

#### Euphoria!! (2007-2009)

Phase of excesses! Perennial power deficit! Sky-rocketing prices! BTG project awards at 30GW+ pa...record levels

# **Capital Goods**

Rise of reforms (2001-2006)

Ray of reforms! SEBs bailed out! Electricity Act 2003 rolls out the reforms process

Dire "State" (Pre-2001)

In dire state! SEBs nearly bankrupt thanks to high

power theft



Self-correction (2010-2012)

Reality hits! SEBs curtail high-cost power. Hibernation in project awards

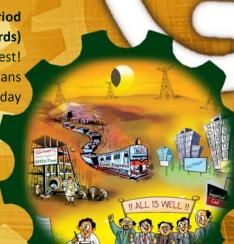


Survival of the fittest!
Sound capacity plans
see light of day

# BTG Ordering: Emerging from the Eclipse

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#### **BTG Ordering: Emerging from the Eclipse**

- Our statistical analysis of the macro data-points on demand and supply dynamics in the power sector suggests that the new cycle of powergen capex could commence over the next 12-15 months.
- From a market structure that was threatened by: i) intense competition from Chinese, Koreans and Japanese companies ii) and, possibility of ~5-6 players in the domestic market, BTG sector is undergoing a metamorphosis. Imported products have witnessed erosion of competitiveness, while the domestic players are engaging into disciplined 'aggression'.

#### **About the Cover**

- We track the journey and evolution of the Indian Power sector over the last 20 years, and juxtapose the same on the Capital Goods Index. Electricity Act 2003 was a watershed event, a panacea for the economic viability. Between 2007 and 2009, several events acted as tipping points that fuelled a fresh wave of private investments in power generation. However, 'reversal to mean' happened rather fast, given several challenges and constraints.
- Over the last 12-18 months, there have been a series of attempts by the government to address various contentious issues surrounding SEB finances, fuel availability, tariff review, etc. The progress has been encouraging, and an eclipse always ends.

#### **BTG Ordering: Emerging from the Eclipse**

|   | Page No. |
|---|----------|
| Executive Summary                         | 3        |
| How to play the theme                     | 4        |
| Key Exhibits                              | 5-6      |
| BTG ordering: Emerging from the 'Eclipse' | 7-13     |
| Disciplined Competitive 'Aggression'      |          |
| Companies                                 | 19-42    |
| BHEL                                      | 19       |
| Larsen & Toubro                           | 27       |
| Thermax                                   | 37       |

Prices as on December 5, 2013

#### Recommended Reading: India's Capex J-Curve - Comforting, yet Troubling (April 2013)



#### India's capex J-curve poised to kick-start

- India's capex J-Curve will be kick-started by (1) reorientation of fiscal expenditure, and (2) higher capex by Public Sector Units. This will be followed by revival in the industrial cycle culminating with greenfield/mega projects.
- Historical analysis (1995 onwards) suggests that government capex is largely stable across cycles, while private capex has been volatile. History seems to be repeating itself even now, government projects adds continue to be at normative levels of INR1,600b/ qtr whereas private projects adds are in negative territory for last 4 quarters.
- Policy initiatives offer ray of hope; but execution challenges persist across sectors.

9 December 2013

# **Capital Goods**



Self-correction (2010-2012)
Reality hits! SEBs curtail highcost power. Hibernation in
project awards

### **BTG** ordering: Emerging from the 'Eclipse'

BHEL has the highest leverage; L&T and TMX key beneficiaries

#### Powergen capex: Emerging from the 'Eclipse'

Our statistical analysis of the macro data-points on demand and supply dynamics in the power sector suggests that the new cycle of powergen capex could commence over the next 12-15 months. Despite aggressive assumptions on capacity additions and PLF; the electricity generation CAGR till FY19 when juxtaposed with aggregate FY13 demand stands at 8.8% and compares with last 10-years electricity consumption CAGR of 6.2%. Thus, we believe that SEBs will, sooner than later, start planning about capacity additions.

'Timing the recovery' remains the key moving variable. However we believe that what matters is not 'timing the project awards', but the time when markets believe that project awards 'could possibly' commence. And that time is now.

#### **Expect 20GW of project awards, interplay of structural factors**

During FY12 and FY13, power BTG project awards stood at just ~10GW pa, including 13GW of cumulative capacities being awarded under the bulk tender, and compares with annual run-rate of 25-30GW pa during FY07-10. Going forward, we believe that the pipeline is showing initial signs of recovery with projects of ~20GW likely to be awarded in 12-15 months. This could be a Tipping point, particularly for the equipment manufacturers, given that industry capacity for super-critical boilers and turbines stands at ~21-24GW pa.

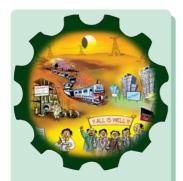
An important driver has been the 'Case 2' Bidding Document (approved in Sept 2013) with bidding for 9.3GW has already been initiated. The trend of increased project awards could possibly be supported by interplay of structural factors: i) Improved demand planning by distribution companies ii) Ensuring financial viability of the Distribution business models iii) Coal mine allocations post gap of 5 years, etc.

#### Metamorphosis: Disciplined competitive 'aggression'

From a market structure that was threatened by: i) intense competition from Chinese, Koreans and Japanese companies ii) and, possibility of ~5-6 players in the domestic market, BTG sector is undergoing a metamorphosis. Imported products have witnessed erosion of competitiveness, while the domestic players are witnessing disciplined 'aggression'. Business models from state gencos around vendor financing have witnessed muted bidding interest and unviable bids; and thus its again back to basics.

#### For private capacities, overseas orders have also started trickling-in

We understand that there have been few international orders received by the new manufacturing capacities of L&T-Mitsubishi and JSW-Toshiba; while TMX-Babcock JV is also qualified as a global manufacturing base. The quantum of orders is not meaningful initially; we believe that the opportunities exist to scale up the export business over the next few years. Currency depreciation has also made Indian manufacturing more competitive.



Redefining period (2013 onwards)

Survival of the fittest! Sound capacity plans see light of day

#### Target price snapshot (INR)

|      | •     | •     | • •    |
|------|-------|-------|--------|
|      | CMP   | TP    | Upside |
| BHEL | 171   | 210   | 23%    |
| L&T  | 1,087 | 1,186 | 9%     |
| TMX  | 670   | 850   | 27%    |

Investors are advised to refer through disclosures made at the end of the Research Report.

#### How to Play the Theme: BHEL best positioned as cyclical factors support recovery

BHEL CMP: INR171 TP: INR210 Rating: Buy Upside:23%

Financials & Valuations (INR b) 2014E 2015E 2016E Y/E Mar 395.6 325.8 Net Sales 358.8 47.2 **EBITDA** 33.7 47.6 Adj PAT 35.1 23.6 36.7 EPS (INR) 14.4 9.6 15.0 EPS Gr. (%) (46.4) (32.9)55.6 BV/Sh.(INR) 133.3 139.6 149.3 RoE (%) 11.1 7.1 10.4 RoCE (%) 11.4 7.3 10.7 Payout (%) 30.0 30.0 30.0 **Valuations** P/E(x)11.9 17.8 11.4 P/BV (x) 1.3 1.2 1.1 EV/EBITDA (x) 7.5 9.0 5.1 Div Yield (%) 2.4 1.7 2.6 \*Consolidated

- BHEL is strongly exposed to cyclical factors: i) Contribution margins at ~40-41% vs expected EBIDTA margin of 11.9% in FY14, leading to a meaningful operating leverage ii) Core NWC stable at ~200 days; cyclical factors of Retention money (at ~200 days in FY14E vs 55-60 days in FY07-09) and customer advances (deteriorated from 63% of revenues in FY09 to 34% in FY13) that impacted reported NWC are expected to normalize, as we expect BTB to increase from 2.2x currently to 3x in FY15/16E.
- We expect Free Cash Flows to improve from ~INR16-19b in FY13/14E to ~INR75-88b in FY15/16E, leading to a meaningful increase in net cash from INR63b in FY13 to INR174b in FY16E (~43% of current market cap). We upgrade the stock to **Buy** with a Price target of INR210/sh (14x FY16E).

#### LT CMP: INR1,087 TP: INR1,186 Rating: Buy Upside:9%

#### Financials & Valuations (INR b) 2014E 2015E 2016E Y/E Mar Sales 664.8 745.5 833.7 **EBITDA** 67.6 76.3 88.2 Adj PAT \* 40.4 48.3 59.4 EPS (INR)\* 43.8 52.4 64.3 EPS Gr. (%) -18.1 19.6 22.9 BV/Sh (INR) 351.4 440.4 392.8 **RoE** (%) 14.5 14.4 14.8 12.9 RoCE (%) 12.4 12.5 27.7 26.9 26.9 Payout (%) Valuations P/E(x)\*24.8 20.7 16.9 P/BV(x)3.1 2.8 2.5 EV/EBITDA(x) 15.6 13.9 11.7 Div Yield (%) 1.2 1.3 1.5 \*Consolidated

- L&T has emerged as a formidable 'challenger', and is the most integrated player in the power sector value chain. L&T is a strong play on the recovery in the investment climate, and hence the recent stock price rally is largely led by expectations of a decisive election mandate.
- We believe that India's capex J-Curve will be kick-started by (1) accelerated spending on flagship government projects, and (2) government's attempt to address the contentious issues in several sectors. This phase will then be followed with revival in industrial cycle culminating with traction in greenfield projects.
- Given the dependence on greenfield projects for the next level of growth, we believe that a large part of L&T's business model depicts characteristics of a mid to late cycle recovery. Asset monetization is an important near term stock driver. Maintain **Buy**, with revised SOTP based price target of INR1,186/sh, as we roll over to FY16E.

#### TMX CMP: INR670 TP: INR850 Rating: Buy Upside:27%

#### Financials & Valuations (INR b) Y/E Mar 2014E 2015E 2016E **Net Sales** 53.7 58.2 70.0 **EBITDA** 4.8 5.6 7.0 Adj PAT 3.0 3.5 4.7 EPS (INR) 25.2 29.5 39.4 EPS Gr. (%) (6.6)17.0 33.3 BV/Sh. (INR) 177.1 197.3 223.8 RoE (%) 15.3 16.1 19.0 12.8 14.2 17.2 RoCE (%) Payout (%) 32.4 31.7 32.7 **Valuations** P/E (X) 26.5 22.7 17.0 P/BV (X) 3.8 3.4 3.0 EV/EBITDA (X) 15.5 13.0 10.2 Div Yield (%) 1.0 \*Consolidated

- Thermax is a beneficiary of several structural trends, like energy efficiency, stringent regulations for environment compliance, green products, and currency depreciation. Overseas revenues contributed 27% of the consolidated revenues in FY13, and we expect the share to increase to 40% by FY16E.
- We understand that TMX is possibly an 'early' stage beneficiary of the possible uptick in the investment climate, particularly in the heating / WHR segment (25-28% of consolidated revenues). We expect TMX to report earnings CAGR of 5% over FY13-15, and 33% in FY16E. We maintain Buy, with an 18-month price target of INR850 (20x FY16E at INR762/sh and INR86/sh in subsidiaries).

#### **Expect 20GW of project awards, interplay of structural factors**

When juxtaposed with aggregate FY13 demand (as reported by CEA) at 997BUs, the supply CAGR stands at 8.8%. This compares with 10 year electricity consumption growth of 6.2% CAGR

Statistical analysis of the macro datapoints suggests that new cycle of powergen capex could possibly commence in next 12-15 months

| FY13    | FY19                         | CAGR  |
|---------|------------------------------|---|
| 130,221 | 220,221                      | 9.2%  |
| 44,055  | 66,769                       | 7.2%  |
| 51,661  | 65,592                       | 4.1%  |
| 34,505  | 89,485                       | 17.2%   |
|         | <b>130,221</b> 44,055 51,661 | 130,221     220,221       44,055     66,769       51,661     65,592 |

| Coal Based PLF (%) | 64.5% | 70.6% |
|--------------------|-------|-------|
| - Centre           | 74.0% | 80.0% |
| - State            | 62.0% | 60.0% |
| - Private          | 56.0% | 70.0% |

| 907 | 1653             | 10.5%   |
|-----|------------------|---|
| 694 | 1361             | 11.9%   |
| 67  | 111              | 8.8%  |
| 114 | 135              | 2.9%  |
| 33  | 46               | 5.7%  |
|     | 694<br>67<br>114 | 694     1361       67     111       114     135 |

| Demand (BUs) | 997 | 1,653 | 8.8%           |
|--------------|-----|-------|----------------|
|              |     | Sou   | rce: CEA, MOSL |

67% of the capacity under construction has 50%+ of project cost already spent. This reflects the maturity of projects, led by hibernation in awards since mid FY11

Under construction coal capacity (MW), in terms of project cost spent as at Sept 2013

|                 | Under Constr | 0-25%  | 25-50% | 50%+   |
|-----------------|--------------|--------|--------|--------|
| Centre          | 22,714       | 13,360 | 890    | 8,464  |
| State           | 13,931       | -      | 2,100  | 11,831 |
| Private         | 54,980       | 4,560  | 9,310  | 41,110 |
| Total           | 91,625       | 17,920 | 12,300 | 61,405 |
| Composition (%) |              | 19.6   | 13.4   | 67.0   |

Announced Project Awards for BHEL & L&T (excl 12.8GW of bulk tender projects), in MW

Source: CEA, MOSL

Of the 25GW projects awarded by the private sector from FY10 onwards to both BHEL and L&T, already 3.9GW has been cancelled and another 7GW are non-moving. Thus, 45% of the private sector project awards have been impacted

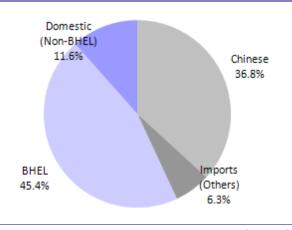
|         | FY10   | FY11   | FY12  | FY13  | 1HFY14 | Cumulative |
|---------|--------|--------|-------|-------|--------|------------|
| BHEL    | 14,800 | 8,820  | 2,520 | 3,140 | 1,500  | 30780      |
| Private | 12,910 | 4,920  | 1,320 | -     | -      | 19,150     |
| State   | -      | 3,900  | 1,200 | 2,640 | -      | 7,740      |
| Central | 1,890  | -      | -     | 500   | 1,500  | 3,890      |
| L&T     | 4,620  | 2,680  | -     | 1,320 | -      | 8,620      |
| Private | 2,640  | 2,680  | -     | -     | -      | 5,320      |
| State   | 1,980  | -      | -     | 1,320 | -      | 3,300      |
| Total   | 19,420 | 11,500 | 2,520 | 4,460 | 1,500  | 39,400     |
| Private | 15,550 | 7,600  | 1,320 | -     | -      | 24,470     |
| State   | 1,980  | 3,900  | 1,200 | 3,960 | -      | 11,040     |
| Central | 1.890  | _      | -     | 500   | 1.500  | 3.890      |

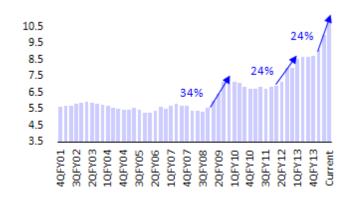
Source: MOSL, Company

#### Imported products witness erosion of competitive dynamics

# Capacity under construction: Imports (Chinese and Others) constitutes 43% of capacity

INR vs CNY: currency movement has been sharp, impacting competitiveness of imported products





Source: CEA Source: Bloomberg

#### **Domestic competitive intensity stabilizing**

Project award pipeline of ~16-20GW pa could lead to optimum capacity utilization

Supercritical installed capacity at ~21-24GW

|                          | Boilers |        | Tu   | rbines |
|--------------------------|---------|--------|------|--------|
| -                        | GW      | INR B* | GW   | INR B* |
| BHEL                     | 12.0    | Na     | 12.0 | Na     |
| L&T - MHI                | 4.0     | 8.7    | 4.0  | 12.9   |
| Thermax – Babcock Wilcox | 3.0     | 8.2    |      |        |
| Doosan                   | 2.2     | Na     |      |        |
| JSW - Toshiba            |         |        | 3.0  | 9.8    |
| Bharat Forge - Alstom    |         |        | 5.0  | 18.0   |
| Total                    | 21.2    |        | 24.0 |        |

\*Project Cost; Source: MOSL, Company

Most of the capacities are operational, while Bharat Forge – Alstom will be commissioned by Feb 2015 Large part of domestic capacity already commissioned

|                          | Stake<br>(%) | Location                           | Commissio ning | Remarks   |
|--------------------------|--------------|------------------------------------|----------------|---|
| BHEL                     | 100          | TG - Haridwar;<br>Boilers - Trichy | 2010           |   |
| L&T - MHI                | 51:49        | Hazira                             | 2010           | Can ramp-up to 6GW quickly                                  |
| Thermax - BW             | 51:49        | Baroda                             | 2013           | Ready for commissioning                                     |
| Doosan                   | 100          | Chennai                            | na             |   |
| JSW - Toshiba            | 25:75        | Chennai                            | 2011           | Expanding to 6GW; construction commenced FY13               |
| Bharat Forge -<br>Alstom | 49:51        | Gujarat                            | 2015           | Shifted from Mundra to Sanand;<br>construction started 2013 |

Source: MOSL, Company

## BTG ordering: Emerging from the 'Eclipse'

#### Expect possibility of 20GW project awards in the next 12-15 months

Our statistical analysis of the macro data-points on demand and supply dynamics in the power sector suggests that the new cycle of powergen capex could commence over the next 12-15 months. Despite aggressive assumptions on capacity additions and PLF; the electricity generation CAGR till FY19 when juxtaposed with aggregate FY13 demand stands at 8.8% and compares with last 10-years electricity consumption CAGR of 6.2%. Thus, we believe that SEBs will, sooner than later, start planning about capacity additions. 'Timing the recovery' remains the key moving variable. However we believe that what matters is not 'timing the project awards', but the time when markets believe that project awards 'could possibly' commence. And that time is now.

We believe that the new cycle of power generation capex could commence over the next 12-15 months

#### Statistical analysis suggests a new 'cycle' for powergen capex

Our statistical analysis of the macro data-points on demand and supply dynamics in the power sector suggests that the new cycle of power generation capex could commence over the next 12-15 months. Our calculations factor in:

- 90GW of coal based capacity addition over the next 5 years, and thus we assume that all projects under construction will be commissioned; note that this pipeline comprises 60% of capacities by the private sector and some of these projects face funding and other constraints
- PLF improvement for Central sector plants from 74% in FY13 to 80% and for the private sector from 56% to 70%.

