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# Bank of America Merrill Lynch

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#### Stock Data

Price	Rs2,207
Price Objective	Rs2,960
Date Established	31-Oct-2010
Investment Opinion	C-1-7
Volatility Risk	HIGH
52-Week Range	Rs2,055-Rs2,695
Mrkt Val / Shares Out (mn)	US\$23,729 / 489.5
Average Daily Volume	607,212
BofAML Ticker / Exchange	BHHEF / BSE
Bloomberg / Reuters	BHEL IN / BHEL.BO
ROE (2011E)	29.3%
Net Dbt to Eqty (Mar-2010A)	-60.7%
Est. 5-Yr EPS / DPS Growth	22.0% / 20.0%
Free Float	32.3%

# Margin expansion commendable; street beating 3Q

#### Street beating 3Q; Rec PAT +21%YoY; Margin +151bps; Buy

BHEL had street beating 3Q with Rec PAT at Rs13.4bn +21%YoY; 5% ahead of consensus on good execution - sales +19%YoY and a surprise EBITDA margin expansion by 151bps @23.1% on lower materials and labour productivity. Backlog +18%YoY as 3Q inflows -24%YoY was in-line as orders are loaded in 4Q (read page 26 of our Bharat Heavy Electricals, 19 January 2011). Quality of earnings was better with 21% fall in treasury income. Rep PAT Rs14bn +31%YoY on Rs603mn profit on change in method of calculation of % completion. Overall, BHEL had a better 3Q v/s L&T with margin expansion and lower treasury. BHEL remains one of our top picks on 24% CAGR in EPS over FY11-13E with backlog at 3.4x FY12E sales, peaked costs and improved competitiveness.

#### Margin +151bps on operating leverage; Mgt. bullish on orders

We have been calling for operating leverage driven by capex to 15GW to kick-in from 2Q onwards to support margins and BHEL 3Q EBITDA margin +151bps support our view. This was driven by good execution, 133bps lower material cost and improved labour productivity (cost fall 206bps). To contain run-away margins, BHEL made Rs1bn prov. for liquidated damages. Rec. PAT +21%YoY despite +39% depreciation and 21% lower treasury income.

On call, mgt. was bullish on order inflows till FY12 despite Chinese competition and concurred with our view in report above. Mgt. informed of steps taken to scale-up in its industry domain as hedge to support long term growth by a) upgrading power T&D portfolio (Toshiba JV), b) scaling up transport equipment by doubling diesel loco production, tie-up with Alstom / GE to set-up new locomotive factory & metro rail products with Alstom and c) compressor with technology from GE.

#### Look beyond financials for more exciting times ahead

BHEL's product development/SC tech investment has created a platform for sustained growth. FY10 capex rose 58%, EVA, 33%, and value add/staff +31% YoY. The start of 15GW (10GW) and plans for 20GW by FY12 support execution.

#### Estimates (Mar)

\* For full definitions of *iQmethod* sm measures, see page 10

2009A	2010A	2011E	2012E	2013E
37,371	41,770	52,133	66,193	80,775
76.3	85.3	106.5	135.2	165.0
22.3%	11.8%	24.8%	27.0%	22.0%
17.0	23.3	26.0	30.0	35.0
57.0	-1.0	46.3	85.7	101.5
2009A	2010A	2011E	2012E	2013E
28.9x	25.9x	20.7x	16.3x	13.4x
0.77%	1.06%	1.18%	1.36%	1.59%
17 7,	15.8x	12.5x	10.2x	8.4x
17.7X	13.0%	12.51	10.28	0.48
	37,371 76.3 22.3% 17.0 57.0	37,371 41,770 76.3 85.3 22.3% 11.8% 17.0 23.3 57.0 -1.0  2009A 2010A 28.9x 25.9x 0.77% 1.06%	37,371 41,770 52,133 76.3 85.3 106.5 22.3% 11.8% 24.8% 17.0 23.3 26.0 57.0 -1.0 46.3  2009A 2010A 2011E 28.9x 25.9x 20.7x 0.77% 1.06% 1.18%	37,371 41,770 52,133 66,193 76.3 85.3 106.5 135.2 22.3% 11.8% 24.8% 27.0% 17.0 23.3 26.0 30.0 57.0 -1.0 46.3 85.7  2009A 2010A 2011E 2012E 28.9x 25.9x 20.7x 16.3x 0.77% 1.06% 1.18% 1.36%

<sup>&</sup>gt;> Employed by a non-US affiliate of MLPF&S and is not registered/qualified as a research analyst under the FINRA rules.

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Refer to important disclosures on page 11 to 13. Analyst Certification on Page 9. Price Objective Basis/Risk on page 9. Link to Definitions on page 9.11011925



