,711 (1,362)
Cash Flow to Equity Holders	(1,529)	(4,401)	(4,385)	2,301	514	685	352	5,323	11,349
PV Of Cash Flows to Equity holders	(1,529)	(4,401)	(3,880)	1,802	356	420	191	2,557	535
PV of All Cash Flows Value per share of JSPL	30,743.8 998.2								
Assumptions Average PLF for Power Plant Life of Power Plant in years for Cash Flow Average sale price per unit Equity rate of return Interest income on Investment	consideratio		84.5% 25.0 36 per Kwh 13.0% 5.0%						

FCF value of ~Rs 31bn (Rs 1,000 per share of JSPL)



## **Company Financials**

### **Income Statement**

Y/E March (Rs mn)	2006	2007E	2008E	2009E
Net sales	25,893	34,756	56,386	73,504
Other operating income	8	0	0	0
Total income	25,901	34,756	56,386	73,504
Cost of goods sold	12,272	15,640	21,924	28,573
Contribution (%)	<i>53</i>	<i>55</i>	61	61
Advt/Sales/Distrn O/H	3,559	5,077	11,638	13,163
Operating Profit	10,070	14,039	22,823	31,768
Other income	348	115	115	260
PBIDT	10,418	14,153	22,938	32,028
Depreciation	2,192	3,204	4,831	6,245
Interest	942	1,655	4,663	4,542
Other pretax	0	0	0	0
Pre-tax profit	7,284	9,295	13,444	21,242
Tax provision	1,549	2,324	4,440	5,595
(-) Minority Interests	0	0	0	10
Associates	0	0	0	0
Adjusted PAT	5,735	6,971	9,003	15,637
E/o income / (Expense)	(3)	0	0	0
Preference dividend	0	0	0	0
Reported PAT	5,733	6,971	9,003	15,637

### **Key Ratios**

Y/E March (%)	2006	2007E	2008E	2009E
Sales growth	15.4	34.2	62.2	30.4
ОРМ	38.9	40.4	40.5	43.2
Oper. profit growth	13.0	39.4	62.6	39.2
COGS / Net sales	47.4	45.0	38.9	38.9
Overheads/Net sales	13.7	14.6	20.6	17.9
Depreciation / G. block	6.7	6.0	4.7	6.0
Effective interest rate	3.9	3.7	7.3	7.0
Net wkg.cap / Net sales	0.2	0.2	0.2	0.2
Net sales / Gr block (x)	0.9	0.8	0.7	0.7
RoCE	20.6	16.6	19.6	24.3
Debt / equity (x)	1.8	2.2	2.2	1.2
Effective tax rate	21.3	25.0	33.0	26.3
RoE	36.3	32.2	31.0	38.3
Payout ratio (Div/NP)	8.1	7.1	5.6	3.4
EPS (Rs.)	186.2	226.3	292.3	507.7
EPS Growth	8.5	21.6	29.1	73.7
CEPS (Rs.)	257.4	330.4	449.2	710.4
DPS (Rs.)	15.0	16.0	16.5	17.5

Source: Company, ENAM Research



## **Company Financials**

### **Balance Sheet**

Y/E March (Rs mn)	2006	2007E	2008E	2009E
Total assets	54,541	82,804	107,841	109,874
Gross block	32,948	53,393	102,441	104,940
Net fixed assets	27,505	44,766	88,983	85,237
CWIP	19,033	27,354	2,500	2,941
Investments	302	302	302	302
Wkg. cap. (excl cash)	6,314	8,962	13,383	17,273
Cash / Bank balance	1,388	1,420	2,672	4,119
Others/Def tax assets	0	0	0	0
Capital employed	54,541	82,804	107,841	109,874
Equity capital	154	154	154	154
Reserves	18,285	24,693	33,118	48,151
Borrowings	33,299	55,154	71,766	58,766
Others	2,803	2,803	2,803	2,803

### **Cash flow**

Y/E March (Rs mn)	2006	2007E	2008E	2009E
Sources	26,448	31,466	29,868	8,278
Cash profit	8,587	10,175	13,834	21,892
(-) Dividends	527	562	579	614
Retained earnings	8,061	9,613	13,255	21,277
Issue of equity	7	0	0	0
Borrowings	18,330	21,855	16,612	(13,000)
Others	51	(2)	0	0
Applications	26,448	31,466	29,868	8,278
Capital expenditure	23,587	28,786	24,194	2,940
Investments	(3)	0	0	0
Net current assets	1,838	2,648	4,421	3,890
Change in cash	1,027	32	1,252	1,447