We thus calculate the possible coal based generation growth at 11.9% CAGR till FY19; and on an aggregate basis at 10.5% CAGR. When juxtaposed with aggregate FY13 demand (as reported by CEA) at 997BUs, the supply CAGR stands at 8.8%.

Calculated supply CAGR of 8.8% till FY19 compares with last 10 years electricity consumption growth of 6.2% CAGR The aggregate electricity consumption growth stands at 6.2% CAGR over the last 10 years, and has declined from peak levels of 8.4-8.7% 10-year growth CAGR ending FY1992-1996. The calculated supply CAGR of 8.8% till FY19 (under fairly aggressive assumptions of all projects under construction getting commissioned and increased PLFs on aggregate capacity) needs to be seen in that context. In case we extend the lull period for new power generation project awards by 2 years, the calculated supply CAGR declines to 6.4% from 8.8%; which is in line with the last 10-year average.

When juxtaposed with aggregate FY13 demand (as reported by CEA) at 997BUs, the supply CAGR stands at 8.8%. This compares with 10 year electricity consumption growth of 6.2% CAGR Statistical analysis of the macro datapoints suggests that new cycle of powergen capex could possibly commence in next 12-15 months

|                                    | FY13    | FY19    | CAGR  |
|------------------------------------|---------|---------|-------|
| Installed Coal based Capacity (MW) | 130,221 | 220,221 | 9.2%  |
| - Centre                           | 44,055  | 66,769  | 7.2%  |
| - State                            | 51,661  | 65,592  | 4.1%  |
| - Private                          | 34,505  | 89,485  | 17.2% |

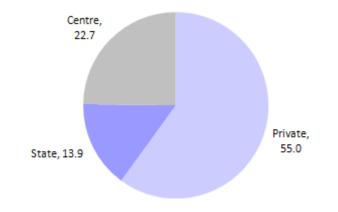
| Coal Based PLF (%) | 64.5% | 70.6% |  |
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| - Centre           | 74.0% | 80.0% |  |
| - State            | 62.0% | 60.0% |  |
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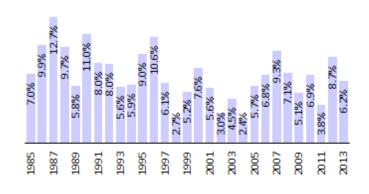
| Generation (BUs) | 907 | 1653  | 10.5% |
|------------------|-----|-------|-------|
| - Coal           | 694 | 1361  | 11.9% |
| - Gas            | 67  | 111   | 8.8%  |
| - Hydro          | 114 | 135   | 2.9%  |
| - Nuclear        | 33  | 46    | 5.7%  |
| Demand (BUs)     | 997 | 1,653 | 8.8%  |

Source: CEA, MOSL

91GW of capacity under construction as at Sept 2013 (GW), including 55GW from the private sector

Electricity consumption growth stood at 6.2% over the last 10 years (% YoY)





Source: CEA

Source: CEA

67% of the capacity under construction has 50%+ of project cost already spent, and is a clear reflection of the hibernation in awards since mid FY11

Under construction coal capacity (MW), in terms of project cost spent as at Sept 2013

|         | Under Constr | 0-25%  | 25-50% | 50%+   |
|---------|--------------|--------|--------|--------|
| Centre  | 22,714       | 13,360 | 890    | 8,464  |
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| Private | 54,980       | 4,560  | 9,310  | 41,110 |
| Total   | 91,625       | 17,920 | 12,300 | 61,405 |
| %       |              | 19.6%  | 13.4%  | 67.0%  |
|         |              |        |        |        |

Source: CEA, MOSL

9 December 2013 8

#### Expect powergen capex to pick up, driven by structural trends

The Indian power sector has witnessed a series of attempts by the government to address the various contentious issues surrounding SEB finances, fuel availability, tariff review, etc. While the progress has been encouraging, there is still a lot that needs to be done.

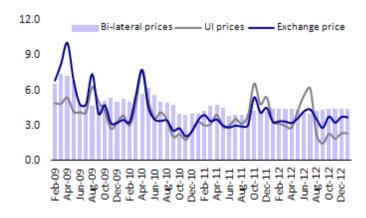
Distribution companies having burnt their fingers once, could look for longterm tie-ups fairly in advance

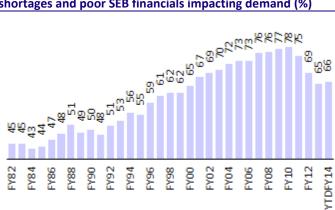
- Improved demand planning by distribution companies: Power generation capacity addition entails long gestation (of ~50-54 months), and hence projects awarded over the next 12 -15 months will likely be commissioned in FY18-20. We believe that State Electricity Boards will commence planning for the long-term energy procurement well in advance; as over the last cycle, most of the SEBs incurred a meaningful financial burden by procuring power at higher rates under short to medium term contracts.
- 2 Coal mine allocations, post gap of 5 years: In July 2013, 14 coal blocks with reserves of 8b tons were allocated to the power companies (including NTPC, State Gencos, etc). In Sept 2013, media articles indicated that government will offer four coal blocks in Orissa with reserves of 2b tons to power companies in the country's first round of coal mine auction. The blocks will be awarded under a model similar to the ultra mega power projects where a firm that quotes the lowest tariff for electricity supply gets to develop a plant based on the mine. The allocations will be made after a gap of five years, as coal blocks have not been allotted to private firms after 2008.
- important driver of the power demand in our opinion, will be the economic and financial viability of the distribution business models; and the longer term trend is being supported by: i) AT&C losses (as per CEA) have declined from peak levels of 32.9% in FY01 to 24.2% in FY11 and the target is to reduce the same to 15% with R-APDRP; we understand that of the 1400 towns sanctioned under Part A, 500 towns have already been integrated with data centers ii) Financial Restructuring Plan of the SEBs has been approved, with Uttar Pradesh, Rajasthan, Tamil Nadu and Haryana already completing the exercise; also CCEA has extended the cut-off date for re-structuring to March 2014 and thus would enable Bihar, Andhra Pradesh, Karnataka and Jharkhand to also participate in the same and iii) FY13/FY14 had seen tariff hikes by 24-26 states each year, at record levels.

Model Bidding Documents, including Case 1 and Case 2 has been approved: We believe that an important driver of the incremental projects will be the 'Case 2' Model Bidding Document which was approved in Sept 2013. Post this, bidding process has been initiated for the two UMPP projects of 4GW each on Design Build Finance Operate and Transfer (DBFOT) basis and 1.3GW in Jharkhand. The UMPPs are in Orissa (pit head) and Cheyyur (imported coal), and we understand that the target is to award these projects by end FY14. Approval of Case 1 document also entails that IPPs will now be able to tie-up capacities under construction on a long term PPA route; which was also the key requirement for coal allocation by Coal India.

#### SEBs financials were impacted as they procured power at higher costs through medium term contracts (INR/kwh)

# Coal PLFs have declined meaningfully given the fuel shortages and poor SEB financials impacting demand (%)





Source: CERC Source: CEA

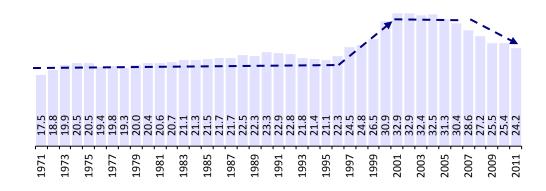
In July 2013, 14 coal blocks with reserves of 8b tons were allocated to the power companies (including NTPC, State Gencos, etc) 2 Coal mine allocations of 8b tons for power projects in July 2013

| Captive Block                    | Allottee                     | m tons |
|----------------------------------|------------------------------|--------|
| Tentuloi, Orissa                 | Orissa Thermal Power         | 1234   |
| Bhalumuda, Chhattisgarh          | NTPC                         | 550    |
| Banai, Chhattisgarh              | NTPC                         | 629    |
| Chandrabila, Orissa              | NTPC                         | 550    |
| Kudanali-Luburi, Orissa          | NTPC                         | 266    |
|                                  | J&K State Power Dev          | 130    |
| Baisi, Chhattisgarh              | Chhattisgarh State Power Dev | 150    |
| Pachwara South, Jharkhand        | Neyveli UP Power             | 279    |
| Jilga-Barpali, Chhattisgarh      | Neyveli UP Power             | 396    |
|                                  | Chhattisgarh State Power Dev | 150    |
| Sarapal-Nuapara, Orissa          | Andhra Pradesh Power Gen     | 701    |
| Kente Extension, Chhattisgarh    | Rajasthan Vidyut Utpadan     | 200    |
| Mahajanvadi, Maharashtra         | Maharashtra State Power Gen  | 170    |
|                                  | Gujarat State Electricity    | 170    |
| Gondbahera Ujheni, MP            | MP Power Gen                 | 532    |
| Deocha-Pachami, WB               | Karnataka Power Corp         | 382    |
|                                  | WB Power                     | 584    |
|                                  | Bihar State Power            | 486    |
|                                  | Punjab State Power           | 229    |
|                                  | TANGEDCO                     | 171    |
|                                  | UP Rajya Vidyut              | 250    |
| Kalyyanpur- Badalpara, Jharkhand | Haryana Power                | 51     |
|                                  | UP Rajya Vidyut              | 51     |
| Total                            |                              | 8,311  |

Source: MOSL, Media Articles

Pace of reduction could accelerate as we understand that of the 1400 towns sanctioned under Part A, 500 towns have already been integrated with data centers and target is to reduce losses to 15%

#### **3**AT&C losses have declined from peak levels (%)



Source: CEA, MOSL

#### Possible project awards of 20GW in next 12-15 months will be an important driver, given that industry capacity for super-critical boilers and turbines stand at

~21-24GW pa

#### BTG award pipeline showing initial signs of recovery

- During FY12 and FY13, the power BTG project awards stood at just ~20GW, including 13GW of capacities being awarded under the bulk tender route. This compares with an annual order award run-rate of ~25-30GW pa during FY07-FY10. Going forward, we believe that the pipeline is again showing initial signs of recovery with projects of ~20GW likely to be awarded in the next 12-15 months. This could be an important turning point, particularly for the equipment manufacturers, given that industry capacity for super-critical boilers and turbines stands at ~21-24GW pa.
- An important driver of the incremental projects has been the 'Case 2' Standard Bidding Document which was approved in Sept 2013. Post this, bidding process has been initiated for the two UMPP projects of 4GW each on Design Build Finance Operate and Transfer (DBFOT) basis and 1.3GW in Jharkhand. The UMPPs are in Orissa (pit head) and Cheyyur (imported coal), and we understand that the target is to award these projects by end FY14.
- We expect NTPC to award ~5GW of projects, including 2GW of North Karanpura which had been cleared by the Cabinet Committee on Investments in February 2013 and the bidders are L&T, BHEL and Doosan; 1.3GW of Tanda (where L&T is already L1 in boilers, while TG bids have been invited) and 1.6GW of retendering for Darlipalli post exit of BGR (BHEL is L1 for supply of boilers).
- In addition, we expect project awards of ~5-7GW by state sector, including 1.3GW by Mahagenco, 1.3GW for Malwa project in Madhya Pradesh (L&T is already L1), 800MW Wanakbori in Gujarat, 2.4GW by AP Genco, etc. We also expect an increasing trend of several state governments to invite bids on Case 2 basis, going forward. Other key projects include 1980MW by Neyveli Lignite for the Ghatampur project, with the BOP tender also been invited in Oct 2013.
- In addition, we expect possibilities of project awards by Jindal Power for the 1.3GW Kineta Power / Dumka, etc; but a revival in the private IPP interest still seems a long way ahead.

# Four years of constrained ordering environment for BHEL: i) FY12/FY13 - Limited gross project awards of INR198b / INR256b, and largely driven by NTPC bulk tender ii) FY10/FY11: Sizeable part of awards at 89%/51% respectively from private sector, with several of these projects facing execution challenges

BHEL: Power sector order intake has been impacted by constrained demand environment



Source: MOSL, Company; Note: FY12 numbers are net of order cancellations

Of the 25GW projects awarded by the private sector from FY10 onwards to both BHEL and L&T, already 3.9GW has been cancelled and another 7GW are non-moving. Thus, 45% of the private sector project awards have been impacted Announced Project Awards for BHEL & L&T (excl 12.8GW of bulk tender projects), in MW

|         | FY10   | FY11   | FY12  | FY13  | 1HFY14 | Cumulative |
|---------|--------|--------|-------|-------|--------|------------|
| BHEL    | 14,800 | 8,820  | 2,520 | 3,140 | 1,500  | 30,780     |
| Private | 12,910 | 4,920  | 1,320 | -     | -      | 19,150     |
| State   | -      | 3,900  | 1,200 | 2,640 | -      | 7,740      |
| Central | 1,890  | -      | -     | 500   | 1,500  | 3,890      |
| L&T     | 4,620  | 2,680  | -     | 1,320 | -      | 8,620      |
| Private | 2,640  | 2,680  | -     | -     | -      | 5,320      |
| State   | 1,980  | -      | -     | 1,320 | -      | 3,300      |
| Total   | 19,420 | 11,500 | 2,520 | 4,460 | 1,500  | 39,400     |
| Private | 15,550 | 7,600  | 1,320 | -     | -      | 24,470     |
| State   | 1,980  | 3,900  | 1,200 | 3,960 | -      | 11,040     |
| Central | 1,890  | -      | -     | 500   | 1,500  | 3,890      |

Source: MOSL, Company

#### Bids for ~9.3GW of Case 2 projects have already been invited

Post the approval of the Case 2 bid document in Sept 2013, bidding process for ~9.3GW of capacity has already been initiated An important driver of the incremental projects has been the 'Case 2' Standard Bidding Document which was approved in Sept 2013. Post this, bidding process has been initiated for the two UMPP projects of 4GW each on Design Build Finance Operate and Transfer (DBFOT) basis and 1.3GW in Jharkhand. The UMPPs are in Orissa (pit head) and Cheyyur (imported coal), and we understand that the target is to award these projects by end FY14.

- For the Orissa UMPP, the Request for Qualification has seen interest from nine players: NHPC (teamed up with Bhel and Singareni Colleries), NTPC, Tata Power, Adani Power, JSW Energy, Jindal Power, Sterlite Infraventures, China Light & Power and L&T. Land for the project is expected to be in possession shortly, water is available from Hirakud reservoir and coal supply is assured through allocated coal blocks; thus we understand that the project will have limited execution and operational risks.
- For the Cheyyur UMPP, there have been issues with local fishermen protesting environmental clearances, and National Green Tribunal had restricted Power Finance Corporation to go ahead with the award process; and thus the speedy resolution of the matter will be closely watched. Again, the Request for Qualification has seen interest from eight players: NTPC, Adani Power, JSW Energy, Jindal Power, Sterlite Infraventures, China Light & Power, GMR Energy and L&T. Recent PFC release stated that the Environment clearance, forest

- clearance and water linkage for the project is already in-place; and land is expected to be in possession shortly.
- Jharkhand SEB invited bids for pre-qualification of developer for setting up 1320 MW Patratu power plant on DFBOT basis. Coal for the proposed project is to be supplied from Banhardih captive coal block. Jharakhad SEB intends to set up three power plants with an aggregate capacity of 3.6GW, and Patratu is amongst the first tenders being invited; other projects are expected to be set up in Godda and Chatra with coal to be provided from Urma Paharitha and Maurya coal blocks.

## **Disciplined Competitive 'Aggression'**

#### BHEL has the highest operating leverage

From a market structure that was threatened by: i) intense competition from Chinese, Koreans and Japanese companies ii) and, possibility of ~5-6 players in the domestic market, BTG sector is undergoing a metamorphosis. Imported products have witnessed erosion of competitiveness, while the domestic players are engaging in disciplined 'aggression'. Business models from state gencos around vendor financing have witnessed muted bidding interest and unviable bids; and thus its again back to basics.

Possible project awards of 20GW in next 12-15 months will be an important driver, given that industry capacity for super-critical boilers and turbines stand at ~21-24GW pa

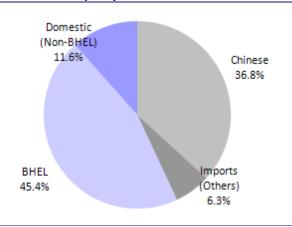
From a market structure that was threatened by: i) intense competition from Chinese, Koreans and Japanese companies ii) and, possibility of ~5-6 players in the domestic market, the BTG manufacturing sector is undergoing a metamorphosis.

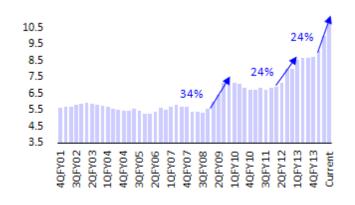
- Imported products witness erosion of competitive intensity: Of the 90GW capacity under construction as per CEA, share of Chinese and other imported equipments stand at 36.8% and 6.3% respectively. This is a large market pie being captured by imported products. Going forward, we believe the competitive intensity of such players has been largely eroded given i) currency movements (sharp 56% currency depreciation over the last 3 years), ii) imposition of 21% import duty in 2012 leading to differential of ~14% for domestic players and iii) also intense competition given commissioning of ~21-24GW of supercritical BTG manufacturing capacities in India has led to a 15% price correction in boilers and 20% in turbines under bulk tender 2 vs bulk tender 1.
- Disciplined competitive aggression amongst domestic players: The domestic market structure is also showing resemblance of stability, with ~4 players each in boilers and turbines setting up manufacturing capacities of ~21-24GW pa for supercritical projects. Based on interactions with industry players, we understand that there has been limited progress in setting up integrated manufacturing capacities for supercritical projects by few players like BGR-Hitachi, GB Engineering Ansaldo, ISGEC Foster Wheeler, Cethar Riley, etc. Recently in October 2013, the EPC bid for 600MW Surat Lignite project awarded to Lanco Infra (INR33b) was cancelled as the company did not submit 10% bank guarantee.