# *iQprofile*<sup>™</sup> Bharat Heavy Electricals

Key Income Statement Data (Mar)	2009A	2010A	2011E	2012E	2013E
(Rs Millions)					
Sales	268,847	335,984	388,953	465,883	553,645
Gross Profit	96,640	129,854	153,027	177,937	207,138
Sell General & Admin Expense	(41,579)	(68,219)	(75,033)	(82,192)	(91,302)
Operating Profit	51,718	57,055	72,191	89,273	108,699
Net Interest & Other Income	7,656	7,907	6,134	9,967	12,402
Associates	NA	NA	NA	NA	NA
Pretax Income	59,374	64,962	78,324	99,240	121,101
Tax (expense) / Benefit	(22,004)	(23,192)	(26,192)	(33,047)	(40,327)
Net Income (Adjusted)	37,371	41,770	52,133	66,193	80,775
Average Fully Diluted Shares Outstanding	490	490	490	490	490
Key Cash Flow Statement Data					
Net Income	37,371	41,770	52,133	66,193	80,775
Depreciation & Amortization	3,343	4,580	5,803	6,471	7,137
Change in Working Capital	12,443	(24,495)	(19,542)	(11,145)	(25,938)
Deferred Taxation Charge	(5,024)	3,131	3,131	3,131	3,131
Other Adjustments, Net	(7,256)	(7,907)	(6,134)	(9,967)	(12,402)
Cash Flow from Operations	40,877	17,079	35,391	54,684	52,702
Capital Expenditure	(12,983)	(17,549)	(12,750)	(12,750)	(3,000)
(Acquisition) / Disposal of Investments	(441)	(275)	(5,000)	(5,000)	(5,000)
Other Cash Inflow / (Outflow)	1,334	9,371	7,202	10,409	12,928
Cash Flow from Investing	(12,089)	(8,453)	(10,548)	(7,341)	4,928
Shares Issue / (Repurchase)	0	0	0	0	0
Cost of Dividends Paid	(9,736)	(13,321)	(14,841)	(17,125)	(19,979)
Cash Flow from Financing	(9,501)	(13,872)	(13,769)	(17,567)	(20,505)
Free Cash Flow	27,894	(470)	22,641	41,934	49,702
Net Debt	(101,653)	(96,623)	(106,197)	(135,973)	(173,098)
Change in Net Debt	(18,744)	5,030	(9,574)	(29,776)	(37,125)
Key Balance Sheet Data					
Property, Plant & Equipment	26,274	39,450	46,397	52,675	48,539
Other Non-Current Assets	18,926	16,071	17,940	19,809	21,679
Trade Receivables	159,755	206,888	223,781	261,661	310,951
Cash & Equivalents	103,147	97,901	108,975	138,750	175,875
Other Current Assets	106,109	124,560	142,490	166,217	191,713
Total Assets	414,211	484,868	539,583	639,113	748,757
Long-Term Debt	0	0	0	0	0
Other Non-Current Liabilities	0	0	0	0	0
Short-Term Debt	1,494	1,278	2,778	2,778	2,778
Other Current Liabilities	283,329	324,417	339,700	390,161	439,010
Total Liabilities	284,823	325,695	342,477	392,939	441,787
Total Equity	129,388	159,174	197,106	246,174	306,970
Total Equity & Liabilities	414,211	484,868	539,583	639,113	748,757
<i>iQmethod</i> <sup>™</sup> - Bus Performance*					
Return On Capital Employed	31.4%	28.8%	29.1%	29.6%	29.0%
Return On Equity	31.5%	29.0%	29.3%	29.9%	29.2%
Operating Margin	19.2%	17.0%	18.6%	19.2%	19.6%
EBITDA Margin	20.5%	18.3%	20.1%	20.6%	20.9%
<i>iQmethod</i> <sup>™</sup> - Quality of Earnings*					
Cash Realization Ratio	1.1x	0.4x	0.7x	0.8x	0.7x
Asset Replacement Ratio	3.9x	3.8x	2.2x	2.0x	0.4x
Tax Rate (Reported)	37.1%	35.7%	33.4%	33.3%	33.3%
Net Debt-to-Equity Ratio	-78.6%	-60.7%	-53.9%	-55.2%	-56.4%
Interest Cover	NM	NM	NM	NM	NM
Key Metrics					
* For full definitions of <i>iOmethod</i> <sup>SM</sup> measures, see page 10	n				

<sup>\*</sup> For full definitions of *iQmethod* <sup>SM</sup> measures, see page 10.

#### **Company Description**

With 14 plants & 8 service centers, BHEL is India's dominant producer of power & industrial machinery. It has the capacity to deliver 15,000MW pa and planning to reach 20,000MW pa by FY12. It has fully established technology to produce coal based power sets of up to 1,000MW and advanced-class gas turbines. Sets produced by BHEL account for 62% (92GW) of India's installed power capacity (148GW) and given their reliability, generate 74% of India's power. The government holds 67.7% equity in BHEL.

#### **Investment Thesis**

We believe that BHEL product's business case certainty for IPPs, success of its new products especially with Pvt. IPPs and India's proposed power equipment purchase policy offers an opportunity for BHEL to win good orders that translate to strong order backlog over the next two years. Key drivers for strong profit growth are acceleration capex, recent success in Super-critical boiler, solid order book-to-sales ratio and good operating leverage, and a 3rd shift on most critical operations.