Source: Company, ENAM Research

## Risks to call



### **Risks to Call**

### Power Project: Execution risk in terms of delays in stage-wise commissioning could impact earnings

### Cyclicality of steel prices

- International steel prices have been firm recently, tightening interest rates around the world/ possible
   US recession could lower growth rates in the steel industry
- However in the medium to long term, consolidation in the industry and production cutbacks could give stability to steel prices

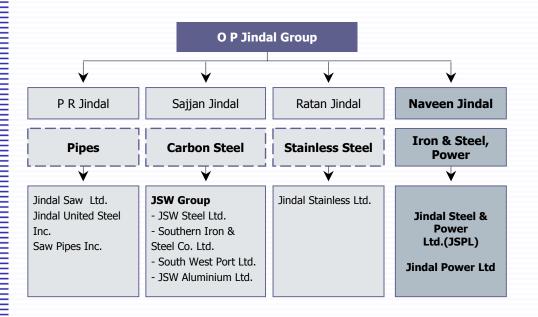
### Bolivian investment – Risk of nationalization/ expropriation

Equity investment in Bolivia SPV, if made in the future, could be written off





## **Appendix 1: Structure - JSPL**



JSPL

99.8% stake

Operating Assets
Iron & Steel
Power (340MW)
Ferro chrome

Jindal Power Ltd
1000MW

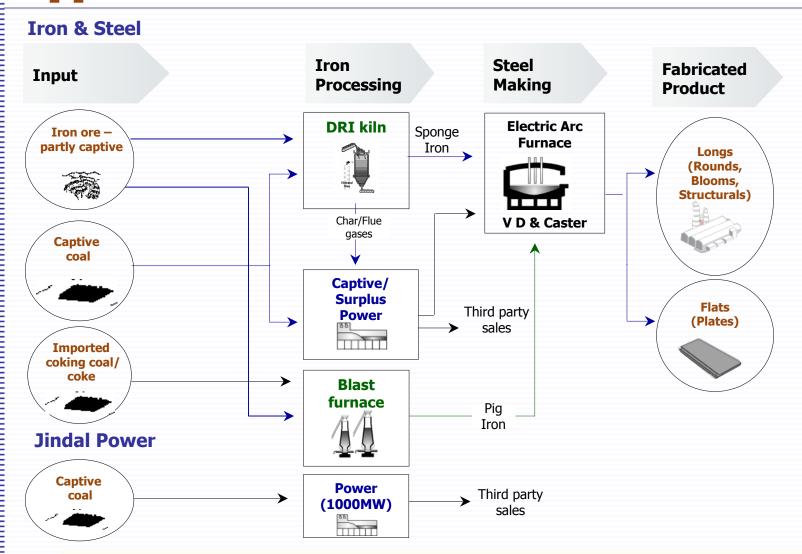
Production (000 tonnes)	FY06
Sponge iron Steel products- Longs	1,018 522
Power – mn kwh	2,225

Source: Company , ENAM Research

Source: Company , ENAM Research



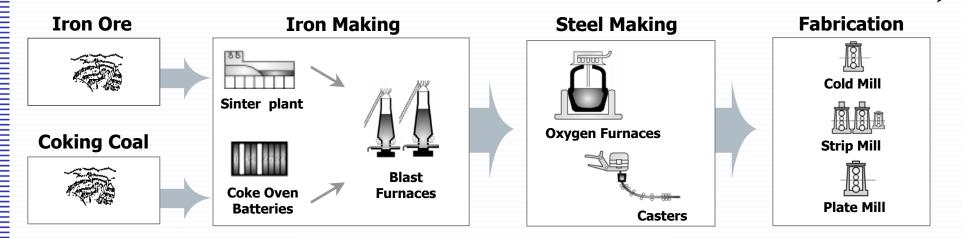
## **Appendix 2: Value Chain - JSPL**



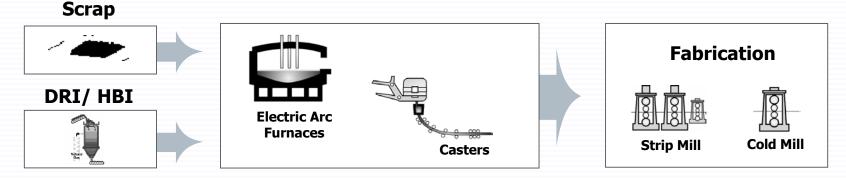
**Optimizing resources & capturing value throughout the chain** 