#### Imported products witness erosion of competitive dynamics

# Capacity under construction: Imports (Chinese and Others) constitutes 43% of capacity

INR vs CNY: currency movement has been sharp, impacting competitiveness of imported products





Source: CEA Source: Bloomberg

Our calculation suggests a net gain of approx 14% for domestic manufacturers

Imposition of 21% import duty in 2012 leading to differential of ~14% for domestic players

|                               |      | Earlier |         |      | Wef 2012 |         |
|-------------------------------|------|---------|---------|------|----------|---------|
|                               | Duty | BHEL    | Chinese | Duty | BHEL     | Chinese |
| Domestic                      |      | 650     | -       |      | 650      | -       |
| Imports                       | 35%  | 350     | 1,000   | 35%  | 350      | 1,000   |
| Value                         |      | 1,000   | 1,000   |      | 1,000    | 1,000   |
| RM Costs                      | 0%   | 325     |         |      | 325      |         |
| Customs (%)                   | 0%   | -       |         | 5%   | 18       | 50      |
| Excise (Adj for Cenvat)       | 12%  | 78      | -       | 12%  | 120      | 120     |
| Sales Tax, etc                | 4%   | 29      | -       | 4%   | 46       | 47      |
| Duty Impact                   |      | 107     |         |      | 183      | 217     |
| Net Impact                    |      | 10.7%   |         |      | -3.4%    |         |
| Net Gain (for domestic mfgrs) |      | 14.1%   |         |      |          |         |

Note: Calculations based on theoretical product value of 1,000

Source: MOSL, Company

#### **Domestic competitive intensity stabilizing**

Supercritical installed capacity at ~21-24GW

Project award pipeline of ~16-20GW pa could lead to optimum capacity utilization

|                          | Во   | ilers  | Tu   | rbines |
|--------------------------|------|--------|------|--------|
| -                        | GW   | INR B* | GW   | INR B* |
| BHEL                     | 12.0 | na     | 12.0 | na     |
| L&T - MHI                | 4.0  | 8.7    | 4.0  | 12.9   |
| Thermax – Babcock Wilcox | 3.0  | 8.2    |      |        |
| Doosan                   | 2.2  | Na     |      |        |
| JSW - Toshiba            |      |        | 3.0  | 9.8    |
| Bharat Forge - Alstom    |      |        | 5.0  | 18.0   |
| Total                    | 21.2 |        | 24.0 |        |
|                          |      |        |      |        |

\*Project Cost; Source: MOSL, Company

Most of the capacities are operational, while Bharat Forge – Alstom will be commissioned by Feb 2015 Large part of domestic capacity already commissioned

|                          | Stake<br>(%) | Location                           | Commissio ning | Remarks  |
|--------------------------|--------------|------------------------------------|----------------|--|
| BHEL                     | 100          | TG - Haridwar;<br>Boilers - Trichy | 2010           |  |
| L&T - MHI                | 51:49        | Hazira                             | 2010           | Can ramp-up to 6GW quickly                               |
| Thermax - BW             | 51:49        | Baroda                             | 2013           | Ready for commissioning                                  |
| Doosan                   | 100          | Chennai                            | na             |  |
| JSW - Toshiba            | 25:75        | Chennai                            | 2011           | Expanding to 6GW; construction commenced FY13            |
| Bharat Forge -<br>Alstom | 49:51        | Gujarat                            | 2015           | Shifted from Mundra to Sanand; construction started 2013 |

Source: MOSL, Company

# Business models around vendor financing witness muted bidding interest, and unviable bids

Another encouraging trend is that new business models being contemplated like vendor financing, etc have witnessed poor response given the stringent funding conditions. Our channel checks indicate that for the TANGECO project, the sole bidder quoted a price that was at 35-50% premium to the contracts which do not entail financing pre-conditions.

- In early 2012, Mahagenco had invited expressions of interest for coal-based power projects at Dondaicha (3.3GW) and Dhopawe (1.98GW).
- TANGEDCO in 2013 come out with tenders for Udangudi (1.32GW) project which also entailed suppliers credit under "EPC cum Debt Financing Contract". The contract terms entailed funding atleast 75% of the EPC cost and 100% of the Interest during Construction period. The bidding condition was flexible towards project imports and stipulated that i) Bidder shall be an Indian manufacturer who has designed, engineered, manufactured, supplied, erected, commissioned at least one number 500 MW or above which is in successful operation for at least one year OR ii) Bidder shall be a manufacturer who has designed, engineered, manufactured, supplied, erected, commissioned at least one unit of minimum 660 MW capacity which is in successful operation for at least one year as on date of techno commercial bid opening. Indian JV company can also participate based on the experience of the parent company.

#### For private capacities, overseas orders have also started trickling-in

We understand that there have been few international orders received by the new manufacturing capacities of L&T-Mitsubishi and JSW-Toshiba. While the quantum is not meaningful initially, we believe that the opportunities exist to scale up the export business over the next few years. Currency depreciation has also made Indian manufacturing more competitive.

- In its Press Release in 2013, **JSW-Toshiba** had stated that "Going forward, in addition to India, Toshiba Group, will look to reinforce its presence by making the best use of Toshiba JSW in markets around the world including Asia and the Middle East, where demand for thermal power plants is strong".
- L&T in its FY13 Annual Report had also stated that "The Joint Ventures with Mitsubishi Heavy Industries for manufacture of Steam Turbines and Steam Generators are seeking to supply components to MHI's third country projects." It also stated that "The export market thrust which is an integral part of the

- company's business strategy got impetus as the company bagged a prestigious order from MHI to supply pressure parts for Rabigh Arabian Water Electricity Company, Saudi Arabia."
- For **TMX**, there are options of bagging orders from the overseas markets, as part of the global manufacturing network of Babcock and Wilcox. The TBW manufacturing plant is the only second plant globally (apart from China), and being a modern plant combined with the sharp currency depreciation, we believe that competitiveness for the Indian manufacturing has comparatively improved.

Despite a constrained environment, L&T has managed to achieve EBIDTA breakeven with sub 50% capacity utilization

L&T reported strong EBIDTA improvement despite revenue decline in FY13; comparison with BHEL (INR M)

|                          | BHEL    |         | LT Turl | oine  | LT Bo  | iler   | LT BTG |        |  |
|--------------------------|---------|---------|---------|-------|--------|--------|--------|--------|--|
|                          | FY12    | FY13    | FY12    | FY13  | FY12   | FY13   | FY12   | FY13   |  |
| Capacity (MW)            | 20,000  | 20,000  |         |       |        |        | 4,000  | 4,000  |  |
| Revenues                 | 479,788 | 484,246 | 12,323  | 9,923 | 24,478 | 23,790 | 36,801 | 33,713 |  |
| RM cost                  | 283,440 | 273,155 | 10,630  | 7,397 | 20,068 | 18,410 | 30,698 | 25,807 |  |
| % of sales               | 59%     | 56%     | 86%     | 75%   | 82%    | 77%    | 83%    | 77%    |  |
| Other manufacturing cost | 42,618  | 59,666  | 898     | 1,760 | 2,808  | 2,205  | 3,706  | 3,965  |  |
| % of sales               | 9%      | 12%     | 7%      | 18%   | 15%    | 11%    | 10%    | 12%    |  |
| Staff cost               | 54,654  | 57,528  | 400     | 439   | 956    | 923    | 1,356  | 1,362  |  |
| % of sales               | 11%     | 12%     | 3%      | 4%    | 4%     | 4%     | 4%     | 4%     |  |
| Total Expenses           | 380,712 | 390,348 | 11,927  | 9,596 | 23,832 | 21,537 | 35,760 | 31,133 |  |
| EBITDA                   | 99,076  | 93,898  | 396     | 328   | 646    | 2,253  | 1,042  | 2,581  |  |
| % of sales               | 21%     | 19%     | 3%      | 3%    | 3%     | 9%     | 3%     | 8%     |  |

Source: MOSL, Company

#### BHEL best positioned, as cyclical factors support recovery

We believe that BHEL is the most actionable play on the theme of a possible recovery in power generation project awards.

■ BHEL is strongly exposed to cyclical factors: i) Contribution margins at ~40-41% vs expected EBIDTA margin of 11.9% in FY14, leading to a meaningful operating leverage ii) Core NWC stable at ~200 days; cyclical factors of Retention money (at ~200 days in FY14E vs 55-60 days in FY07-09) and customer advances (deteriorated from 63% of revenues in FY09 to 34% in FY13) that impacted reported NWC are expected to normalize, as we expect BTB to increase from 2.2x currently to 3x in FY15/16E.

We expect Free Cash Flows to improve from ~INR16-19b in FY13/14E to ~INR75-88b in FY15/16E, leading to a meaningful increase in net cash from INR63b in FY13 to INR174b in FY16E (~43% of current market cap). We upgrade the stock to **Buy** with a Price target of INR210/sh (14x FY16E).

■ L&T has emerged as a formidable 'challenger', and is the most integrated player in the power sector value chain. L&T is a strong play on the recovery in the investment climate, and hence the recent stock price rally is largely led by expectations of a decisive election mandate.

We believe that India's capex J-Curve will be kick-started by (1) accelerated spending on flagship projects, and (2) government's attempt to address the

contentious issues in several sectors. This phase will then be followed with revival in industrial cycle culminating with traction in greenfield projects.

Given the dependence on greenfield projects for the next level of growth , we believe that a large part of L&T's business model depicts characteristics of a mid to late cycle recovery. Asset monetization is an important near term stock driver. Maintain **Buy**, with revised SOTP based price target of INR1,186/sh, as we roll over to FY16E.

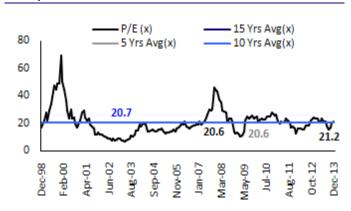
■ Thermax is a beneficiary of several structural trends, like energy efficiency, stringent regulations for environment compliance, green products, and currency depreciation. Overseas revenues contributed 27% of the consolidated revenues in FY13, and we expect the share to increase to 40% by FY16E.

We understand that TMX is possibly an 'early' stage beneficiary of the possible uptick in the investment climate, particularly in the heating / WHR segment (25-28% of consolidated revenues). We expect TMX to report earnings CAGR of 5% over FY13-15, and 33% in FY16E. We maintain **Buy**, with an 18-month price target of INR850 (20x FY16E at INR762/sh and INR86/sh in subsidiaries).

#### **BHEL P/E band**

#### 

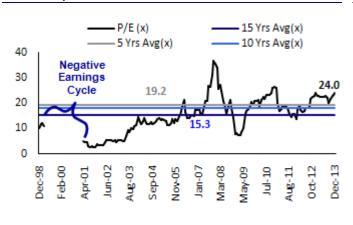
#### L&T P/E band



Source: Bloomberg, MOSL

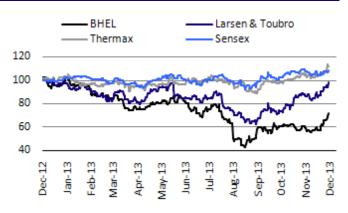
Source: Bloomberg, MOSL

#### Thermax P/E band



#### Source: Bloomberg, MOSL

#### 1 Year Relative Performance to Sensex



Source: Bloomberg, MOSL

9 December 2013

Update | Sector: Capital Goods



Buy



**BSE Sensex S&P CNX** 20,958 6,241

CMP: INR171 TP: INR210

#### **Stock Info**

| Bloomberg             | BHEL IN    |
|-----------------------|------------|
| Equity Shares (m)     | 2,447.6    |
| 52-Week Range (INR)   | 248/100    |
| 1, 6, 12 Rel. Per (%) | 20/-18/-36 |
| M.Cap. (INR b)        | 418.5      |
| M.Cap. (USD b)        | 6.8        |

#### Financial Snapshot (INR b)

| Y/E Mar       | 2015E  | 2016E  |       |
|---------------|--------|--------|-------|
| Net Sales     | 395.6  | 325.8  | 358.8 |
| EBITDA        | 47.2   | 33.7   | 47.6  |
| Adj PAT       | 35.1   | 23.6   | 36.7  |
| EPS (INR)     | 14.4   | 9.6    | 15.0  |
| EPS Gr. (%)   | (46.4) | (32.9) | 55.6  |
| BV/Sh. (INR)  | 133.3  | 139.6  | 149.3 |
| RoE (%)       | 11.1   | 7.1    | 10.4  |
| RoCE (%)      | 11.4   | 7.3    | 10.7  |
| Payout (%)    | 30.0   | 30.0   | 30.0  |
| Valuations    |        |        |       |
| P/E (x)       | 11.9   | 17.8   | 11.4  |
| P/BV (x)      | 1.3    | 1.2    | 1.1   |
| EV/EBITDA     | 7.5    | 9.0    | 5.1   |
| Div Yield (%) | 2.4    | 1.7    | 2.6   |

<sup>\*</sup> Consolidated

#### Shareholding pattern (%)

|           | Sep-13 | Jun-13 | Sep-12 |
|-----------|--------|--------|--------|
| Promoter  | 67.7   | 67.7   | 67.7   |
| Dom. Inst | 12.0   | 12.2   | 12.7   |
| Foreign   | 15.5   | 15.2   | 14.6   |
| Others    | 4.8    | 4.8    | 5.0    |

#### Stock Performance (1-year)



#### Cyclical factors support recovery

#### Strong operating leverage and improvement in FCF to drive re-rating

#### Expect BTB to bounce back from 2.2x currently to ~3x in FY15/16E

- Based on our expectations that the new cycle for powergen capex will possibly commence in the next 12-15 months, we expect BHEL's power segment order intake to improve from average levels of INR196b in FY12-14E to average of INR280b in FY15/16E. Since FY10, BHEL's BTB has nearly halved from peak levels of 4.3x to 2.2x in FY13/1HFY14; and we expect the ratio to improve to 2.6x in end FY14 and further to ~3x in FY15/16E.
- Improvement in BTB is an all important trend for capital goods companies, and has linkages with several components including working capital, operating free cash flows and operating leverage.

#### Expect margins to bottom in FY15, meaningful operating leverage

We expect BHEL's EBIDTA margins to decline from 19.4% in FY13 to 10.3% in FY15E, and improve to 13.3% in FY16E. During this period, we expect contribution margins to be maintained at 40-41%, and thus the expectations of margin expansion in FY16E are largely a function of the operating leverage, particularly staff costs (17% in FY16E, vs 18.8% in FY15E) and provisions, including LDs (at 3.6% in FY16E vs 7.1% in FY14E).

#### Operating cash flows to improve; Core NWC stable

- For BHEL, a large part of the variation in the reported net working capital is being driven by cyclical factors, such as retention money (at ~200 days in FY14E vs 55-60 days in FY07-09) and customer advances (deteriorated from 63% of revenues in FY09 to 34% in FY13, but stable as % of order book at 12-14%). Thus, while the core net working capital has been fairly stable at ~200days, the reported number has been volatile from negative 24 days in FY09 to 188 days in FY14E.
- Given that we expect the above cyclical factors impacting NWC to normalize in FY15/16E, we expect Free Cash Flows to improve from ~INR16-19b in FY13/14E to ~INR75-88b in FY15/16E. This will lead to a meaningful increase in net cash from INR63b in FY13 to INR174b in FY16E (~43% of current market cap).

#### Valuations, upgrade to Buy

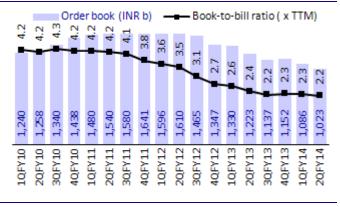
We roll over our price target to FY16, and assign a PER multiple of 14x based on long term averages. We upgrade the stock to **Buy**, with a Price target of INR210, upside of 23%. The key variable to watch out for is the impact of the Pay Commission in FY17, and could be an important swing factor. The key risk to our view is a delay in pick-up in power gen ordering cycle and also possibility of write-off of a large part of the retention money (~INR220b currently).

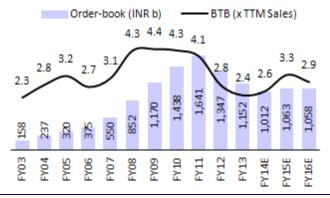
#### Expect BTB to bounce back from lows of 2.2x currently to ~3x in FY15/16E

- For BHEL, BTB has nearly halved from peak levels of 4.3x in FY10 to 2.2x in FY13/1HFY14. We expect the ratio to improve marginally to 2.6x in end FY14 and further to ~3x in FY15/16E. This is being led by increased order intake, particularly in the power segment, from average levels of INR196b in FY12-14E to average of INR280b in FY15/16E.
- During the 2QFY14 post results concall, the management had also stated that 15GW of projects are likely to be finalized in 2HFY14, and BHEL is favorably positioned for ~5GW of projects. Going forward, we expect that the new cycle of powergen capex could possibly commence in the next 12-15 months and the pipeline is again showing initial signs of recovery.
- Improvement in BTB is an all important trend for companies in the capital goods sector, and has linkages on several components including working capital, operating free cash flows and operating leverage.

#### BTB has declined to 2.2x, at all time lows

Expect BTB to inch-upwards to ~3x in FY15/FY16E

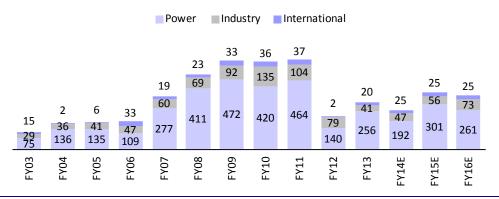




Source: MOSL, Company

Source: MOSL, Company

## Expect Power sector orders to bounce back from average levels of INR196b in FY12-14E to average of INR280b in FY15/16E



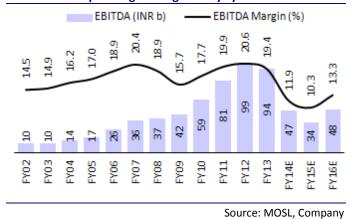
Source: MOSL, Company

#### Expect margins to bottom in FY15, BHEL has meaningful operating leverage

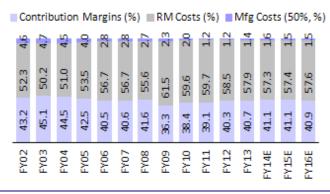
Given our expectations of BTB bottoming in 1HFY14, we expect reported EBIDTA margins to bottom in FY15, given the time lag of ~18 months. We expect BHEL's EBIDTA margins to decline from 19.4% in FY13 to 10.3% in FY15E, and improve to 13.3% in FY16E. During this period, we expect contribution margins to be maintained at 40-41%, and thus the expectations of margin expansion are

- largely a function of the cyclical factors: staff costs and provisions (plus liquidated damages).
- Staff cost for BHEL is largely fixed in nature and thus entails a very strong operating leverage: during FY01-FY12, staff cost declined meaningfully from 23.9% of revenues to 11.4% of revenues; and given the poor operating leverage, we expect the same to increase to 18.8% of revenues in FY15E. Provisions also have a cyclical character, and are a function of the execution stage of the projects. Given the meaningful cost and time overruns in terms of project execution over the last 2-3 years, the quantum is expected to increase meaningfully in FY14 and we expect the trends to normalize going forward.