#### Chart 1: BHEL - Quarterly Order Book & Growth



Source: Company

#### Chart 2: BHEL trend in Quarterly Sales Growth



Source: Company

#### Stock Data

Price to Book Value 5.5x

Backlog +17.9% to ~Rs1.58tn;

Inflow Rs122bn -23.8YoY as new orders are loaded in 4Q as per MLe

Backlog 17.9%YoY led by order inflows of Rs57.7bn from Indiabulls - thanks to its upgraded 270MW BTG, Rs14.5bn from AP Genco and Rs19.8bn export order for gas turbines from Middle East

Rec. PAT was +21%YoY led by improved labour productivity with 206bps fall in labour costs and 133bps fall in materials on better sourcing and use of BHEL's bargaining power with vendors

Rep PAT +30.8%YoY due to Rs603mn of exceptional gain (net of tax) on Rs4.4bn contract revenue on trial operation due to change in method of % completion vs Rs370mn of prior period tax in 3QFY10

Table 1: RHFL - 30FV11 Results Review

Table 1: BHEL - 3QFY11 Results Review			
For the period (Rs mn)	3QFY10	3QFY11	%YoY
Order Backlog	1,340,000	1,580,000	17.9%
Order Inflows	160,000	122,000	-23.8%
Gross Sales	73,860	88,358	19.6%
Less: Excise Duty	2,857	4,305	50.7%
- Excise as % of Gross Sales	3.9%	4.9%	
Net Sales	71,003	84,053	18.4%
Other Operating Income	1,289	1,741	35.0%
Net Sales & Other Op. Income	72,292	85,793	18.7%
Value of Production	76,391	91,214	19.4%
Raw material	39,416	45,640	15.8%
- as % of value prodn	51.6%	50.0%	
- % of net sales	54.5%	53.2%	-133bp
Staff cost	12,269	12,797	4.3%
- % of net sales	17.0%	14.9%	
Other exp.	4,990	7,526	50.8%
- % of net sales	6.9%	8.8%	
Total expenses	56,675	65,964	16.4%
EBITDA	15,617	19,829	27.0%
- EBITDA margin %	21.6%	23.1%	151bps
Depreciation	1,038	1,447	39.4%
EBIT	14,579	18,382	26.1%
Interest	69	145	109.7%
Other income	1,933	1,529	-20.9%
PBT	16,443	19,767	20.2%
- PBT Margin %	22.7%	23.0%	
Tax	5,347	6,337	18.5%
- Tax Rate	32.5%	32.1%	
Rec PAT	11,095	13,429	21.0%
- Rec PAT margin %	15.3%	15.7%	
Net Exceptionals	(370)	603	-263.2%
Rep PAT	10,726	14,032	30.8%
- Rep PAT Margin %	14.8%	16.4%	
BHEL - Segmental Details			
(Rs mn)	3QFY10	3QFY11	%YoY
Sales			

(Rs mn)	3QFY10	3QFY11	%YoY
Sales			
Power	57,087	68,380	19.8%
Industry	18,020	21,429	18.9%
Total	75,107	89,810	19.6%
Intersegmental revnue	1,247	1,452	16.5%
Gross Sales	73,860	88,358	19.6%
PBIT			
Power	13,086	15,433	17.9%
- PBIT Margin	22.9%	22.6%	-35bp
Industry	4,051	4,542	12.1%
- PBIT Margin	22.5%	21.2%	-129bp
Total PBIT	17,137	19,975	16.6%
- PBIT Margin	22.8%	22.2%	

Source: Company

#### Chart 3: BHEL - Book to Bill



Source: Company, BofA Merrill Lynch Global Research

Table 2: BHEL - Order Inflows 3QFY11

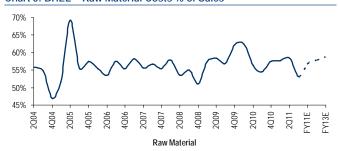
Project	Client	Value (Rs mn)	Size MW	Unit &
Power		(**************************************		
Nashik Ph II	Indiabulls Power	28750	1350	5x270
Amarawati Ph II	Indiabulls Power	28930	1350	5x270
Rayalseema 6	APGENCO	14450	600	1x600
Others		6640		
Total Power		78770	3300	
Industry				
1100kW Solar Photovoltaic power plants at Lakshadweep &	Lakshadweep			
Renovation of existing 800kW solar power plants	Administration	350	2	
3x2MW (6MW) Grid-Connected Solar Power Plants	Indiabulls	780	6	3x2
40 sets for 1400HP AC EMUs & 30 sets for 6000HP Electric				
Locomotives	Indian Railways	3000		
Others		23220	610	
Total Industry		27350	618	
Export				
Gas Turbine		19800	692	
Total Export		19800	692	
Balance Adj.		(3,920)		
Total		122,000	4,610	
Source: Company				

Chart 4: BHEL - Quarterly Sales Growth



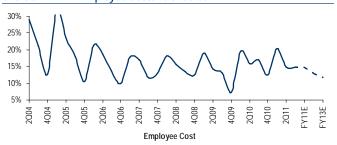
Source: Company, BofA Merrill Lynch Global Research

Chart 5: BHEL - Raw Material Costs % of Sales



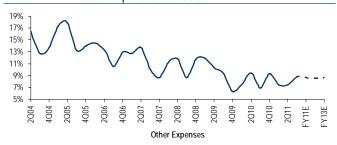
Source: Company, BofA Merrill Lynch Global Research

Chart 6: BHEL - Employee Costs % of Sales



Source: Company, BofA Merrill Lynch Global Research

Chart 7: BHEL - Other Expenses % of Sales



Source: Company, BofA Merrill Lynch Global Research



## Valuations:

# Remain mid-cycle on EV/order backlog and below mid-cycle on P/E bands

#### Chart 8: BHEL - EV/OB (x)



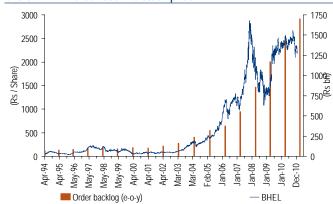
Source: Company, Bloomberg, BofA Merrill Lynch Global Research