## **Appendix 3: Steel Production process**



### **Recycling/ Electric Arc Furnace**



Source: World Steel (IISI), Bloomberg, Eurofer, OCED, ENAM Research

Steel output either from iron ore (blast furnace) or from scrap (electric arc furnace)



## **Appendix 4: ROE sensitivity – Jindal Power**

RoE (%)		Avg Selling price( Rs /Kwh)						
		2.00	2.15	2.30	2.45	2.55		
	70	17	21	25	29	31		
ţ,	75	20	24	28	32	34		
Fac (%)	80	22	27	30	34	36		
PLF Factor (%)	85	25	29	33	36	38		
	90	27	31	35	38	41		

Source: Company , ENAM Research

### Assumptions

- JPL has a contract for sale of 350MW power with JSPL @ Rs 2.1/ kwh
- Sensitivity calculations assume that the first 350MW of power generated will be sold to JSPL @ Rs 2.1/ kwh and the balance 650 MW will be sold externally to other parties

ROE of 30% in FY09 at 80% PLF & average realization of Rs 2.30/kwh

#### **ENAM Securities Pvt. Ltd.**

109-112, Dalamal Tower, Free Press Journal Marg, Nariman Point, Mumbai - 400 021, India. **Tel:- Board** +91-22 6754 7500; **Dealing** +91-22 2280 0167; **Fax:- Research** +91-22 6754 7579; **Dealing** +91-22 6754 7575

#### CONFLICT OF INTEREST DISCLOSURE

We, at ENAM, are committed to providing the most honest and transparent advice to our clients. However, given the nature of the capital markets, from time to time we are faced with situations that could give rise to potential conflict of interest. In order to provide complete transparency to our clients, before we make any recommendations, we are committed to making a disclosure of our interest and any potential conflict IN ADVANCE so that the interests of our clients are safe- guarded at all times. In light of this policy, we have instituted what we believe to be the most comprehensive disclosure policy among leading investment banks/brokerages in the world so that our clients may make an informed judgment about our recommendations. The following disclosures are intended to keep you informed before you make any decision- in addition, we will be happy to provide information in response to specific queries that our clients may seek from us.

#### Disclosure of interest statement (As of April 5, 2007)

Analyst ownership of the stock	No
2. Firm ownership of the stock	No
3. Directors ownership of the stock	No
4. Investment Banking mandate	No
5. Broking relationship	No

We are committed to providing completely independent and transparent recommendations to help our clients reach a better decision.

This document is provided for assistance only and is not intended to be and must not alone be taken as the basis for an investment decision. Nothing in this document should be construed as investment or financial advice, and nothing in this document should be construed as an advice to buy or sell or solicitation to buy or sell the securities of companies referred to in this document. The intent of this document is not in recommendary nature

Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult its own advisors to determine the merits and risks of such an investment. The investment discussed or views expressed may not be suitable for all investors

Enam Securities Private Limited has not independently verified all the information given in this document. Accordingly, no representation or warranty, express or implied, is made as to the accuracy, completeness or fairness of the information and opinions contained in this document

The Disclosures of Interest Statement incorporated in this document is provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. This information is subject to change without any prior notice. The Company reserves the right to make modifications and alternations to this statement as may be required from time to time without any prior approval

Enam securities Private Limited, its affiliates, their directors and the employees may from time to time, effect or have effected an own account transaction in, or deal as principal or agent in or for the securities mentioned in this document. They may perform or seek to perform investment banking or other services for, or solicit investment banking or other business from, any company referred to in this report. Each of these entities functions as a separate, distinct and independent of each other. The recipient should take this into account before interpreting the document

This report has been prepared on the basis of information, which is already available in publicly accessible media or developed through analysis of ENAM Securities Private Limited. The views expressed are those of analyst and the Company may or may not subscribe to all the views expressed therein

This document is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied, in whole or in part, for any purpose. Neither this document nor any copy of it may be taken or transmitted into the United State (to U.S.Persons), Canada, or Japan or distributed, directly or indirectly, in the United States or Canada or distributed or redistributed in Japan or to any resident thereof. The distribution of this document in other jurisdictions may be restricted by law, and persons into whose possession this document comes should inform themselves about, and observe, any such restrictions

Neither the Firm, not its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits that may arise from or in connection with the use of the information

Copyright in this document vests exclusively with ENAM Securities Private Limited.