Expect EBIDTA margins to bottom in FY15E, improvement is a function of operating leverage led by cyclical factors

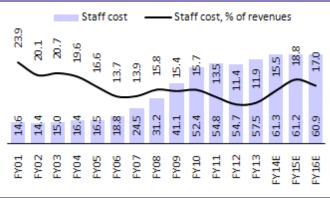


# Contribution margins has been maintained at ~40-41% despite intense competitive pressures



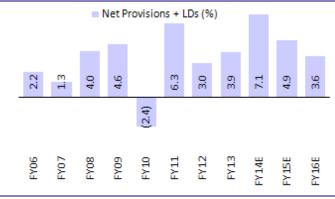
Source: MOSL, Company

## Expect Staff cost at 18.8% of revenues in FY15, completing a full circle



Source: MOSL, Company

# Net additions to provisions, plus Liquidated damages are also highly cyclical in nature



Source: MOSL, Company

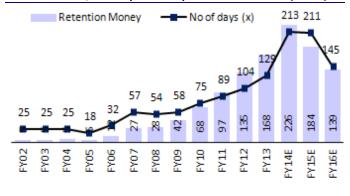
#### Operating cash flows to improve; Core NWC stable

- For BHEL, a large part of the variation in the reported net working capital is being driven by cyclical factors, like retention money and customer advances. Thus, while the core net working capital has been fairly stable at ~200days, the reported number has been volatile from negative 24 days in FY09 to 188 days in FY14E.
- Retention money is largely a function of negotiations with the customers and the schedule of project completions; the quantum has increased meaningfully from 55-60 days in FY07-09 to ~200 days in FY14. Improving collections has been an important area of focus and the intense efforts had led to 15% higher

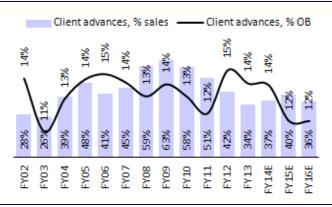
collections in FY13. Media reports had indicated that BHEL is also taking legal steps to recover the dues. Also, BHEL is taking direct line of credit from bankers / financial institutions and hence will get a priority in terms of payments for equipment supplies. Customer advances is a function of the order intake and order book, and has been fairly stable at ~12-14%; however as a % of revenues the number has been volatile from 63% in FY09 to 34% in FY13.

■ Given that we expect the cyclical factors (retention money and customer advances) impacting Net Working Capital to normalize in FY15/16E, we expect Free Cash Flows to improve from ~INR16-19b in FY13/14E to ~INR75-88b in FY15/16E. This will lead to a meaningful increase in net cash from INR63b in FY13 to INR174b in FY16E.

#### Retention money is largely a function of negotiation with the customers, and expect the quantum to decline (INR b)



Customer advances have remained stable (as % of order book), but volatile as % of revenues



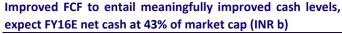
Source: MOSL, Company Source: MOSL, Company

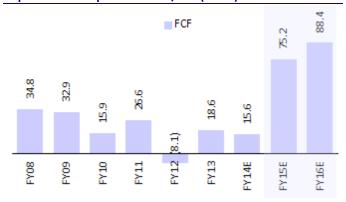
#### NWC volatility a function of cyclical factors; expect a meaningful improvement in FY16E (Days)

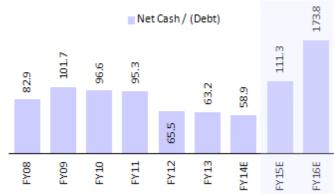
|                                    | FY02 | FY03 | FY04 | FY05 | FY06 | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14E | FY15E I | FY16E |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|---------|-------|
| Debtors (excl Retention Money)     | 220  | 190  | 185  | 211  | 164  | 148  | 173  | 164  | 155  | 163  | 172  | 177  | 177   | 198     | 177   |
| Inventories                        | 107  | 105  | 96   | 112  | 102  | 89   | 108  | 109  | 103  | 100  | 105  | 90   | 95    | 102     | 110   |
| Loans and Advances                 | 53   | 50   | 47   | 47   | 33   | 24   | 22   | 34   | 31   | 30   | 23   | 22   | 23    | 25      | 24    |
| Sundry Creditors                   | 99   | 96   | 79   | 80   | 77   | 75   | 84   | 81   | 84   | 74   | 84   | 80   | 80    | 77      | 77    |
| Other Liabilities                  | 17   | 17   | 15   | 17   | 14   | 12   | 14   | 15   | 14   | 19   | 9    | 14   | 16    | 16      | 13    |
| Core NWC                           | 264  | 232  | 234  | 273  | 208  | 174  | 206  | 211  | 190  | 200  | 207  | 195  | 200   | 232     | 220   |
| Volatility led by Cyclical Factors |      |      |      |      |      |      |      |      |      |      |      |      |       |         |       |
| Retention Money                    | 25   | 25   | 25   | 18   | 32   | 57   | 54   | 58   | 75   | 89   | 104  | 129  | 213   | 211     | 145   |
| Customer Advances                  | 101  | 95   | 143  | 176  | 150  | 165  | 215  | 229  | 213  | 187  | 154  | 124  | 133   | 146     | 132   |
| Provisions                         | 29   | 37   | 49   | 47   | 40   | 47   | 56   | 64   | 42   | 70   | 59   | 69   | 91    | 112     | 106   |
| Reported NWC                       | 158  | 125  | 68   | 68   | 50   | 20   | (12) | (24) | 10   | 32   | 97   | 131  | 188   | 184     | 127   |

Source: MOSL, Company

Given the correction in cyclical factors impacting NWC, expect FCF to improve in FY15/16E (INR b)







Source: MOSL, Company

Source: MOSL, Company

#### Valuations, Upgrade to Buy

We expect BHEL to report EPS of INR14.4 in FY14/INR9.6 in FY15E / INR15 in FY16E. At the CMP of INR171/sh, the stock quotes at PER of 119x FY14E / 17.8x FY15 / 11.4x FY16E. We roll over our price target to FY16, and assign a PER multiple of 14x based on long term averages. We upgrade the stock to **Buy**, with a price target of INR210, upside of 23%.

BHEL is making efforts in terms of expanding the contribution from the industry business, particularly transmission and transportation, and they provide interesting long term business drivers. The key variable to watch out for is the impact of the Pay Commission in FY17, and could be an important swing factor. However, we believe that a part of the impact will be mitigated by productivity improvements over the medium term, and thus the impact is possibly not structural. We would be watchful of the trends.

**BHEL: Operating Matrix** 

| Ditte Operating Matrix      | FY06 | FY07 | FY08   | FY09  | FY10  | FY11   | FY12   | FY13   | FY14E  | FY15E  | FY16E |
|-----------------------------|------|------|--------|-------|-------|--------|--------|--------|--------|--------|-------|
| Order Intake (INR b)        |      |      |        |       |       |        |        |        |        |        |       |
| Power                       | 90   | 245  | 387    | 444   | 401   | 443    | 176    | 227    | 162    | 264    | 217   |
| R&M                         | 19   | 32   | 24     | 28    | 19    | 21     | 23     | 29     | 30     | 36     | 44    |
| Industry                    | 47   | 60   | 69     | 92    | 135   | 114    | 79     | 41     | 47     | 56     | 73    |
| International               | 33   | 19   | 23     | 33    | 36    | 37     | 2      | 20     | 25     | 25     | 25    |
| Cancellations               | -    | -    | -      | _     | -     | -      | 58     | -      | -      | _      | -     |
| Total Order Intake          | 189  | 356  | 503    | 597   | 590   | 605    | 221    | 317    | 264    | 382    | 359   |
| Order intake Growth (% YoY) |      |      |        |       |       |        |        |        |        |        |       |
| Power                       | (19) | 155  | 48     | 15    | (11)  | 11     | (57)   | 29     | (25)   | 57     | (13)  |
| Industry                    | 15   | 27   | 15     | 34    | 46    | (15)   | (31)   | (48)   | 15     | 20     | 30    |
| International               | 425  | (43) | 21     | 41    | 9     | 5      | (94)   | 756    | 25     | -      | -     |
| Order backlog (INR b)       |      |      |        |       |       |        |        |        |        |        |       |
| Power                       | 280  | 376  | 710    | 974   | 1,125 | 1,258  | 1,077  | 933    | 792    | 822    | 789   |
| Industry                    | 60   | 70   | 88     | 130   | 208   | 232    | 175    | 115    | 97     | 98     | 108   |
| International               | 35   | 43   | 57     | 71    | 91    | 117    | 94     | 104    | 123    | 142    | 161   |
| Total Order backlog         | 375  | 550  | 852    | 1,170 | 1,424 | 1,641  | 1,347  | 1,152  | 1,012  | 1,063  | 1,058 |
| Growth (%)                  | 3.9  | 88.2 | 41.1   | 18.7  | (1.1) | 2.5    | (63.5) | 43.2   | (16.6) | 44.7   | (5.9) |
|                             |      |      |        |       |       |        |        |        |        |        |       |
| Segmental Revenues (INR b)  |      |      |        |       |       |        |        |        |        |        |       |
| Power                       | 98   | 127  | 159    | 213   | 269   | 348    | 379    | 396    | 333    | 270    | 295   |
| Industry                    | 37   | 50   | 44     | 56    | 57    | 90     | 102    | 100    | 65     | 55     | 64    |
| International               | 10   | 11   | 11     | 12    | 16    | 12     | 15     | 6      | 6      | 6      | 6     |
| Total Revenues              | 145  | 187  | 214    | 280   | 342   | 450    | 495    | 502    | 404    | 331    | 365   |
| Revenue Growth (% YoY)      |      |      |        |       |       |        |        |        |        |        |       |
| Power                       | 50.5 | 29.5 | 25.5   | 34.1  | 25.8  | 29.5   | 8.8    | 4.5    | (15.8) | (18.9) | 9.1   |
| Industry                    | 21.9 | 34.9 | (12.7) | 27.8  | 3.0   | 56.3   | 13.5   | (1.6)  | (35.0) | (15.0) | 15.0  |
| International               | 29.9 | 3.2  | 5.7    | 4.8   | 32.0  | (22.2) | 21.7   | (60.8) | -      | -      | 10.0  |
| Total                       | 40.5 | 29.0 | 14.2   | 31.0  | 21.8  | 31.6   | 10.1   | 1.3    | (19.5) | (18.0) | 10.1  |
|                             |      |      |        |       |       |        |        |        |        |        |       |
| EBITDA Margins (%)          | 18.9 | 20.4 | 18.9   | 15.7  | 17.7  | 19.9   | 20.3   | 19.4   | 12.4   | 10.3   | 13.3  |
| Employees (in 000)          | 42.6 | 42.6 | 42.1   | 43.6  | 45.7  | 46.3   | 46.7   | 49.4   | 48.4   | 49.9   | 48.4  |
| Staff Cost (INR B)          | 18.8 | 23.7 | 26.1   | 41.9  | 65.4  | 54.0   | 54.7   | 57.5   | 61.3   | 61.2   | 60.9  |
| INR 000/empl                | 441  | 559  | 608    | 939   | 1,423 | 1,160  | 1,137  | 1,177  | 1,247  | 1,247  | 1,285 |
|                             |      |      |        |       |       |        |        |        |        |        |       |
| Net Working Capital (Days)  |      |      |        |       |       |        |        |        |        |        |       |
| Reported (excl Cash)        | 53   | 24   | -4     | -19   | 14    | 35     | 98     | 133    | 190    | 186    | 129   |
| Customer Advances           | 150  | 165  | 215    | 229   | 213   | 187    | 154    | 124    | 133    | 146    | 132   |
| NWC (excl Customer Adv)     | 202  | 189  | 212    | 210   | 228   | 222    | 253    | 257    | 324    | 333    | 261   |
|                             |      |      |        |       |       |        |        |        |        |        |       |

Source: Company, MOSL

Motilal Oswal

## **Financials and valuation**

| Income statement       |         |         |         |         | (INR    | Million) |
|------------------------|---------|---------|---------|---------|---------|----------|
| Y/E March              | 2011    | 2012    | 2013    | 2014E   | 2015E   | 2016E    |
| Total Income           | 404,443 | 479,788 | 484,247 | 395,587 | 325,823 | 358,824  |
| Change (%)             | 21.0    | 18.8    | 0.8     | -18.6   | -18.0   | 10.1     |
| Staff Cost             | 54,769  | 54,654  | 57,528  | 61,267  | 61,240  | 60,874   |
| Mfg. Expenses          | 230,816 | 280,845 | 280,156 | 226,819 | 186,880 | 206,512  |
| Selling Expenses       | 38,325  | 45,213  | 52,665  | 60,285  | 43,997  | 43,868   |
| EBITDA                 | 80,532  | 99,076  | 93,898  | 47,216  | 33,706  | 47,570   |
| Change (%)             | 36.0    | 23.0    | -5.2    | -49.7   | -28.6   | 41.1     |
| % of Net Sales         | 19.9    | 20.6    | 19.4    | 11.9    | 10.3    | 13.3     |
| Depreciation           | 5,441   | 8,000   | 9,534   | 9,516   | 10,664  | 11,908   |
| Interest               | 547     | 513     | 1,253   | 1,206   | 1,155   | 1,245    |
| Other Income           | 10,206  | 12,656  | 11,217  | 13,565  | 12,254  | 17,953   |
| Extra-ord. Items (net) | 5,305   | -193    | -4      | 0       | 0       | 0        |
| PBT                    | 90,055  | 103,026 | 94,324  | 50,058  | 34,141  | 52,370   |
| Tax                    | 29,945  | 32,623  | 28,177  | 16,269  | 10,584  | 15,711   |
| Rate (%)               | 33.3    | 31.7    | 29.9    | 32.5    | 31.0    | 30.0     |
| Reported PAT           | 60,110  | 70,403  | 66,148  | 33,789  | 23,557  | 36,659   |
| Adjusted PAT           | 56,650  | 68,922  | 65,540  | 35,129  | 23,557  | 36,659   |
| Change (%)             | 20.9    | 21.7    | -4.9    | -46.4   | -32.9   | 55.6     |

| Balance sheet          |         |         |         |         | (INR    | Million) |
|------------------------|---------|---------|---------|---------|---------|----------|
| Y/E March              | 2011    | 2012    | 2013    | 2014E   | 2015E   | 2016E    |
| Share Capital          | 4,895   | 4,895   | 4,895   | 4,895   | 4,895   | 4,895    |
| Reserves               | 196,643 | 248,837 | 299,546 | 321,475 | 336,764 | 360,555  |
| Net Worth              | 201,538 | 253,732 | 304,441 | 326,370 | 341,659 | 365,451  |
| Loans                  | 1,021   | 1,234   | 14,152  | 14,094  | 14,094  | 14,094   |
| Differed Tax Liability | -21,636 | -15,462 | -15,507 | -15,507 | -15,507 | -15,507  |
| Capital Employed       | 180,924 | 239,504 | 303,086 | 324,958 | 340,246 | 364,038  |
|                        |         |         |         |         |         |          |
| Gross Fixed Assets     | 80,497  | 97,066  | 107,832 | 117,634 | 129,424 | 143,214  |
| Less: Depreciation     | 46,488  | 54,098  | 63,248  | 72,005  | 82,669  | 94,577   |
| Net Fixed Assets       | 34,009  | 42,968  | 44,585  | 45,630  | 46,755  | 48,638   |
| Capital WIP            | 17,338  | 13,476  | 11,716  | 5,000   | 5,000   | 5,000    |
| Investments            | 4,392   | 4,617   | 4,292   | 4,292   | 4,292   | 4,292    |
|                        |         |         |         |         |         |          |
| Curr. Assets           | 515,229 | 591,237 | 625,185 | 614,786 | 594,222 | 626,907  |
| Inventory              | 108,521 | 135,487 | 117,638 | 100,808 | 88,990  | 105,006  |
| Debtors                | 274,656 | 357,405 | 398,882 | 414,470 | 356,072 | 308,949  |
| Cash & Bank Balance    | 96,302  | 66,720  | 77,321  | 72,946  | 125,394 | 187,898  |
| Loans & Advances       | 32,654  | 30,118  | 29,344  | 24,562  | 21,766  | 23,054   |
| Other Current Assets   | 3,096   | 1,506   | 2,000   | 2,000   | 2,000   | 2,000    |
| Curr. Liab. & Prov.    | 390,043 | 412,794 | 382,692 | 344,750 | 310,023 | 320,799  |
| Creditors              | 80,526  | 108,717 | 104,313 | 84,643  | 67,311  | 74,303   |
| Other Liabilities      | 224,790 | 211,999 | 180,916 | 158,150 | 141,396 | 139,648  |
| Provisions             | 84,728  | 92,078  | 97,462  | 101,956 | 101,315 | 106,848  |
| Net Current Assets     | 125,186 | 178,443 | 242,493 | 270,036 | 284,199 | 306,109  |