#### Chart 10: BHEL P/E Band



Source: Company, Bloomberg, BofA Merrill Lynch Global Research

Chart 9: BHEL order book vs stock price



Source: Company, Bloomberg, BofA Merrill Lynch Global Research

#### Chart 11: BHEL Price Performance



Source: Bloomberg



Table 3: Global Engineering Valuation Comps

Table 3: Global			on Comps	5																
<b>Company Name</b>	BofAML	BofAML	Local		Mkt Cap	EBITD	A Marg	in (%)		P/E (x)		P	/BV (x)		E	V/E (x)		R	oE (%)	
21-Jan-11 Indian Engg	Ticker	Rating	Price Cu	rrency	(US\$ mn)	FY11E	FY12E	FY13E I	FY11E I	FY12E I	FY13E	FY11E F	FY12E F	Y13E I	FY11E I	FY12E F	FY13E I	Y11E F	Y12E F	Y13E
BHEL	BHHEF	C-1-7	2207	INR	23,729	20.1%	20.6%	20.9%	20.7	16.3	13.4	5.5	4.4	3.5	12.5	9.9	7.8	29.3	29.9	29.2
ABB	ABVFF	C-3-7	745	INR	3,467	5.6%	9.3%	10.2%	66.2	33.3	23.8	6.2	5.3	4.4	41.3	19.9	14.4	9.6	17.1	20.3
Cummins India	CUIDF	C-1-7	732	INR	3,181	20.2%	20.2%	19.7%	21.2	16.2	14.2	7.6	6.1	4.9	17.0	12.9	11.3	39.5	41.8	38.3
Crompton Greaves	00.5.	0 . ,	284	INR	3,991	14.2%	14.2%	14.2%	20.2	17.3	14.8	5.7	4.5	3.5	13.2	11.4	9.9	31.6	28.4	26.2
Larsen & Toubro	LTOUF	C-1-7	1649	INR	22,017	14.1%	13.8%	13.6%	22.7	17.8	13.9	4.1	3.4	2.8	16.3	13.1	10.4	19.5	20.8	22.2
Suzlon	XZULF	C-3-7	53	INR	2,063	6.9%	8.7%	9.4%	(36.2)	17.6	10.1	1.3	1.3	1.2	12.2	7.9	6.4	(3.7)	7.2	12.0
Thermax	ALULI	001	701	INR	1,832	11.7%	11.7%	11.8%	23.1	17.7	13.7	6.2	4.9	3.9	13.8	10.6	8.2	29.1	30.3	29.7
Voltas	VTSJF	C-1-7	211	INR	1,534	9.5%	9.4%	9.5%	17.2	14.6	12.1	5.0	4.0	3.3	12.9	10.4	8.4	31.4	30.6	30.0
Indian Engg Avg		0 . ,	2		.,001	7.070	71170	7.070	20.8	18.8	14.5	5.2	4.2	3.4	14.0	12.0	9.6	27.1	25.8	26.0
Regional Engg																				
Chinese Engg																				
Dongfang Electric	DNGFF	B-1-7	33.4	HKD	1,456	9.0%	8.9%	9.5%	23.8	19.5	16.0	5.2	4.2	3.4	13.2	10.5	8.2	24.2	23.7	23.2
Harbin Power	HBPWF	B-1-7	10.1	HKD	878	5.0%	5.3%	5.6%	13.7	12.5	10.7	1.3	1.2	1.1	5.3	5.1	4.4	9.5	9.6	10.3
Shanghai Electric	SIELF	B-1-7	4.9	HKD	1,875	7.0%	7.4%	8.1%	18.4	16.2	13.3	2.0	1.9	1.8	10.9	9.3	7.4	11.8	12.2	13.9
Chinese Engg Avg -																				
Н									18.6	16.1	13.4	2.8	2.4	2.1	9.8	8.3	6.7	15.2	15.2	15.8
Dongfang Electric - A	DNGFF	B-1-7	30.4	CNY	7,671	9.0%	8.9%	9.5%	25.6	21.0	17.2	5.6	4.5	3.6	14.5	11.5	9.1	24.2	23.7	23.2
Harbin Power - A	HBPWF	B-1-7	10.1	HKD	911	5.0%	5.3%	5.6%	13.7	12.5	10.7	1.3	1.2	1.1	5.3	5.1	4.4	9.5	9.6	10.3
Shanghai Electric - A	SIELF	B-1-7	8.1	CNY	12,146	7.0%	7.4%	8.1%	35.9	31.7	26.0	4.0	3.8	3.5	22.2	18.7	14.6	11.8	12.2	13.9
Chinese Engg Avg -																				
Α									25.1	21.7	18.0	3.6	3.1	2.7	14.0	11.8	9.4	15.2	15.2	15.8
Korean Engg																				
Doosan Heavy	DOHIF	REVIEW	80400	KRW	7,600	8.3%	9.6%	10.0%	34.9	15.3	11.8	2.4	2.1	1.8	19.0	13.4	11.2	6.9	14.2	16.2
Daelim Indus Co	DERXF	C-1-7	124500	KRW	3,863	5.9%	6.1%	5.5%	12.3	10.6	7.7	1.0	1.0	0.9	13.1	10.5	7.4	8.9	9.4	11.8
GS Engineering	GSNGF	C-2-7	120000	KRW	5,457	7.1%	6.6%	6.3%	15.8	13.8	11.8	1.7	1.5	1.3	10.1	8.5	6.6	11.2	11.4	11.9