E: MOSL Estimates

## **Financials and valuation**

| _   |    |    |   |  |
|-----|----|----|---|--|
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| Y/E March                | 2011 | 2012  | 2013  | 2014E | 2015E | 2016E |
|--------------------------|------|-------|-------|-------|-------|-------|
| Basic (INR)              |      |       |       |       |       |       |
| EPS                      | 23.1 | 28.2  | 26.8  | 14.4  | 9.6   | 15.0  |
| Change (%)               | 20.9 | 21.7  | -4.9  | -46.4 | -32.9 | 55.6  |
| Cash EPS                 | 25.4 | 31.4  | 30.7  | 18.2  | 14.0  | 19.8  |
| Book Value               | 82.3 | 103.7 | 124.4 | 133.3 | 139.6 | 149.3 |
| DPS                      | 6.2  | 6.4   | 5.4   | 4.1   | 2.9   | 4.5   |
| Payout (incl. Div. Tax.) | 25.4 | 22.3  | 20.0  | 30.0  | 30.0  | 30.0  |
| Valuation (x)            |      |       |       |       |       |       |
| P/E                      |      |       | 6.4   | 11.9  | 17.8  | 11.4  |
| Cash P/E                 |      |       | 5.6   | 9.4   | 12.2  | 8.6   |
| EV/EBITDA                |      |       | 3.7   | 7.5   | 9.0   | 5.1   |
| EV/Sales                 |      |       | 0.7   | 0.9   | 1.0   | 0.7   |
| Price/Book Value         |      |       | 1.4   | 1.3   | 1.2   | 1.1   |
| Dividend Yield (%)       |      |       | 3.2   | 2.4   | 1.7   | 2.6   |
| Return Ratio (%)         |      |       |       |       |       |       |
| RoE                      | 31.4 | 30.3  | 23.5  | 11.1  | 7.1   | 10.4  |
| RoCE                     | 35.0 | 33.0  | 24.5  | 11.4  | 7.3   | 10.7  |
| Turnover Ratios          |      |       |       |       |       |       |
| Debtors (Days)           | 241  | 263   | 290   | 375   | 393   | 309   |
| Inventory (Days)         | 100  | 105   | 90    | 95    | 102   | 110   |
| Creditors. (Days)        | 77   | 83    | 79    | 79    | 76    | 77    |
| Asset Turnover (x)       | 11.7 | 11.0  | 10.7  | 8.5   | 6.8   | 7.2   |
| Leverage Ratio           |      |       |       |       |       |       |
| Debt/Equity (x)          | -0.6 | -0.5  | -0.3  | -0.2  | -0.2  | -0.3  |

#### **Cash flow statement**

#### (INR Million

| 2011    |   |   |   |   |  |
|---------|---|---|---|---|--|
| 2011    | 2012  | 2013  | 2014E   | 2015E   | 2016E  |
| 84,750  | 103,218   | 94,329  | 50,058  | 34,141  | 52,370   |
| 5,441   | 8,000   | 9,534   | 9,516   | 10,664  | 11,908   |
| 547     | 513   | 1,253   | 1,206   | 1,155   | 1,245  |
| 29,945  | 32,623  | 28,177  | 16,269  | 10,584  | 15,711   |
| -36,596 | -85,648   | -8,217  | -8,409  | 53,947  | 39,245   |
| 36,198  | -11,245   | 31,113  | 15,567  | 75,196  | 88,441   |
| 5,305   | -193  | -4  | 0   | 0   | 0  |
| 41,503  | -11,438   | 31,108  | 15,567  | 75,196  | 88,441   |
| -17 339 | -13 097   | -9 390  | -3 8/16   | -11 790   | -13,790  |
| ,       |   |   | 0   | 0   | 0  |
| -20,932 | -13,322   | -9,065  | -3,846  | -11,790   | -13,790  |
| -6 369  | 6 169   | -43   | 0   | 0   | 0  |
|         |   |   |   |   | 0  |
| 547     | 513   | 1,253   |   | 1,155   | 1,245  |
| 14,999  | 11,302  | 23,064  | 14,833  | 9,803   | 10,902   |
| -22,171 | -5,434  | -11,442   | -16,097   | -10,958   | -12,147  |
| -1,599  | -30,194   | 10,601  | -4,376  | 52,448  | 62,504   |
| 97,901  | 96,302  | 66,720  | 77,321  | 72,946  | 125,394  |
| 96,301  | 66,720  | 77,321  | 72,945  | 125,394   | 187,898  |
|         | 84,750 5,441 547 29,945 -36,596 36,198 5,305 41,503 -17,339 -3,593 -20,932 -6,369 -256 547 14,999 -22,171 -1,599 97,901 | 84,750       103,218         5,441       8,000         547       513         29,945       32,623         -36,596       -85,648         36,198       -11,245         5,305       -193         41,503       -11,438         -17,339       -13,097         -3,593       -225         -20,932       -13,322         -6,369       6,169         -256       213         547       513         14,999       11,302         -22,171       -5,434         -1,599       -30,194         97,901       96,302 | 84,750       103,218       94,329         5,441       8,000       9,534         547       513       1,253         29,945       32,623       28,177         -36,596       -85,648       -8,217         36,198       -11,245       31,113         5,305       -193       -4         41,503       -11,438       31,108         -17,339       -13,097       -9,390         -3,593       -225       325         -20,932       -13,322       -9,065         -6,369       6,169       -43         -256       213       12,918         547       513       1,253         14,999       11,302       23,064         -22,171       -5,434       -11,442         -1,599       -30,194       10,601         97,901       96,302       66,720 | 84,750         103,218         94,329         50,058           5,441         8,000         9,534         9,516           547         513         1,253         1,206           29,945         32,623         28,177         16,269           -36,596         -85,648         -8,217         -8,409           36,198         -11,245         31,113         15,567           5,305         -193         -4         0           41,503         -11,438         31,108         15,567           -17,339         -13,097         -9,390         -3,846           -3,593         -225         325         0           -20,932         -13,322         -9,065         -3,846           -6,369         6,169         -43         0           -256         213         12,918         -58           547         513         1,253         1,206           14,999         11,302         23,064         14,833           -22,171         -5,434         -11,442         -16,097           -1,599         -30,194         10,601         -4,376           97,901         96,302         66,720         77,321 | 84,750         103,218         94,329         50,058         34,141           5,441         8,000         9,534         9,516         10,664           547         513         1,253         1,206         1,155           29,945         32,623         28,177         16,269         10,584           -36,596         -85,648         -8,217         -8,409         53,947           36,198         -11,245         31,113         15,567         75,196           5,305         -193         -4         0         0           41,503         -11,438         31,108         15,567         75,196           -17,339         -13,097         -9,390         -3,846         -11,790           -3,593         -225         325         0         0           -20,932         -13,322         -9,065         -3,846         -11,790           -6,369         6,169         -43         0         0           -256         213         12,918         -58         0           547         513         1,253         1,206         1,155           14,999         11,302         23,064         14,833         9,803           -22,171 </td |

E: MOSL Estimates

9 December 2013

Update | Sector: Capital Goods



| BSE Sensex | S&P CNX |
|------------|---------|
| 20,958     | 6,241   |

## **Larsen & Toubro**

CMP: INR1,087 TP: INR1,186 Buy

#### **Stock Info**

| Bloomberg             | LT IN     |
|-----------------------|-----------|
| Equity Shares (m)     | 926.1     |
| 52-Week Range (INR)   | 1,133/678 |
| 1, 6, 12 Rel. Per (%) | 12/8/-10  |
| M.Cap. (INR b)        | 1,006.3   |
| M.Cap. (USD b)        | 16.3      |

#### Financial Snapshot (INR Billion)

| 2014E | 2015E  | <b>2016E</b>   |
|-------|--|--|
| 664.8 | 745.5  | 833.7  |
| 67.6  | 76.3   | 88.2   |
| 40.4  | 48.4   | 59.6   |
| 43.8  | 52.4   | 64.5   |
| -18.1 | 19.6   | 22.9   |
| 351.4 | 392.8  | 440.4  |
| 14.5  | 14.4   | 14.8   |
| 12.4  | 12.5   | 12.9   |
| 27.7  | 26.9   | 26.9   |
|       |  |  |
| 24.8  | 20.8   | 16.9   |
| 3.1   | 2.8  | 2.5  |
| 15.6  | 13.9   | 11.7   |
| 1.2   | 1.3  | 1.5  |
|       | 664.8<br>67.6<br>40.4<br>43.8<br>-18.1<br>351.4<br>14.5<br>12.4<br>27.7<br>24.8<br>3.1<br>15.6 | 67.6 76.3<br>40.4 48.4<br>43.8 52.4<br>-18.1 19.6<br>351.4 392.8<br>14.5 14.4<br>12.4 12.5<br>27.7 26.9<br>24.8 20.8<br>3.1 2.8<br>15.6 13.9 |

<sup>\*</sup> Consolidated

#### Shareholding pattern (%)

|           | Sep-13 | Jun-13 | Sep-12 |
|-----------|--------|--------|--------|
| Promoter  | 0.0    | 0.0    | 0.0    |
| Dom. Inst | 37.3   | 36.8   | 37.8   |
| Foreign   | 19.2   | 20.0   | 19.5   |
| Others    | 43.5   | 43.2   | 42.7   |

#### Stock Performance (1-year)



#### Integrated player in power segment value chain

#### Maintain Buy, but risk-reward increasingly skewed

#### Integrated player in power value chain

L&T Power offers turnkey solutions for up to 1GW super critical coal-based power plants, and has also demonstrated capability of executing BOP packages for both subcritical and supercritical thermal projects on EPC basis. We believe that integration in the value chain is the key competitive advantage; also given the increasing trend of a large number of projects being awarded on EPC basis.

#### BTG Manufacturing: FY16 improvement to be led by strong leverage

During FY13, BTG business reported net profit of INR520m, and is commendable given that the capacity utilization stood at sub-50%. The improved performance is also being led by the fast tracked indigenization program, with current levels at ~80-85% for boilers and ~60% for turbines. Given the possible pick up in power generation project awards, we expect revenues to increase 35% during FY16E/FY13 and net profit at INR2.2b in FY16.

#### Tapping opportunities globally and also spares and services in India

L&T-MHI BTG manufacturing unit in Hazira is part of the MHI global network, and thus would be a beneficiary of the outsourcing possibilities by MHI for its global requirements. L&T MHI Boilers is also looking for opportunities to make inroads for operational spares for pressure parts and coal pulverizers in the Indian market. We understand that, going forward, adding capabilities in Repairs and Maintenance and Operations of power plants will be an important growth driver.

#### Maintain Buy, but risk-reward increasingly skewed

For L&T, we expect consolidated earnings CAGR of 6.4% during FY13-16E, and the muted growth is largely a reflection of: i) expectations of margin pressures in E&C business from 12% in FY13 to 10.8% in FY16 given possibility of increased competitive intensity, adverse project mix towards government contracts and also higher contribution of overseas revenues (at 23% in FY16, vs 19% in FY13), and ii) increased losses from asset development portfolio, at INR8b in FY16E vs INR3.7b in FY13. Maintain **Buy**, with revised SOTP based price target of INR1,186/sh, as we roll over to FY16E.

L&T is a strong play on the recovery in the investment climate, and hence the recent stock price rally is largely led by expectations of a decisive election mandate. Given the dependence on mega Greenfield projects for the next level of growth trajectory, we believe that a large part of L&T's business model depicts characteristics of a mid to late cyclical recovery. Asset monetization is an important near term stock driver.

#### Integrated player in power value chain

L&T Power offers turnkey solutions for up to 1GW super critical coal-based power plants, and has also demonstrated capability of executing BOP packages for both subcritical and supercritical thermal projects on EPC basis. We believe that integration in the value chain is the key competitive advantage; also given the increasing trend of a large number of projects being awarded on EPC basis.

**L&T Power: Technology tie-ups for Product Manufacturing** 

| Technology Provider             | Product   |
|---------------------------------|---|
| Mitsubishi Electric Corporation | High capacity Generators                                    |
| Mitsubishi Heavy Industries     | Supercritical Boilers & turbine generators, and pulverizers |
| Clyde Bergemann, USA            | Electrostatic Precipitators                                 |
| CMI, Belgium                    | Heat Recovery Steam Generators                              |
| Howden                          | Axial Fans and Air Pre-heaters                              |
| Sargent and Lundy, USA          | Power Plant Engineering                                     |

Source: MOSL, Company

#### L&T Power: Large part of the auxiliaries manufactured in-house

| Product          | Comments  |
|------------------|---|
| Critical piping  | Commissioned in March 2011, has an annual fabrication capability of 12,000 tons of critical piping , including alloy steel piping for high pressure and high temperature steam conditions |
| Coal Pulverizers | Manufactured as part of L&T-MHI Boilers   |
| Foundry          | Set up heavy foundry with capacity of 2500tons pa; and capable of producing castings of up to 60 tons   |
| Heat Exchangers  | Heavy Engineering supplies heat exchangers and vessels for power plants   |
|                  |   |

Source: MOSL, Company

We believe that integration in the value chain is the key competitive advantage; also given the increasing trend of a large number of projects being awarded on EPC basis

#### **L&T Power: Integrated offering in the value chain**

| Segment                      | Capability   |
|------------------------------|--|
| Engineering Services         | L&T Sargent and Lundy; one of the key players for designing power plants globally  |
| Construction and Erection    | Extertise of building 100+ power plants, capacity 35GW   |
| Electrical and<br>Automation | Leading provider of turnkey solutions for switchyards in India; executed substations ranging from 33kv to 400kv; manufacturer of LV and MV Switchgear products |

Source: MOSL, Company

#### L&T MHI Boiler: FY16 improvement led by operating and financial leverage

- Given the increased indigenization levels of ~80-85%, the boiler business reported gross margins of 14.3% in FY13 (vs 10.3% in FY12), which is encouraging. Reported EBIDTA margins also improved to 8.7% in FY13 (vs 1.7% YoY) and is being supported by: i) Embedded derivative gains of INR741m and ii) Provision write backs of INR317m. Adjusted for the same, net profits stand at just INR348m, vs reported INR1.4b.
- During FY13, order intake stood at INR19.3b and closing order book stood at INR90b (we understand that this includes slow moving orders of Jaiprakash Karchana 1,980MW and Rajpura 700MW).
- We model revenue decline of 7% till FY15 to INR21.9b and EBIDTA margins at 4.5% / 5.2% in FY14/15 respectively; vs 8.7% in FY13. We model recovery in FY16E led by an improvement in the BTG ordering cycle, and expect revenues at

INR29b (up 35% YoY) and EBIDTA margins at 7.9%. We estimate net profits at INR535m in FY14, INR647m in FY15 and INR1.7b in FY16 largely led by operating and financial leverage.

L&T MHI Boilers: strong profits of INR1.4b in FY13 supported by Derivative gains and provisions write back (INR m)

|                   | FY12   | FY13   | FY14E  | FY15E  | FY16E  |
|-------------------|--------|--------|--------|--------|--------|
| Revenues          | 24,250 | 23,598 | 22,603 | 21,902 | 29,486 |
| % YoY             | 140.4  | -2.7   | -4.2   | -3.1   | 34.6   |
| Gross Profit      | 2,498  | 3,380  | 3,390  | 3,504  | 5,307  |
| Gross Margins (%) | 10.3   | 14.3   | 15.0   | 16.0   | 18.0   |
| EBIDTA            | 417    | 2,060  | 1,025  | 1,020  | 2,327  |
| EBIDTA (%)        | 1.7    | 8.7    | 4.5    | 4.7    | 7.9    |
| Net Profit        | 111    | 1,414  | 535    | 554    | 1,685  |

Source: MOSL, Company

# L&T MHI Turbine Generator: Improving indigenization levels to drive margins

- Revenues in FY13 declined 19% YoY to INR9.9b; however given the various initiatives in terms of cost rationalization, improved supply chain management, etc, the gross margin improved meaningfully from 6.9% in FY12 to 15.1% in FY13. We understand that indigenization levels currently stands at 60%, and the next phase in terms of heavy forgings will be important in driving the longer-term margin profile.
- EBIDTA margins stood at 3.3% in FY13 vs 2.9% YoY, and were impacted by forex provisions of INR421m. Adjusted for the same, EBIDTA margins in FY13 improved meaningfully to 7.5% in FY13. Forex debt outstanding as at March 2013 stands at INR9.6b; and given the sharp currency volatility, we model in exchange loss of INR700m in FY14.
- Net loss in FY13 stood at INR895m, and given the constrained business environment / currency volatility, we model in losses at INR1.2b in FY14 and declining to INR187m in FY15. For FY16, given our expectations of a recovery in BTG ordering, we model in revenues at INR15.7b (up 49% YoY), EBIDTA margins at 9.7% (up 100bpa YoY) and net profits at INR473m.

L&T MHI Turbine Generator: FY13 impacted by forex loss of INR421m (INR M)

|                   | FY12   | FY13  | FY14E   | FY15E  | FY16E  |
|-------------------|--------|-------|---------|--------|--------|
| Revenues          | 12,288 | 9,923 | 8,373   | 10,545 | 15,684 |
| % YoY             | 9.2    | -19.2 | -15.6   | 25.9   | 48.7   |
| Gross Profit      | 849    | 1,499 | 1,340   | 1,687  | 2,588  |
| Gross Margins (%) | 6.9    | 15.1  | 16.0    | 16.0   | 16.5   |
| EBIDTA            | 361    | 328   | (60)    | 917    | 1,527  |
| EBIDTA (%)        | 2.9    | 7.5   | 7.6     | 8.7    | 9.7    |
| Net Profit        | (171)  | (895) | (1,221) | (187)  | 473    |

Source: Company, MOSL

#### Tapping opportunities globally and also spares and services in India

We understand that the BTG manufacturing unit in Hazira is part of the MHI global network, and thus would be a beneficiary of the outsourcing possibilities by MHI for its global requirements. L&T in its FY13 Annual Report had also

stated that "The Joint Ventures with Mitsubishi Heavy Industries for manufacture of Steam Turbines and Steam Generators are seeking to supply components to MHI's third country projects." It also stated that "The export market thrust which is an integral part of the company's business strategy got impetus as the company bagged a prestigious order from MHI to supply pressure parts for Rabigh Arabian Water Electricity Company, Saudi Arabia."

■ L&T MHI Boilers is also looking for opportunities to make inroads for operational spares for pressure parts and coal pulverizers in the Indian market. We understand that, going forward, adding capabilities in Repairs and Maintenance and Operations of power plants will be an important driver.