Hyundai Eng&Con	HYEHF	RSTR**	83800	KRW	8,336	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR	RSTR
Hyundai Develop.	HYHVF	C-1-7	37100	KRW	2,494	11.0%	16.0%	10.6%	16.0	6.7	11.2	1.2	1.0	0.9	12.9	4.7	7.9	7.4	15.9	8.7
Daewoo Eng & Con	DWOFF	C-3-7	14600	KRW	5,411	3.6%	5.3%	5.3%	166.5	19.5	16.4	1.5	1.4	1.3	24.1	14.8	12.1	0.9	7.6	8.4
Samsung C&T	SSGFF	C-1-7 C-1-7	78000 188000	KRW KRW	10,865 6,706	2.7% 9.7%	3.1% 8.8%	3.4% 8.1%	34.7 22.4	28.0 15.1	22.9 12.5	1.6 7.4	1.5 5.3	1.4 4.1	38.1 14.7	30.0 9.7	22.8 8.1	4.7 37.4	5.5 40.8	6.5 36.9
Samsung Engineer Korean Engg Avg	SGRGF	C-1-/	100000	KKVV	0,700	9.770	0.0%	0.170	21.6	15.1 15.6	13.2	2.4	2.0	1.7	18.2	12.9	10.8	12.0	40.6 <b>15.4</b>	14.8
Other Regional Engo	1								21.0	13.0	13.2	2.4	2.0	1.7	10.2	12.7	10.0	12.0	13.4	14.0
IGB Corporation	IGBBF	C-3-7	2.2	MYR	1,050	56.1%	56.4%	57.0%	18.8	19.8	19.7	1.1	1.0	1.0	10.2	9.9	9.5	5.8	5.4	5.2
Muhibbah ENGR	MUHBF	007	1.7	MYR	221	6.6%	7.1%	8.5%	15.5	12.3	11.3	1.3	1.2	1.1	14.9	12.4	12.0	9.0	10.7	10.1
Leighton Hldgs	LGTHF	B-2-7	31.3	AUD	9,307	10.0%	9.4%	9.5%	14.0	12.8	10.3	3.4	3.1	2.8	4.9	4.7	4.1	25.2	25.3	28.6
Other Regional Engo																				
Avg	•								16.1	15.0	13.8	1.9	1.8	1.6	10.0	9.0	8.5	13.3	13.8	14.6
Japanese Engg																				
Mitsubishi Elec	MIELF	B-1-7	893	JPY	23,102	9.8%	10.1%	10.3%	14.6	13.9	12.7	1.8	1.6	1.4	5.6	4.9	4.3	13.0	12.0	11.4
Toshiba	TOSBF	C-1-7	480	JPY	24,507	8.3%	9.1%	9.1%	22.9	15.3	14.3	2.4	2.1	1.8	6.1	5.3	5.2	10.9	14.7	13.6
Japanese Engg Avg									18.8	14.6	13.5	2.1	1.8	1.6	5.8	5.1	4.7	11.9	13.4	12.5
US Engg																				
Genl Electric	GE	B-2-7	19	USD	207,022	19.1%	20.5%	22.8%	17.2	15.2	12.5	1.9	2.0	2.0	21.3	19.0	16.4	10.6	12.6	16.0
Jacobs Eng.	JEC	B-1-9	50	USD	6,323	5.7%	6.1%	6.2%	20.6	18.7	16.0	2.2	1.9	1.7	9.5	8.1	6.6	11.2	11.1	11.7
US Engg Avg									18.9	16.9	14.3	2.0	2.0	1.9	15.4	13.5	11.5	10.9	11.8	13.9
European Engg	ADI 75	D 1 7	00	LICD	E4 000	1 ( 40)	10.00/	10.00/	20.0	147	10.5	0.4	2.0	0.7	0.7	7.1		20.0	01.6	20.0
ABB Ltd.	ABLZF	B-1-7	23	USD	51,923	16.4%	18.8%		20.0	14.7	12.5	3.4	3.0	2.6	9.7	7.4	6.4	20.3	21.6	22.0
Alstom	AOMFF	B-1-7	42	EUR	16,742	9.9%	10.0%		18.1	13.5	10.3	2.8	2.5	2.2	6.4	6.3	4.6	25.1	22.4	24.4
Areva SA	IVNICE	D 2 7	36 2.4	EUR	18,528	6.2%	13.0%		26.7	28.0	21.6	1.6	1.6	1.5	34.6	15.3	12.7	6.6	5.5 25.6	6.6
Invensys Schneider	IVNSF	B-2-7	3.4	GBP	4,364		12.2%		14.9	13.3	12.7	5.6	4.1	3.2	8.4	7.3	6.3	44.5	35.6 17.0	28.3
Schneider Siemens	SBGSF SMAWF	B-1-7 B-2-7	114 93	EUR EUR	41,424 114,312	15.9%	18.3%		20.2 20.6	14.1 14.3	12.5 12.2	2.4 2.9	2.2 2.6	2.0 2.3	11.1 8.8	8.3 7.7	7.4 6.5	14.3 14.2	17.9 19.0	18.1 20.2
Spectris	SEPJF	B-2-7 B-2-7	13.1	GBP		17.9%			15.1	12.7	11.6	3.1	2.6	2.3	9.8	8.1	0.5 7.1	21.7	22.3	20.2
European Engg Avg	JLFJF	D-7-1	13.1	GDP	2,403	17.770	10.770	17.370	19.1	15.8	13.3	3.1	2.0 <b>2.7</b>	2.3	9.8 12.7	8.6	7.1	20.9	22.3 20.6	21.3 20.1
SENSEX			19008						18.2	14.7	NA	3.1	2.7	NA	10.7	8.9	NA	18.2	19.5	NA
JENJEA			17000						10.2	14.7	IVA	J. I	2.1	IVA	10.7	0.7	IVA	10.2	17.3	IVA