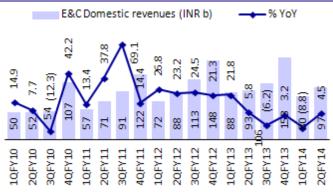
#### Maintain Buy, but risk-reward increasingly skewed

For L&T, we expect consolidated earnings CAGR of 6.4% during FY13-16E, and the muted growth is largely a reflection of: i) expectations of margin pressures in E&C business from 12% in FY13 to 10.8% in FY16 given possibility of increased competitive intensity, adverse project mix towards government contracts and also higher contribution of overseas revenues (at 23% in FY16, vs 19% in FY13) ii) increased losses from asset development business, at INR8b in FY16E vs INR3.7b in FY13. Maintain **Buy**, with revised SOTP based price target of INR1,186/sh, as we roll over to FY16E.

#### Increased contribution of overseas orders

# 

#### Domestic execution has been impacted by several factors



Source: MOSL, Company

Overseas revenues to contribute ~47% of the consolidated profits in FY14E

|      |  | nues (IN   | IK b)   |   | EPS (INR/share)  |   |   |  |   |
|------|--|--|---|---|--|---|---|--|---|
| FY12 | FY13                                     | FY14E  | FY15E   | FY16E   | FY12   | FY13  | FY14E   | FY15E  | FY16E   |
| 54   | 109                                      | 105  | 132   | 164   | 3.2  | 6.5   | 6.3   | 7.9  | 9.8   |
| 30   | 40                                       | 50   | 56  | 61  | 1.5  | 0.8   | 1.6   | 2.0  | 2.1   |
| 9    | 13                                       | 16   | 21  | 25  | 1.3  | 3.9   | 4.1   | 5.4  | 6.4   |
| 32   | 39                                       | 46   | 52  | 58  | 3.8  | 5.7   | 7.1   | 8.0  | 8.2   |
| 125  | 200                                      | 218  | 261   | 309   | 9.8  | 16.9  | 19.2  | 23.3   | 26.6  |
| 643  | 745                                      |  |   |   | 48   | 49  | 40  | 48   | 59  |
| 19   | 27                                       |  |   |   | 21   | 34  | 47  | 48   | 45  |
|      | 54<br>30<br>9<br>32<br><b>125</b><br>643 | 54 109<br>30 40<br>9 13<br>32 39<br>125 200<br>643 745 | 54 109 105<br>30 40 50<br>9 13 16<br>32 39 46<br>125 200 218<br>643 745 | 54     109     105     132       30     40     50     56       9     13     16     21       32     39     46     52       125     200     218     261       643     745 | 54     109     105     132     164       30     40     50     56     61       9     13     16     21     25       32     39     46     52     58       125     200     218     261     309       643     745 | 54     109     105     132     164     3.2       30     40     50     56     61     1.5       9     13     16     21     25     1.3       32     39     46     52     58     3.8       125     200     218     261     309     9.8       643     745     48 | 54     109     105     132     164     3.2     6.5       30     40     50     56     61     1.5     0.8       9     13     16     21     25     1.3     3.9       32     39     46     52     58     3.8     5.7       125     200     218     261     309     9.8     16.9       643     745     48     49 | 54     109     105     132     164     3.2     6.5     6.3       30     40     50     56     61     1.5     0.8     1.6       9     13     16     21     25     1.3     3.9     4.1       32     39     46     52     58     3.8     5.7     7.1       125     200     218     261     309     9.8     16.9     19.2       643     745     48     49     40       19     27     21     34     47 | 54     109     105     132     164     3.2     6.5     6.3     7.9       30     40     50     56     61     1.5     0.8     1.6     2.0       9     13     16     21     25     1.3     3.9     4.1     5.4       32     39     46     52     58     3.8     5.7     7.1     8.0       125     200     218     261     309     9.8     16.9     19.2     23.3       643     745     48     49     40     48       19     27     21     34     47     48 |

Source: MOSL, Company

Source: MOSL, Company

Without drawing any conclusions, we understand that L&T could possibly be a 'mid' to 'late' stage beneficiary of any possible uptick in investment cycle:

 Overseas business is expected to contribute ~47% of the consolidated profits in FY14E, of which 60% is being contributed by largely contributed by IT services.

■ Comparatively lower operating leverage vs peers, with FY13 contribution margins at 21.2% vs adj EBIDTA margins at 11%.

■ L&T's order intake has been relatively insulated even in a turbulent environment, given the adaptability and diversity, with management guiding for 20% order intake growth in FY14E. This factor could also possibly limit the near term business upsides (in terms of percentages, given the higher base).

#### Asset monetization an important near-term driver

For L&T, subsidiaries are expected to contribute 45% of the invested capital, but just 5% of the consolidated profits in FY14. L&T's consolidated RoE has deteriorated significantly from 31% in FY07 to 16% in FY13. Correcting the capital structure and improving RoEs are important stock triggers. For the infrastructure development business, we expect losses to increase from INR3.9b in FY13 (also supported by previous year goodwill write back) to INR5.5b / INR5.3b / INR8b in FY14/15/16 respectively, and is led by commissioning of ~INR63b of road portfolio. Successful asset monetization will be an important event to monitor, and will be the key interim value driver.

Consolidated Debt ballooning, given large investments in Concession business (INR b)

|                | 0, 0 | . 0  |       |       | - /   |
|----------------|------|------|-------|-------|-------|
|                | FY12 | FY13 | FY14E | FY15E | FY16E |
| Finance        | 209  | 282  | 324   | 373   | 428   |
| Hydrocarbon    | 7    | 6    | 6     | 6     | 6     |
| Overseas Infra | 3    | 7    | 7     | 7     | 7     |
| Power Dev      | 19   | 38   | 61    | 61    | 61    |
| Heavy Engg     | 12   | 15   | 15    | 15    | 15    |
| Shipbuilding   | 22   | 28   | 28    | 28    | 28    |
| Power BTG      | 16   | 24   | 24    | 24    | 24    |
| Property Dev   | 22   | 33   | 38    | 48    | 58    |
| Concession     | 70   | 100  | 134   | 189   | 244   |
| Corporate      | 2    | 1    | 1     | 1     | 1     |
| Machinery      | 1    | 1    | 1     | 1     | 1     |
| Infotech       | 3    | 3    | 3     | 3     | 3     |
| Total          | 384  | 537  | 641   | 754   | 875   |
| Excl Finance   | 176  | 255  | 317   | 382   | 447   |

Source: MOSL, Company

#### **SOTP** valuation

|                                       | Method        | Valuation multiple |     |       | Rationale  |
|---------------------------------------|---------------|--------------------|-----|-------|--|
| Construction Business                 |               |                    |     |       |  |
| L&T Standalone                        | FY16E PER (x) | 15.0               | 818 | 886   | At nor with Market average                                     |
| International Ventures (L&T FZE)      | FY16E PER (x) | 15.0               | 33  | 35    | At par with Market average                                     |
| Service Segments                      |               |                    |     |       |  |
| Infotech                              | FY16E PER (x) | 10.0               | 91  | 99    | At par to second tier IT companies                             |
| Finance                               | FY16E PBV (x) | 1.20               | 92  | 81    | At par with NBFCs  |
| General Insurance                     | FY16E PBV (x) | 1.0                | 6   | 6     | At par with industry average                                   |
| Sapura Shipping                       | FY16E PBV (x) | 1.5                | 1   | 2     |  |
| L&T Realty                            | FY16E PBV (x) | 1.0                | 32  | 35    |  |
| Asset Ownership / Project Developer   |               |                    |     |       |  |
| Infrastructure Development Projects   | FY16E PBV (x) | 1.0                | 74  | 81    | Lower than Net Worth to capture the macro volatility           |
| Power Development Projects            | FY16E PBV (x) | 0.5                | 13  | 14    | At 50% of BV, to factor in the challenges of fuel availability |
| Manufacturing Ventures                |               |                    |     |       |  |
| - Power Equipments                    | FY16E PBV (x) | 1.0                | 3   | 3     | AA Daale Value airea tha business banduinda                    |
| - Special Steel and Heavy Forgings    | FY16E PBV (x) | 1.0                | 4   | 4     | At Book Value, given the business headwinds                    |
| - L&T Komatsu                         | FY16E PER (x) | 10.0               | 1   | 1     | In line with industry average                                  |
| - Audco India                         | FY16E PER (x) | 10.0               | 9   | 5     | Revenue growth and margins have shown strong consistency       |
| - EWAC Alloys                         | FY16E PER (x) | 10.0               | 7   | 4     | In line with industry average                                  |
| Less: Holding Company Discount of 20% |               |                    |     | -74   |  |
| Total                                 |               |                    |     | 1,186 |  |

Note: Seawoods and Shipbuilding JVs not considered in SOTP as these projects are funded through advances

Source: MOSL

#### Consolidated profits to remain constrained, given losses in manufacturing and asset development businesses (INR m)

| INR m                              | FY09   | FY10   | FY11   | FY12   | FY13   | FY14E  | FY15E  | FY16E  |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Standalone                         | 27,092 | 43,760 | 39,580 | 44,565 | 49,106 | 45,570 | 52,275 | 60,080 |
| Consolidated                       | 30,046 | 54,507 | 44,562 | 46,937 | 52,056 | 38,957 | 48,340 | 59,392 |
| Addn to Standalone PAT             | 2,953  | 10,747 | 4,982  | 2,372  | 2,950  | -6,612 | -3,935 | -688   |
|                                    |        |        |        |        |        |        |        |        |
| Contribution from key subsidiaries | FY09   | FY10   | FY11   | FY12   | FY13   | FY14E  | FY15E  | FY16E  |
| Service Sector                     | 4,461  | 5,683  | 7,088  | 6,850  | 10,450 | 12,142 | 14,284 | 15,603 |
| L&T Infotech                       | 2,674  | 2,873  | 3,160  | 4,190  | 6,290  | 7,932  | 8,919  | 9,142  |
| L&T Finance                        | 1,788  | 2,811  | 3,928  | 2,660  | 4,160  | 4,210  | 5,366  | 6,461  |
|                                    |        |        |        |        |        |        |        |        |
| Overseas E&C                       | -930   | 1,563  | 1,977  | 1,571  | 789    | 1,652  | 1,981  | 2,180  |
| L&T International FZE              | -930   | 1,563  | 1,977  | 1,571  | 789    | 1,652  | 1,981  | 2,180  |
|                                    |        |        |        |        |        |        |        |        |
| Asset Development                  | 86     | 3,566  | 150    | -3,101 | -3,738 | -5,461 | -5,253 | -7,981 |
| L&T IDPL                           | 86     | 3,261  | -1,132 | -3,087 | -3,381 | -5,793 | -6,216 | -9,083 |
| L&T Power Development              | 0      | 29     | 34     | 73     | 0      | 0      | 15     | 15     |
| Sapura Shipping                    | 0      | 0      | 134    | -416   | 177    | 178    | 302    | 352    |
| L&T Sea Woods                      | 0      | -22    | -32    | -5     | 6      | -50    | -50    | -50    |
| L&T Realty                         | 0      | 298    | 1,146  | 335    | -540   | 204    | 696    | 785    |
|                                    |        |        |        |        |        |        |        |        |
| Manufacturing                      | 473    | 348    | 696    | 1,005  | -1,475 | -6,450 | -4,879 | -1,297 |
| L&T MHI Turbine & Boilers          | -93    | -475   | -412   | -31    | 265    | -350   | 187    | 1,101  |
| L&T Special Steel & Heavy Forgings | 0      | 34     | 35     | -83    | -1,155 | -1,582 | -1,506 | -1,484 |
| L&T Ship Building                  | 0      | -22    | -32    | -24    | -1,906 | -5,883 | -5,018 | -2,894 |
| Komatsu                            | 95     | 330    | 305    | 25     | 73     | 116    | 93     | 74     |
| Audco                              | 355    | 160    | 165    | 305    | 398    | 386    | 444    | 918    |
| EWAC                               | 100    | 120    | 272    | 553    | 581    | 592    | 651    | 716    |
| Divestire Gains (Diff)             |        |        |        |        |        |        |        |        |
| MTM Provision                      |        |        |        |        |        |        |        |        |
| Other Subsidiaries                 | 17     | 202    | 363    | 259    | 271    | 271    | 271    | 271    |
| Total of all Subsidiaries          | 4,091  | 11,160 | 9,911  | 6,325  | 6,026  | 1,882  | 6,134  | 8,505  |

Source: MOSL, Company

**L&T: Operating Matrix** 

|   | FY08           | FY09 | FY10    | FY11           | FY12  | FY13           | FY14E          | FY15E          | FY16E          |
|---|----------------|------|---------|----------------|-------|----------------|----------------|----------------|----------------|
| Order Intake (INR b)                            | 420            | 516  | 696     | 798            | 706   | 880            | 891            | 956            | 1,086          |
| Domestic  | 361            | 450  | 661     | 718            | 579   | 731            | 641            | 716            | 798            |
| Growth (%)                                      | 44             | 25   | 47      | 9              | -19   | 26             | -12            | 12             | 11             |
| Overseas  | 60             | 66   | 35      | 80             | 127   | 150            | 250            | 240            | 288            |
| Growth (%)                                      | 8              | 11   | -47     | 129            | 59    | 18             | 67             | -4             | 20             |
|   |                |      |         |                |       |                |                |                |                |
| Order Book (INR b)                              | 527            | 703  | 1,002   | 1,302          | 1,457 | 1,536          | 1,766          | 1,980          | 2,236          |
| Growth (%)                                      | 43             | 33   | 43      | 30             | 12    | 5              | 15             | 12             | 13             |
| Process   | 74             | 112  | 160     | 208            | 219   | 154            | 153            | 162            | 181            |
| Oil & Gas                                       | 121            | 98   | 150     | 156            | 146   | 123            | 187            | 230            | 268            |
| Power   | 84             | 155  | 301     | 417            | 408   | 430            | 469            | 556            | 663            |
| Infrastructure                                  | 190            | 288  | 331     | 469            | 627   | 753            | 855            | 895            | 947            |
| Others  | 58             | 49   | 60      | 52             | 58    | 77             | 101            | 137            | 176            |
| DTD (w)   | 2.1            | 2.1  | 2.7     | 2.0            | 2.7   | 2.5            | 2.7            | 2.7            | 2.7            |
| BTB (x)   | <b>2.1</b> 2.7 | 2.5  | 3.1     | <b>3.0</b> 3.4 | 3.1   | <b>2.5</b> 2.8 | <b>2.7</b> 3.0 | <b>2.7</b> 3.0 | <b>2.7</b> 3.1 |
| BTB (x) E&C                                     | 2.7            | 2.5  | 3.1     | 3.4            | 3.1   | 2.8            | 3.0            | 3.0            | 3.1            |
| Gross Revenues (INR b)                          | 252            | 340  | 370     | 439            | 531   | 608            | 661            | 742            | 830            |
| Growth (%)                                      | 41             | 35   | 9       | 19             | 21    | 15             | 9              | 12             | 12             |
| E&C   | 190            | 280  | 318     | 377            | 465   | 541            | 580            | 651            | 726            |
| MIP   | 23             | 24   | 21      | 27             | 27    | 22             | 24             | 26             | 30             |
| EBG   | 24             | 25   | 27      | 28             | 31    | 32             | 33             | 37             | 42             |
| Others(including eliminations)                  | 15             | 12   | 3       | 7              | 9     | 14             | 24             | 28             | 33             |
| EBITDA (INR b)                                  | 32             | 44   | 54      | 62             | 68    | 75             | 77             | 85             | 97             |
| E&C   | 24             | 36   | 43      | 52             | 59    | 62             | 68             | 72             | 78             |
| MIP   | 4              | 5    | 45<br>5 | 6              | 5     | 4              | 3              | 3              | 4              |
| EBG   | 4              | 3    | 4       | 5              | 4     | 4              | 4              | 5              | 5              |
| Others(including eliminations)                  | 0              | 0    | 1       | 0              | 0     | 5              | 1              | 6              | 10             |
| Others(including eliminations)                  |                |      |         | <u> </u>       |       | J              |                |                | 10             |
| EBITDA Margin (%)                               | 12.9           | 13.0 | 14.5    | 14.2           | 12.8  | 12.3           | 11.6           | 11.4           | 11.7           |
| E&C   | 12.8           | 12.9 | 13.6    | 13.6           | 12.7  | 11.5           | 11.8           | 11.0           | 10.8           |
| MIP   | 18.9           | 20.1 | 22.1    | 21.2           | 19.5  | 16.3           | 12.0           | 10.0           | 12.0           |
| EBG   | 17.0           | 13.2 | 15.7    | 16.7           | 12.7  | 13.6           | 13.5           | 12.5           | 12.5           |
| Others(including eliminations)                  | -1.7           | 1.9  | 46.0    | 4.5            | 0.5   | 34.2           | 4.2            | 21.2           | 32.0           |
|   |                |      |         |                |       |                |                |                |                |
| Standalone EPS*                                 | 23.2           | 30.7 | 34.3    | 37.2           | 44.3  | 44.9           | 45.0           | 49.6           | 59.1           |
| Consolidated EPS                                | 26.1           | 34.2 | 41.1    | 46.4           | 52.0  | 53.4           | 43.8           | 52.4           | 64.3           |
|   |                |      |         |                |       |                |                |                |                |
| RoE (%) [Standalone]                            | 22.0           | 21.7 | 17.4    | 16.6           | 18.0  | 16.2           | 14.5           | 14.4           | 14.8           |
| RoE (%) [Consolidated]                          | 22.6           | 21.8 | 22.3    | 17.3           | 16.5  | 14.5           |                |                |                |
| Working Capital (% of sales) - Adj for Subs Adv | 7.1            | 9.3  | 5.5     | 6.7            | 12.0  | 14.9           | 19.4           | 19.9           | 17.5           |

Standalone EPS, excluding dividend and interest received from subsidiary companies