Source: BofA Merrill Lynch Global Research, Bloomberg, Note: FY11E=CY10E



## **Financials**

Table 4: BHEL - Profit & Loss Statement

Table II Billed Trolle & Book Stat	01110111				
FY ends on Mar 31st, (Rs mn)	FY09	FY10	FY11E	FY12E	FY13E
Net Sales & Other Op. Income	268,847	335,984	388,953	465,883	553,645
- Growth %	35.5%	25.0%	15.8%	19.8%	18.8%
Material Consumption, E&E Exp.	(164,073)	(197,648)	(226,285)	(276,513)	(333,337)
- % of Op. Income	61.0%	58.8%	58.2%	59.4%	60.2%
Employee Costs	(29,837)	(52,007)	(56,599)	(60,278)	(64,317)
- % of Op. Income	11.1%	15.5%	14.6%	12.9%	11.6%
Other Operating Exp	(19,876)	(24,693)	(28,075)	(33,348)	(40,155)
- % of Op. Income	7.4%	7.3%	7.2%	7.2%	7.3%
Total Expenditure	(213,786)	(274,348)	(310,960)	(370,139)	(437,809)
EBITDA	55,061	61,635	77,993	95,745	115,836
EBITDA Margin	20.5%	18.3%	20.1%	20.6%	20.9%
- Growth %	24.1%	11.9%	26.5%	22.8%	21.0%
Depreciation	(3,343)	(4,580)	(5,803)	(6,471)	(7,137)
EBIT	51,718	57,055	72,191	89,273	108,699
EBIT Margin	19.2%	17.0%	18.6%	19.2%	19.6%
- Growth %	24.9%	10.3%	26.5%	23.7%	21.8%
Interest & Finance Exp.	(307)	(335)	(428)	(443)	(526)
Other Income	7,963	8,242	6,562	10,409	12,928
PBT	59,374	64,962	78,324	99,240	121,101
PBT Margin	22.1%	19.3%	20.1%	21.3%	21.9%
- Growth %	24.8%	9.4%	20.6%	26.7%	22.0%
Total Tax	(22,004)	(23,192)	(26,192)	(33,047)	(40,327)
- Tax rate	37.1%	35.7%	33.4%	33.3%	33.3%
Rec PAT	37,371	41,770	52,133	66,193	80,775
Rec PAT Margin	13.9%	12.4%	13.4%	14.2%	14.6%
- Growth %	22%	12%	25%	27%	22%
Exceptionals	(5,989)	1,337	641	0	0
Reported Profit	31,382	43,106	52,773	66,193	80,775
Rep PAT Margin (%)	11.7%	12.8%	13.6%	14.2%	14.6%
- Growth %	10%	37%	22%	25%	22%

Source: Company, BofA Merrill Lynch Global Research

Table 5: BHEL - Balance Sheet

FY ends on Mar 31st, (Rs mn)	FY09	FY10	FY11E	FY12E	FY13E
Share Capital	4,895	4,895	4,895	4,895	4,895
Reserves & Surplus, Net	124,493	154,278	192,210	241,279	302,075
Networth	129,388	159,174	197,106	246,174	306,970
Debt	1,494	1,278	2,778	2,778	2,778
Deferred Tax Liability / (Assets)	(18,403)	(15,272)	(12,142)	(9,011)	(5,880)
Total Networth & Liabilities	112,479	145,179	187,742	239,941	303,867
Gross Block	51,837	65,659	79,409	93,159	97,159
Less: Accumulated Dep	(37,133)	(41,505)	(47,308)	(53,779)	(60,916)
Net Block	14,704	24,154	32,101	39,380	36,243
CWIP	11,570	15,296	14,296	13,296	12,296
Fixed assets (net)	26,274	39,450	46,397	52,675	48,539
Investments	523	798	5,798	10,798	15,798
Inventories	78,370	92,355	110,753	129,802	149,935
Debtors	159,755	206,888	223,781	261,661	310,951
Cash	103,147	97,901	108,975	138,750	175,875
Other CA, Loans & Advances	27,739	32,205	31,738	36,415	41,779
Current Assets, Loans & Adv	369,011	429,348	475,246	566,628	678,540
Current Liabilities	233,573	280,237	288,525	329,172	366,707
Provisions	49,756	44,180	51,175	60,989	72,302
Current Liab & Prov.	283,329	324,417	339,700	390,161	439,010
Net Current Assets	85,682	104,931	135,546	176,467	239,530
Total assets	112,479	145,179	187,742	239,941	303,867
Courses Company DofA Marrill Lynch Clohal Decearch					

Source: Company, BofA Merrill Lynch Global Research



Table 6: BHEL - Cash Flow Statement

FY ends on Mar 31st, (Rs mn)	FY09	FY10	FY11E	FY12E	FY13E
PBT	59,374	64,962	78,324	99,240	121,101
Add: Depreciation	3,343	4,580	5,803	6,471	7,137
Add: Interest Exp	307	335	428	443	526
Less: Interest & Other Income	(7,963)	(8,242)	(6,562)	(10,409)	(12,928)
Less: Current Tax	(26,627)	(20,061)	(23,061)	(29,916)	(37,196)
Profit from operations	28,433	41,574	54,932	65,828	78,640
Changes in Working Capital	12,443	(24,495)	(19,542)	(11,145)	(25,938)
DTL / Others	0	0	0	0	0
Cash from Operating activities	40,877	17,079	35,391	54,684	52,702
Capex	(12,983)	(17,549)	(12,750)	(12,750)	(3,000)
Changes in Investments	(441)	(275)	(5,000)	(5,000)	(5,000)
Interest & Other Income	7,963	8,242	6,562	10,409	12,928
Extraordinary items	(5,989)	1,337	641	0	0
Others	(641)	(207)	(0)	0	0
Cash from Investing activities	(12,089)	(8,453)	(10,548)	(7,341)	4,928
Changes in Share Capital	0	0	0	0	0
Changes in Reserve & Surplus	0	0	0	0	0
Changes in Debt	542	(216)	1,500	0	0
Dividend paid	(9,736)	(13,321)	(14,841)	(17,125)	(19,979)
Interest Exp	(307)	(335)	(428)	(443)	(526)
Cash from Financing activities	(9,501)	(13,872)	(13,769)	(17,567)	(20,505)
Changes in Cash & Bank Balance	19,286	(5,246)	11,074	29,776	37,125
Op. Cash & Bank Balance	83,860	103,147	97,901	108,975	138,750
CI. Cash & Bank Balance	103,146	97,901	108,975	138,750	175,875

Source: Company, BofA Merrill Lynch Global Research

Table 7: BHEL - Key Ratios & Valuations

FY ends on Mar 31st	FY09	FY10	FY11E	FY12E	FY13E
CMP (Rs)	2,207	2,207	2,207	2,207	2,207
Shares O/s (mn)	490	490	490	490	490
Market Cap (Rs mn)	1,080,493	1,080,493	1,080,493	1,080,493	1,080,493
Rec EPS (Rs)	76.3	85.3	106.5	135.2	165.0
Rec EPS Growth %	22.3%	11.8%	24.8%	27.0%	22.0%
Rec P/E (x)	28.9	25.9	20.7	16.3	13.4
Rep EPS (Rs)	64.1	88.1	107.8	135.2	165.0
Rep EPS Growth %	9.8%	37.4%	22.4%	25.4%	22.0%
Rep P/E (x)	34.4	25.1	20.5	16.3	13.4
CEPS (Rs)	72.9	101.1	124.7	154.8	186.0
P/CEPS (x)	30.3	21.8	17.7	14.3	11.9
BVPS (Rs)	264.3	325.2	402.7	502.9	627.1
P/B (x)	8.4	6.8	5.5	4.4	3.5
DPS (Rs)	17.0	23.3	26.0	30.0	35.0
Dividend Yield (%)	0.77%	1.06%	1.18%	1.36%	1.59%
Net Debt (Rs mn)	(101,653)	(96,623)	(106,197)	(135,973)	(173,098)
Net Debt / EBITDA (x)	(1.8)	(1.6)	(1.4)	(1.4)	(1.5)
Net Debt / Equity (x)	(0.8)	(0.6)	(0.5)	(0.6)	(0.6)
EV (Rs mn)	978,840	983,870	974,296	944,520	907,395
EV/EBITDA (x)	17.8	16.0	12.5	9.9	7.8
P/OB (x)	0.9	0.7	0.6	0.6	0.5
EV/OB (x)	0.8	0.7	0.6	0.5	0.4
DuPont Analysis					
- Rec PAT / PBT %	62.9%	64.3%	66.6%	66.7%	66.7%
- PBT / EBIT %	114.8%	113.9%	108.5%	111.2%	111.4%
- EBIT / Sales %	19.2%	17.0%	18.6%	19.2%	19.6%
- Sales/ Avg Assets %	-195.0%	-191.9%	-234.9%	-308.3%	-388.0%
- Assets / Avg Networth %	-116.3%	-121.3%	-93.0%	-68.2%	-51.6%
RoE (%)	31.5%	29.0%	29.3%	29.9%	29.2%
RoCE (%)	33.4%	28.9%	27.9%	27.7%	26.7%

Source: Company, BofA Merrill Lynch Global Research



# Price objective basis & risk Bharat Heavy (BHHEF)

Our Price Objective of Rs2960 is based on 18.5x 1-year forward earnings, which is a discount to its current multiples to factor-in slower future growth, the 27pct discount to peak PE in the last cycle (94-97) and the mid-range of PE bands. On FY12E, BHEL trades at 10% premium to the market, it deserves premium given BHEL's superior market position, forecast earnings growth (24pct for BHEL vs. the market 24pct) and RoE (30pct vs. the market 19pct). Risks to our price objective are Govt. encouragement to its competitors with continued zero % import duty / assured orders, Chinese, Japanese and Korean competition, a rebound in metal prices, higher-than-expected wage hikes and on-ground project execution challenges.