Source: Company, MOSL

## **Financials and valuation**

| Income statement    |       |       |       |       | (INF  | R Billion) |
|---------------------|-------|-------|-------|-------|-------|------------|
| Y/E March           | 2011  | 2012  | 2013  | 2014E | 2015E | 2016E      |
| Revenues            | 439.1 | 531.7 | 608.7 | 658.3 | 738.2 | 825.6      |
| Change (%)          | 18.6  | 21.1  | 14.5  | 8.1   | 12.1  | 11.8       |
| Adj EBITDA          | 56.3  | 64.6  | 66.8  | 69.7  | 76.3  | 88.2       |
| EBITDA Margin (%)   | 12.8  | 12.2  | 11.0  | 10.6  | 10.3  | 10.7       |
| Depreciation        | 5.9   | 6.8   | 8.0   | 8.8   | 9.6   | 10.1       |
| EBIT                | 50.4  | 55.8  | 55.9  | 58.8  | 66.7  | 756.5      |
| Interest            | 6.2   | 6.7   | 9.8   | 11.5  | 11.0  | 11.0       |
| Other Income        | 11.5  | 13.4  | 18.5  | 16.4  | 17.4  | 17.1       |
| Extraordinary items | -3.3  | -0.6  | -2.5  | 0.0   | 0.0   | 0.0        |
| PBT                 | 59.0  | 63.1  | 67.1  | 63.7  | 73.1  | 762.5      |
| Tax                 | 19.4  | 18.5  | 18.0  | 18.2  | 20.8  | 24.0       |
| Tax Rate (%)        | 32.9  | 29.4  | 26.8  | 28.5  | 28.5  | 3.1        |
| Reported PAT        | 39.6  | 44.6  | 49.1  | 45.6  | 52.3  | 738.5      |
| Adjusted PAT        | 36.3  | 45.4  | 47.3  | 47.0  | 52.3  | 60.2       |
| Change (%)          | 13.8  | 25.2  | 4.3   | -0.6  | 11.2  | 15.1       |
| Cons PAT            | 44.6  | 46.9  | 52.1  | 39.0  | 48.4  | 59.6       |
| Adj Cons PAT        | 42.4  | 47.7  | 49.3  | 40.4  | 48.4  | 59.6       |

| Balance sheet          |       |       |       |       | (INR  | Billion) |
|------------------------|-------|-------|-------|-------|-------|----------|
| Y/E March              | 2011  | 2012  | 2013  | 2014E | 2015E | 2016E    |
| Share Capital          | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2      |
| Reserves               | 217.2 | 251.0 | 290.2 | 323.1 | 361.3 | 405.3    |
| Net Worth              | 218.5 | 252.2 | 291.4 | 324.4 | 362.6 | 406.6    |
| Debt                   | 71.6  | 99.0  | 88.3  | 120.0 | 120.0 | 120.0    |
| Deferred Tax           | 2.6   | 1.3   | 2.4   | 2.0   | 2.0   | 2.0      |
| Total Capital Employed | 292.7 | 352.5 | 382.2 | 446.3 | 484.6 | 528.6    |
| Gross Fixed Assets     | 89.5  | 105.5 | 119.8 | 131.3 | 142.3 | 162.3    |
| Less: Acc Depreciation | 23.0  | 29.5  | 36.8  | 45.6  | 55.1  | 65.3     |
| Net Fixed Assets       | 66.4  | 76.0  | 83.1  | 85.7  | 87.2  | 97.0     |
| Capital WIP            | 7.7   | 7.6   | 6.0   | 4.5   | 4.5   | 4.5      |
| Investments            | 146.8 | 158.7 | 161.0 | 176.2 | 169.5 | 165.5    |
| <b>Current Assets</b>  | 350.1 | 434.0 | 471.7 | 523.4 | 601.7 | 695.6    |
| Inventory              | 15.8  | 17.8  | 20.6  | 23.0  | 24.0  | 26.8     |
| Debtors                | 124.3 | 187.2 | 226.1 | 250.2 | 280.5 | 305.5    |
| Cash & Bank            | 17.3  | 17.8  | 14.6  | 17.9  | 36.0  | 78.7     |
| Loans & Adv, Others    | 192.8 | 211.3 | 210.4 | 232.3 | 261.2 | 284.6    |
| Curr Liabs & Provns    | 278.4 | 323.8 | 339.6 | 343.0 | 377.8 | 433.6    |
| Curr. Liabilities      | 255.9 | 299.9 | 315.9 | 318.6 | 351.6 | 404.8    |
| Provisions             | 22.4  | 23.9  | 23.7  | 24.5  | 26.3  | 28.8     |
| Net Current Assets     | 71.7  | 110.2 | 132.1 | 180.4 | 223.9 | 262.0    |
| Total Assets           | 292.7 | 352.5 | 382.2 | 446.8 | 485.0 | 529.0    |

E: MOSL Estimates

## **Financials and valuation**

| Ratios |
|--------|
| 1/2 00 |

| Y/E March                | 2011  | 2012  | 2013  | 2014E | 2015E | 2016E |
|--------------------------|-------|-------|-------|-------|-------|-------|
| Basic (INR)              |       |       |       |       |       |       |
| Adj Standalone EPS       | 39.7  | 49.4  | 51.3  | 50.9  | 56.6  | 65.2  |
| Adj Consolidated EPS     | 46.4  | 52.0  | 53.4  | 43.8  | 52.4  | 64.5  |
| Book Value               | 239.2 | 274.6 | 315.7 | 351.4 | 392.8 | 440.5 |
| DPS                      | 9.7   | 11.0  | 12.3  | 12.7  | 14.2  | 16.3  |
| Payout (incl. Div. Tax.) | 24.3  | 23.3  | 24.8  | 31.3  | 29.0  | 27.2  |
| Valuation(x)             |       |       |       |       |       |       |
| P/E (Consolidated)       |       |       | 18.2  | 24.8  | 20.8  | 16.9  |
| Cash P/E                 |       |       | 15.6  | 18.2  | 15.5  | 12.9  |
| Price / Book Value       |       |       | 3.1   | 2.8   | 2.5   | 2.2   |
| EV/Sales                 |       |       | 1.5   | 1.4   | 1.3   | 1.1   |
| EV/EBITDA                |       |       | 13.6  | 15.4  | 13.9  | 11.7  |
| Dividend Yield (%)       |       |       | 1.3   | 1.2   | 1.3   | 1.5   |
| Profitability Ratios (%) |       |       |       |       |       |       |
| RoE                      | 19.7  | 18.9  | 18.1  | 14.8  | 15.2  | 18.0  |
| RoCE                     | 18.5  | 17.3  | 15.2  | 14.2  | 14.3  | 15.5  |
| Cons ROE                 | 18.4  | 17.1  | 15.5  | -     | -     | -     |
| Turnover Ratios (%)      |       |       |       |       |       |       |
| Asset Turnover (x)       | 1.6   | 1.6   | 1.7   | 1.6   | 1.6   | 1.6   |
| Debtors (No. of Days)    | 103.3 | 128.5 | 135.6 | 138.7 | 138.7 | 135.1 |
| Inventory (No. of Days)  | 13.1  | 12.2  | 12.4  | 12.8  | 11.9  | 11.9  |
| Leverage Ratios (%)      |       |       |       |       |       |       |
| Net Debt/Equity (x)      | -0.1  | 0.1   | 0.1   | 0.2   | 0.1   | 0.1   |

#### **Cash flow statement**

#### (INR Billion)

| Y/E March              | 2011  | 2012  | 2013  | 2014E | 2015E | 2016E |
|------------------------|-------|-------|-------|-------|-------|-------|
| OP/(Loss) before Tax   | 55.7  | 63.1  | 67.1  | 63.7  | 73.1  | 84.2  |
| Depreciation           | 6.0   | 7.0   | 8.2   | 8.8   | 9.6   | 10.1  |
| Others                 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Interest               | 6.2   | 6.7   | 9.8   | 11.5  | 11.0  | 11.0  |
| Direct Taxes Paid      | 19.4  | 18.5  | 18.0  | 18.2  | 20.8  | 24.0  |
| (Inc)/Dec in Wkg Cap   | -8.0  | -33.3 | -26.4 | -36.7 | -17.8 | 4.0   |
| CF from Op. Activity   | 43.8  | 25.0  | 40.7  | 29.1  | 55.1  | 85.3  |
| (Inc)/Dec in FA & CWIP | -16.4 | -16.5 | -13.6 | -10.0 | -11.0 | -20.0 |
| (Pur)/Sale of Invt     | 6.8   | 5.0   | 12.1  | 3.7   | 22.1  | 20.0  |
| Others                 | -26.2 | -21.5 | -13.2 | -27.0 | -23.1 | -15.4 |
| CF from Inv. Activity  | -35.8 | -33.1 | -14.7 | -33.3 | -11.9 | -15.4 |
| Inc/(Dec) in Net Worth | 7.9   | -1.0  | 3.4   | 0.0   | 0.0   | 0.0   |
| Inc / (Dec) in Debt    | 3.6   | 27.3  | -10.6 | 31.7  | 0.0   | 0.0   |
| Interest Paid          | 6.2   | 6.7   | 9.8   | 11.5  | 11.0  | 11.0  |
| Divd Paid (incl Tax)   | 9.0   | 10.0  | 11.1  | 12.2  | 12.6  | 14.1  |
| CF from Fin. Activity  | -3.6  | 9.7   | -28.1 | 7.9   | -23.6 | -25.1 |
| Inc/(Dec) in Cash      | 4.3   | 1.6   | -2.1  | 3.8   | 19.5  | 44.8  |
| Add: Opening Balance   | 14.3  | 17.3  | 17.8  | 14.6  | 17.9  | 36.0  |
| Closing Balance        | 18.6  | 18.9  | 15.7  | 18.3  | 37.4  | 80.8  |

E: MOSL Estimates

Thermax



| BSE Sensex | S&P CNX |
|------------|---------|
| 20,958     | 6,241   |

CMP: INR670 TP: INR850 Buy

#### Stock Info

| Bloomberg             | TMX IN  |
|-----------------------|---------|
| Equity Shares (m)     | 119.2   |
| 52-Week Range (INR)   | 695/526 |
| 1, 6, 12 Rel. Per (%) | 8/4/3   |
| M.Cap. (INR b)        | 79.8    |
| M.Cap. (USD b)        | 1.3     |

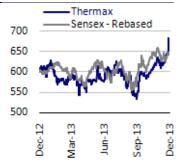
#### Financial Snapshot (INR b)

| Y/E Mar       | 2014E | 2015E | <b>2016E</b> |
|---------------|-------|-------|--------------|
| Net Sales     | 53.7  | 58.2  | 70.0         |
| EBITDA        | 4.8   | 5.6   | 7.0          |
| Adj PAT       | 3.0   | 3.5   | 4.7          |
| EPS (INR)     | 25.2  | 29.5  | 39.4         |
| EPS Gr. (%)   | (6.6) | 17.0  | 33.3         |
| BV/Sh. (INR)  | 177.1 | 197.3 | 223.8        |
| RoE (%)       | 15.3  | 16.1  | 19.0         |
| RoCE (%)      | 12.8  | 14.2  | 17.2         |
| Payout (%)    | 32.4  | 31.7  | 32.7         |
| Valuations    |       |       |              |
| P/E (X)       | 26.5  | 22.7  | 17.0         |
| P/BV (X)      | 3.8   | 3.4   | 3.0          |
| EV/EBITDA (X) | 15.5  | 13.0  | 10.2         |
| Div Yield (%) | 1.0   | 1.2   | 1.6          |
| DIV YIEIG (%) | 1.0   | 1.2   | 1.6          |

#### Shareholding pattern (%)

|           | Sep-13 | Jun-13 | Sep-12 |
|-----------|--------|--------|--------|
| Promoter  | 62.0   | 62.0   | 62.0   |
| Dom. Inst | 8.3    | 8.8    | 10.3   |
| Foreign   | 15.5   | 14.6   | 13.7   |
| Others    | 14.2   | 14.7   | 14.0   |

#### Stock Performance (1-year)



#### Multiple growth drivers

#### Internationalization | New Product Launches | O&M Business

#### Beneficiary of few structural trends

TMX is benefiting from few structural trends: (1) increased energy pricing (electricity prices up 15-20% over last 18 months) driving demand for energy efficiency products (2) Hunt for alternative energy and TMX derives ~30% of revenues from Green products (3) stringent government regulations and increased environmental concerns (4) currency depreciation is also leading to increased possibilities of exports (currently at 19% of revenues), etc.

#### Access to global markets - target 40% of revenues

Overseas revenues contributed 27% of the consolidated revenues in FY13, and we expect the share to increase to 40% by FY16E. Key drivers: (1) Many of TMX's technology tie-ups provide opportunities to access overseas markets (2) Danstoker and Rifox (FY13 revenues INR3.6b) are witnessing strong growth particularly in biomass, heat pumps, etc and Danstoker is fully booked for FY14 (3) TMX's successful execution track record for EPC projects also expands possibilities for more such contracts (4) Refinery capex in ME is an important driver (5) Initial forays into LATAM, Africa, Europe and ME and attempt is to scale-up (6) Service exports have increased from INR80-90m in FY11/12 to INR561m in FY13, driving growth (7) Fortified positioning in HRSG (8) TBW also expected to receive preference orders from international markets.

#### Overseas business to support growth, domestic business constrained

We expect TMX to report 4% revenue CAGR till FY15; and expect acceleration in FY16E (up 20% YoY). We understand that TMX is possibly an 'early' stage beneficiary of the possible uptick in the investment climate, particularly in the heating / WHR segment (25-28% of consolidated revenues). During FY13, exports order intake at INR11.5b was 24% of total intake and was up 46% YoY (revenues INR8.8b). Domestic business remains constrained; however large order finalizations including JSPL 1,320MW, Fertilizer projects, Hydrocarbon capex, Cement capacity expansion, etc are important drivers for TMX.

#### Valuation and View

We expect TMX to report earnings CAGR of 5% over FY13-15, and 33% in FY16E. We maintain **Buy**, with an 18-month price target of INR850 (20x FY16E at INR762/sh and INR86/sh in subsidiaries). Key concern has been the muted domestic order intake in 1HFY14 / 4QFY13 which declined to INR5-7b/qtr vs run-rate of INR10b. Constrained near term demand environment will impact execution, and could be an important overhang.

#### Capacity to manufacture 3GW of boilers

Thermax Babcock & Wilcox (TBW), 51% subsidiary of TMX, is in the process of commissioning the manufacturing facility for manufacture of utility boilers with an annual capacity of 3GW at Shirwal, 50kms from Pune in Maharashtra. The factory has provision for expansion to 5GW; and the initial project cost stands at INR8b with DER of 50:50. The facility has capacity to manufacture both Supercritical and Subcritical boilers (unlike L&T-MHI, where the technology license agreement is for supercritical sets).

**TBW: Key Products being manufactured** 

| Products               | Range       |
|------------------------|-------------|
| Sub critical Boilers   | 300-950MW   |
| Super critical Boilers | upto 1300MW |
| Low NOx Combustion     |             |
| Roll Wheel Pulverizers | 15-104 TPH  |

Source: MOSL, Company

#### Reliance CFBC order / overseas projects to provide initial execution

- TMX management in a recent concall stated that manufacturing for the recent Reliance order of 9 CFBC boilers with a capacity of 500TPH each will be partly taken up at the new facility.
- Also, there are options of bagging orders from the overseas markets, as part of the global manufacturing network of Babcock and Wilcox. The TBW manufacturing plant is the only second plant globally (apart from China), and being a modern plant combined with the sharp currency depreciation, we believe that competitiveness for the Indian manufacturing has comparatively improved.
- In May 2011, Babcock & Wilcox signed a MOU with Toshiba to co-operatively explore strategic, manufacturing, research and other opportunities in advanced supercritical power generation and solar energy technologies around the world. The memorandum outlines a framework under which B&W PGG and Toshiba can pursue technical collaboration on next generation thermal and solar technologies and explore cooperation on project opportunities in Asia, India and other emerging markets.
- We expect the JV to continue to report losses in FY16, largely given under absorption of operating and financing costs. We expect losses to expand from INR303m in FY13 to INR1.1b in FY16E. Given the break-even utilization levels at ~1.2-1.8GW pa, the earnings swing to any order intake can be meaningful, and we would be watchful of the trends.

#### Access to global markets - target 40% of revenues

Overseas revenues contributed 27% of the consolidated revenues in FY13, and we expect the share to increase to 40% by FY16E. Key drivers: (1) Many of TMX's technology tie-ups provide opportunities to access overseas markets (2) Danstoker and Rifox (FY13 revenues INR3.6b) are witnessing strong growth particularly in biomass, heat pumps, etc and Danstoker is fully booked for FY14 (3) TMX's successful execution track record for EPC projects also expands possibilities for more such contracts (4) Refinery capex in ME is also an important driver (5) Initial forays into LATAM, Africa, Europe and ME and attempt is to scale-up (6) Service exports

MOTILAL OSWAL Thermax

have increased from INR80-90m in FY11/12 to INR561m in FY13, driving growth (7) Fortified positioning in HRSG (8) TBW also expected to receive preference orders from international markets.

TMX: Overseas Revenues (% of Consolidated Revenues)

| •                              |        | ,      |        |        |        |        |
|--------------------------------|--------|--------|--------|--------|--------|--------|
| (INR m)                        | FY11   | FY12   | FY13   | FY14E  | FY15E  | FY16E  |
| Thermax Europe                 | 308    | 353    | 435    | 609    | 822    | 863    |
| Thermax USA                    | 523    | 644    | 663    | 729    | 802    | 882    |
| Thermax Zheziang               | 214    | 436    | 707    | 1,061  | 1,273  | 1,401  |
| Danstoker                      | 0      | 5,131  | 3,603  | 4,684  | 5,854  | 7,318  |
| Exports                        | 10,660 | 11,430 | 9,839  | 11,039 | 13,247 | 17,221 |
| Total                          | 11,705 | 17,994 | 15,247 | 18,122 | 21,999 | 27,686 |
| Consolidated Revenues          | 53,921 | 61,698 | 55,656 | 55,131 | 59,805 | 71,728 |
| Overseas Revenues (% of total) | 21.7   | 29.2   | 27.4   | 32.9   | 36.8   | 38.6   |
|                                |        |        |        |        |        |        |

Source: MOSL, Company

#### Maintain Buy, with revised price target of INR850 (20x FY16E)

We believe TMX would benefit from structural trends, which will enable it to make a transition to the 'Big League' in the next economic upturn. We expect acceleration in TMX's revenue growth in FY16E (up 20% YoY); we understand that TMX is possibly an 'early' stage beneficiary of the possible uptick in the investment climate, particularly in the heating / WHR segment (25-28% of consolidated revenues). We expect TMX to report earnings CAGR of 5% over FY13-15, and 33% in FY16E. We maintain **Buy**, with an 18-month price target of INR850 (20x FY16E at INR762/sh and INR86/sh in subsidiaries). Key concern has been the muted domestic order intake in 1HFY14 / 4QFY13 which declined to INR5-7b/qtr vs run-rate of INR10b. Constrained near term demand environment will impact execution, and could be an important overhang.

| Thermax:  | Ingrating  | Martiv   |
|-----------|------------|----------|
| THEITHAN. | JUCIALIIIE | VIAI LIA |

| Thermax: Operating Martix                 |        |        | _      |        |           |         |
|---|--------|--------|--------|--------|-----------|---------|
| INR m                                     | FY11   | FY12   | FY13   | FY14E  | FY15E     | FY16E   |
| Standalone Order intake                   | 53,180 | 40,300 | 48,580 | 51,657 | 50,998    | 60,645  |
| Energy                                    | 41,736 | 28,830 | 36,550 | 42,033 | 39,931    | 47,917  |
| - Power EPC                               | 15,300 | 5,169  | 15,020 | 7,500  | 10,000    | 12,285  |
| - Energy Ex Power EPC                     | 26,436 | 23,661 | 21,530 | 34,533 | 29,931    | 35,632  |
| Environment                               | 11,444 | 11,470 | 12,030 | 9,624  | 11,068    | 12,728  |
|   |        |        |        |        |           |         |
| Order intake (% YoY)                      | -8.3%  | -24.2% | 20.5%  | 6.3%   | -1.3%     | 18.9%   |
| Energy                                    | -10.0% | -30.9% | 26.8%  | 15.0%  | -5.0%     | 20.0%   |
| - Power EPC                               | -28.5% | -66.2% | 190.6% | -50.1% | 33.3%     | 22.9%   |
| - Energy Ex Power EPC                     | 5.8%   | -10.5% | -9.0%  | 60.4%  | -13.3%    | 19.0%   |
| Environment                               | -1.2%  | 0.2%   | 4.9%   | -20.0% | 15.0%     | 15.0%   |
|   |        |        |        |        |           |         |
| Standalone Revenues                       | 50,235 | 54,360 | 47,693 | 45,917 | 48,288    | 57,332  |
| Energy                                    | 38,796 | 41,509 | 36,383 | 34,763 | 38,510    | 45,578  |
| Environment                               | 11,439 | 12,851 | 11,310 | 11,155 | 9,778     | 11,754  |
|   |        |        |        |        |           |         |
| % YoY                                     | 54.5%  | 8.2%   | -12.3% | -3.7%  | 5.2%      | 18.7%   |
| Energy                                    | 60.9%  | 7.0%   | -12.3% | -4.5%  | 10.8%     | 18.4%   |
| Environment                               | 35.9%  | 12.3%  | -12.0% | -1.4%  | -12.3%    | 20.2%   |
|   |        |        |        |        |           |         |
| Standalone Revenues                       | 50,235 | 54,360 | 47,693 | 45,917 | 48,288    | 57,332  |
| Domestic (excl Power EPC)                 | 25,350 | 29,073 | 29,202 | 24,358 | 25,226    | 30,153  |
| Domestic (Power EPC)                      | 14,225 | 13,857 | 8,652  | 10,520 | 9,815     | 9,957   |
| Exports (Excl Deemed)                     | 10,660 | 11,430 | 9,839  | 11,039 | 13,247    | 17,221  |
|   |        |        |        |        |           |         |
| % YoY                                     | 54.5%  | 8.2%   | -12.3% | -3.7%  | 5.2%      | 18.7%   |
| Domestic (excl Power EPC)                 | 25.9%  | 14.7%  | 0.4%   | -16.6% | 3.6%      | 19.5%   |
| Domestic (Power EPC)                      | 144.0% | -2.6%  | -37.6% | 21.6%  | -6.7%     | 1.4%    |
| Exports                                   | 62.5%  | 7.2%   | -13.9% | 12.2%  | 20.0%     | 30.0%   |
|   |        |        |        |        |           |         |
| EBIT Margin (%)                           | 11.8   | 11.1   | 11.1   | 10.3   | 10.7      | 11.2    |
| Energy                                    | 10.0   | 10.7   | 10.4   | 10.0   | 10.5      | 11.5    |
| Environment                               | 12.6   | 12.4   | 10.5   | 10.0   | 10.3      | 11.0    |
|   |        |        |        |        |           |         |
| EPS Composition (INR/Sh)                  |        |        |        |        |           |         |
| Standalone                                | 32.1   | 34.1   | 29.4   | 26.4   | 30.0      | 38.1    |
| TMX-Babcock JV                            | 0.0    | -0.8   | -1.3   | -3.2   | -4.7      | -4.8    |
| Other Subsidiaries                        | -0.1   | 0.5    | -1.1   | 2.0    | 4.3       | 6.1     |
| Consolidated                              | 32.0   | 33.9   | 27.0   | 25.2   | 29.5      | 39.4    |
|   |        |        |        |        |           |         |
| <b>Balance Sheet Details - Standalone</b> |        |        |        |        |           |         |
| Net Working Capital (Days)                | -11.9  | 6.6    | 18.5   | 30.1   | 27.6      | 13.0    |
| NWC, excl Customer Advances (Days)        | 60.5   | 55.6   | 69.8   | 84.3   | 83.5      | 72.1    |
| Net Cash / (Debt) INR M                   | 6,910  | 6,050  | 6,206  | 7,717  | 10,493    | 15,027  |
| RoE (%) Consolidated                      | 31.9   | 27.4   | 18.4   | 15.3   | 16.1      | 19.0    |
|   |        |        |        | Sour   | ce: Compa | nv MOSI |

Source: Company, MOSL

## **Financials and valuation**

| Income statement      |        |        |        |        | (INR N | 1illion) |
|-----------------------|--------|--------|--------|--------|--------|----------|
| Y/E March             | 2011   | 2012   | 2013   | 2014E  | 2015E  | 2016E    |
| <b>Total Revenues</b> | 52,472 | 60,313 | 54,331 | 53,687 | 58,231 | 70,012   |
| Change (%)            | 60.3   | 14.9   | -9.9   | -1.2   | 8.5    | 20.2     |
| Raw Materials         | 34,803 | 38,435 | 33,157 | 31,010 | 34,398 | 41,221   |
| Staff Cost            | 4,547  | 5,578  | 6,122  | 6,375  | 7,153  | 7,935    |
| Other Expenses        | 8,266  | 10,795 | 10,720 | 12,245 | 11,916 | 14,718   |
| EBITDA                | 5,669  | 5,919  | 4,999  | 4,783  | 5,562  | 7,017    |
| % of Total Revenues   | 10.8   | 9.8    | 9.2    | 8.9    | 9.6    | 10.0     |
| Depreciation          | 541    | 663    | 771    | 1,057  | 1,269  | 1,302    |
| Other Income          | 652    | 830    | 769    | 763    | 921    | 1,121    |
| Interest              | 45     | 122    | 165    | 350    | 510    | 500      |
| PBT                   | 5,736  | 5,964  | 4,832  | 4,139  | 4,703  | 6,336    |
| Tax                   | 1,965  | 2,043  | 1,773  | 1,494  | 1,720  | 2,195    |
| Rate (%)              | 34.3   | 34.3   | 36.7   | 36.1   | 36.6   | 34.6     |
| Adjusted PAT          | 3,818  | 4,034  | 3,219  | 3,008  | 3,520  | 4,691    |
| EO Income (net)       | 0      | 0      | 0      | 0      | 0      | 0        |
| Reported PAT          | 3,818  | 4,034  | 3,219  | 3,008  | 3,520  | 4,691    |
| Change (%)            | 169.0  | 5.7    | -20.2  | -6.6   | 17.0   | 33.3     |

| Balance sheet          |        |        |        |        | (INR N | /lillion) |
|------------------------|--------|--------|--------|--------|--------|-----------|
| Y/E March              | 2011   | 2012   | 2013   | 2014E  | 2015E  | 2016E     |
| Share Capital          | 238    | 238    | 238    | 238    | 238    | 238       |
| Reserves               | 12,911 | 16,055 | 18,449 | 20,481 | 22,886 | 26,043    |
| Net Worth              | 13,448 | 16,671 | 19,070 | 21,102 | 23,507 | 26,665    |
| Loans                  | 1,480  | 2,704  | 4,210  | 4,210  | 4,210  | 4,210     |
| Deferred Tax Liability | 299    | 378    | 383    | 383    | 383    | 383       |
| Capital Employed       | 15,448 | 20,491 | 24,382 | 26,051 | 27,919 | 30,526    |
|                        |        |        |        |        |        |           |
| Gross Fixed Assets     | 10,678 | 11,929 | 12,962 | 18,737 | 19,737 | 21,237    |
| Less: Depreciation     | 2,825  | 3,488  | 4,236  | 5,293  | 6,562  | 7,864     |
| Net Fixed Assets       | 7,853  | 8,441  | 8,726  | 13,444 | 13,175 | 13,373    |
| Capital WIP            | 354    | 2,466  | 5,175  | 400    | 400    | 400       |
| Investments            | 2,415  | 2,395  | 4,430  | 4,430  | 4,430  | 4,430     |
|                        |        |        |        |        |        |           |
| Curr. Assets           | 30,370 | 33,427 | 31,319 | 33,610 | 37,318 | 44,023    |
| Inventory              | 3,657  | 3,666  | 3,240  | 3,221  | 3,494  | 4,201     |
| Debtors                | 10,209 | 13,707 | 15,468 | 15,032 | 16,305 | 19,603    |
| Cash & Bank Balance    | 6,880  | 6,983  | 3,211  | 5,496  | 7,068  | 8,236     |
| Loans & Advances       | 4,015  | 3,560  | 4,125  | 4,492  | 4,628  | 5,682     |
| Other Assets           | 5,610  | 5,512  | 5,276  | 5,369  | 5,823  | 6,301     |
|                        |        |        |        |        |        |           |
| Current Liab. & Prov.  |        |        |        |        |        |           |
| Creditors              | 8,928  | 9,690  | 9,723  | 9,664  | 10,482 | 12,602    |
| Other Liabilities      | 3,264  | 5,495  | 5,404  | 5,373  | 5,782  | 6,842     |
| Provisions             | 2,782  | 2,721  | 2,812  | 2,779  | 3,013  | 3,620     |
| Net Current Assets     | 4,825  | 7,190  | 6,051  | 7,777  | 9,914  | 12,323    |
| Application of Funds   | 15,448 | 20,491 | 24,382 | 26,051 | 27,919 | 30,526    |
|                        |        |        |        |        |        |           |

E: MOSL Estimates

## **Financials and valuation**

| Y/E March   | 2011  | 2012  | 2013   | 2014E   | 2015E  | <b>2016E</b>  |
|---|---|---|--|---|--|---|
| Basic (INR)   |   |   |  |   |  |   |
| EPS   | 32.0  | 33.9  | 27.0   | 25.2  | 29.5   | 39.4  |
| Cash EPS  | 36.6  | 39.4  | 33.5   | 34.1  | 40.2   | 50.3  |
| Book Value  | 112.9   | 139.9   | 160.0  | 177.1   | 197.3  | 223.8   |
| DPS   | 9.0   | 7.0   | 7.0  | 7.0   | 8.0  | 11.0  |
| Payout (incl. Div. Tax.)  | 32.6  | 24.0  | 30.3   | 32.4  | 31.7   | 32.7  |
| Valuation (x)   |   |   |  |   |  |   |
| P/E   |   |   | 20.2   | 26.9  | 23.0   | 17.3  |
| Cash P/E  |   |   | 16.3   | 19.9  | 16.9   | 13.5  |
| EV/EBITDA   |   |   | 12.3   | 15.7  | 13.3   | 10.3  |
| EV/Sales  |   |   | 1.1  | 1.4   | 1.3  | 1.0   |
| Price/Book Value  |   |   | 3.4  | 3.8   | 3.4  | 3.0   |
| Dividend Yield (%)  |   |   | 1.3  | 1.0   | 1.2  | 1.6   |
| Profitability Ratios (%)  |   |   |  |   |  |   |
| RoE   | 31.9  | 27.4  | 18.4   | 15.3  | 16.1   | 19.0  |
| RoCE  | 29.0  | 22.9  | 14.8   | 12.8  | 14.2   | 17.2  |
| Turnover Ratios   |   |   |  |   |  |   |
| Debtors (Days)  | 71  | 83  | 104  | 102   | 102  | 102   |
| Inventory (Days)  | 25  | 22  | 22   | 22  | 22   | 22  |
| Creditors. (Days)   | 62  | 59  | 65   | 66  | 66   | 66  |
| Asset Turnover (x)  | 3.4   | 2.9   | 2.2  | 2.1   | 2.1  | 2.3   |
| Leverage Ratio  |   |   |  |   |  |   |
| Debt/Equity (x)   | 0.1   | 0.2   | 0.2  | 0.2   | 0.2  | 0.2   |
| Cash flow statement   |   |   |  |   | (INR N   | /lillion)   |
| Y/E March   | 2011  | 2012  | 2013   | 2014E   | 2015E  | 2016E   |
| PBT before EO Items   | 5,736   | 5,964   | 4,832  | 4,139   | 4,703  | 6,336   |
| Add : Depreciation  | 541   | 663   | 771  | 1,057   | 1,269  | 1,302   |
| Interest  | 45  | 122   | 165  | 350   | 510  | 500   |
| Less : Direct Taxes Paid  | 1,965   | 2,043   | 1,773  | 1,494   | 1,720  | 2,195   |
| (Inc)/Dec in WC   | (3,329)   | (2,262)   | (2,633)  | 559   | (565)  | (1,241)   |
|   | (3,323)   |   |  |   |  |   |
| CF from Operations  | 1,028   | 2,442   | 1,362  | 4,611   | 4,197  | 4,701   |
| CF from Operations EO Income  |   |   |  | <b>4,611</b>  | <b>4,197</b><br>0  | <b>4,701</b>  |
| · · · · · · · · · · · · · · · · · · ·   | 1,028   | 2,442   | 1,362  |   |  |   |
| EO Income   | <b>1,028</b><br>0   | <b>2,442</b><br>0   | 1,362<br>0<br>1,362  | 0   | 0  | 0<br><b>4,701</b>   |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA  | 1,028<br>0<br>1,028<br>(3,265)  | 2,442<br>0<br>2,442   | 1,362<br>0<br>1,362<br>(3,765)   | 0<br><b>4,611</b>   | 0<br><b>4,197</b>  | 0   |
| EO Income<br>CF from Oper. Incl. EO Items   | <b>1,028</b><br>0<br><b>1,028</b>   | 2,442<br>0<br>2,442<br>(3,361)  | 1,362<br>0<br>1,362  | 0<br><b>4,611</b><br>(1,000)  | 0<br><b>4,197</b><br>(1,000)   | 0<br><b>4,701</b><br>(1,500)  |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments   | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976   | 2,442<br>0<br>2,442<br>(3,361)<br>20  | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)  | 0<br>4,611<br>(1,000)<br>0<br>-1,000  | 0<br><b>4,197</b><br>(1,000)<br>0  | 0<br><b>4,701</b><br>(1,500)<br>0   |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth   | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976   | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342  | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800                                      | 0<br><b>4,611</b><br>(1,000)<br>0   | 0<br>4,197<br>(1,000)<br>0<br>-1,000                                       | 0<br><b>4,701</b><br>(1,500)<br>0<br>(1,500)                                |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA  (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth (Inc)/Dec in Debt  | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976   | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342  | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800                                      | 0<br>4,611<br>(1,000)<br>0<br>-1,000  | 0<br>4,197<br>(1,000)<br>0<br>-1,000                                       | 0<br>4,701<br>(1,500)<br>0<br>(1,500)                                       |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth (Inc)/Dec in Debt Less: Interest Paid                                       | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976<br>1,017<br>1,401<br>45                 | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342<br>868<br>1,224<br>122                 | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800<br>295<br>1,506                      | 0<br>4,611<br>(1,000)<br>0<br>-1,000<br>(128)<br>0<br>350                   | 0<br>4,197<br>(1,000)<br>0<br>-1,000<br>89<br>0<br>510                     | 0<br>4,701<br>(1,500)<br>0<br>(1,500)<br>87<br>0<br>500                     |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth (Inc)/Dec in Debt Less: Interest Paid Dividend Paid                         | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976   | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342<br>868<br>1,224                        | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800<br>295<br>1,506<br>165               | 0<br>4,611<br>(1,000)<br>0<br>-1,000<br>(128)                               | 0<br>4,197<br>(1,000)<br>0<br>-1,000                                       | 0<br>4,701<br>(1,500)<br>0<br>(1,500)<br>87                                 |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth (Inc)/Dec in Debt  Less: Interest Paid Dividend Paid  CF from Fin. Activity | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976<br>1,017<br>1,401<br>45<br>695          | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342<br>868<br>1,224<br>122<br>1,246<br>724 | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800<br>295<br>1,506<br>165<br>976<br>660 | 0<br>4,611<br>(1,000)<br>0<br>-1,000<br>(128)<br>0<br>350<br>976<br>(1,454) | 0<br>4,197<br>(1,000)<br>0<br>-1,000<br>89<br>0<br>510<br>1,115<br>(1,536) | 0<br>4,701<br>(1,500)<br>0<br>(1,500)<br>87<br>0<br>500<br>1,533<br>(1,947) |
| EO Income  CF from Oper. Incl. EO Items  (Inc)/Dec in FA (Pur)/Sale of Investments  CF from Investments  (Inc)/Dec in Net Worth (Inc)/Dec in Debt Less: Interest Paid Dividend Paid                         | 1,028<br>0<br>1,028<br>(3,265)<br>1,289<br>-1,976<br>1,017<br>1,401<br>45<br>695<br>1,678 | 2,442<br>0<br>2,442<br>(3,361)<br>20<br>-3,342<br>868<br>1,224<br>122<br>1,246        | 1,362<br>0<br>1,362<br>(3,765)<br>(2,035)<br>-5,800<br>295<br>1,506<br>165<br>976        | 0<br>4,611<br>(1,000)<br>0<br>-1,000<br>(128)<br>0<br>350<br>976            | 0<br>4,197<br>(1,000)<br>0<br>-1,000<br>89<br>0<br>510<br>1,115            | 0<br>4,701<br>(1,500)<br>0<br>(1,500)<br>87<br>0<br>500<br>1,533            |

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