#### Link to Definitions

#### Industrials

Click here for definitions of commonly used terms.

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I, Bharat Parekh, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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#### India - Engineering/Construction/Utilities Coverage Cluster

Investment rating	Company	BofA Merrill Lynch ticker	Bloomberg symbol	Analyst
BUY	_			
	Adani Enterprises Ltd.	ANIEF	ADE IN	Bharat Parekh
	Adani Power Ltd.	XADPF	ADANI IN	Bharat Parekh
	Bharat Heavy	BHHEF	BHEL IN	Bharat Parekh
	Essar Shipping, Ports & Logistics Ltd.	XESSF	ESRS IN	Bharat Parekh
	Gujarat State Petronet Ltd	GJRSF	GUJS IN	Vidyadhar Ginde
	GVK Power & Infrastructure Ltd.	GVPWF	GVKP IN	Bharat Parekh
	IRB Infrastructure Developers Ltd.	XIRBF	IRB IN	Bharat Parekh
	IVRCL Infrastruc	IIFRF	IVRC IN	Bharat Parekh
	Jaiprakash Associates Limited	JPRKF	JPA IN	Bharat Parekh
	Jaiprakash Power Ventures Ltd.	XJSHF	JPVL IN	Bharat Parekh
	Lanco Infratech Ltd.	LNIFF	LANCIIN	Deepak Agrawala
	Larsen & Toub -G	LTORF	LTOD LI	Bharat Parekh
	Larsen & Toubro	LTOUF	LT IN	Bharat Parekh
	Mundra Port SEZ	XMANF	MSEZ IN	Bharat Parekh
	Nagarjuna Const	NGRJF	NJCC IN	Bharat Parekh
	NCC-GDR	XAKUF	NJGR LX	Bharat Parekh
	Reliance Infrastructure	RCTDF	RELI IN	Bharat Parekh
NEUTRAL				
	GMR Infrastructure Ltd.	GMRLF	GMRI IN	Deepak Agrawala
	Gujarat Inds	GUJIF	GIP IN	Bharat Parekh
	Neyveli Lignite	NEYVF	NLC IN	Bharat Parekh
	Tata Pwr. Co.	XTAWF	TPWR IN	Bharat Parekh
UNDERPERFORM				
	ABB	ABVFF	ABB IN	Bharat Parekh
	Gail India	XGLAF	GAIL IN	Vidyadhar Ginde
	Gail Limited - G	GAILF	GAID LI	Vidyadhar Ginde
	NTPC Ltd	NTHPF	NATP IN	Bharat Parekh
	Suzlon Energy	XZULF	SUEL IN	Bharat Parekh

#### $\emph{iQ} method^{\text{\tiny SM}}$ Measures Definitions

<b>Business Performance</b>	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) * (1 - Tax Rate) + Goodwill	Total Assets - Current Liabilities + ST Debt + Accumulated Goodwill
	Amortization	Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5-Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations – Total Capex	N/A
Quality of Earnings		
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt, Less Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit		
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap. = Current Share Price * Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price * Current Shares + Minority Equity + Net De Other LT Liabilities	bt + Sales

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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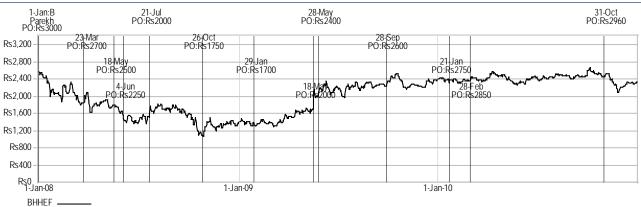
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#### **BHHEF Price Chart**



B: Buy, N: Neutral, S: Sell, U: Underperform, PO: Price objective, NA: No longer valid, NR: No Rating

Prior to May 31, 2008, the investment opinion system included Buy, Neutral and Sell. As of May 31, 2008, the investment opinion system includes Buy, Neutral and Underperform. Dark Grey shading indicates that a security is restricted with the opinion suspended. Light grey shading indicates that a security is under review with the opinion withdrawn. The current investment opinion key is contained at the end of the report. Chart is current as of December 31, 2010 or such later date as indicated.

Investment Rating Distribution: Engineering & Construction Group (as of 01 Jan 2011)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent		
Buy	35	61.40%	Buy	10	32.26%		
Neutral	9	15.79%	Neutral	2	22.22%		
Sell	13	22.81%	Sell	5	38.46%		
Investment Rating Distribution: Global Group (as of 01 Jan 2011)							
Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent		
Buy	2011	53.86%	Buy	874	48.31%		
Neutral	925	24.77%	Neutral	444	52.30%		
Sell	798	21.37%	Sell	276	36.75%		

<sup>\*</sup> Companies in respect of which BofA Merrill Lynch or one of its affiliates has received compensation for investment banking services within the past 12 months. For purposes of this distribution, a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. *VOLATILITY RISK RATINGS*, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. *INVESTMENT RATINGS* reflect the analyst's assessment of a stock's: (i) absolute total return potential and (ii) attractiveness for investment relative to other stocks within its *Coverage Cluster* (defined below). There are three investment ratings: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster\*

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>\*</sup> Ratings dispersions may vary from time to time where BofA Merrill Lynch Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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