Agenda of Presentation

- Performance Snapshot
- Industry Overview & Market Outlook
- Operations
- Projects
- Financials
Performance Snapshot
H1 FY2012 Performance Highlights

1. Strong operating performance of refinery with capacity utilization above 130%, throughput 6.65 mmt

2. Revenue at Rs 30283 crore; up by 24% & EBIDTA at Rs 1172 crore; up by 12% as compared to Sales of Rs 24464 crore & EBIDTA of Rs 1041 crore for H1 FY2010

3. Current Price GRM at US$ 7.31/bbl; up by 19% as compared to CP GRM of $ 6.14/bbl for H1 FY2010

4. Most of units & facilities under Expansion Project achieved mechanical completion. Mechanical completion of DCU, VGO-HT, SRU expected in next 6-8 weeks, by end of Dec, 2011

5. Successfully completed 35 days shut-down. Tie –ins of all new units completed

6. Revamp of CDU, FCCU & SRU for capacity augmentation completed during shut-down.

7. Start up activities of new units commenced & ramp up of throughput expected during Q1 CY12.

8. Raniganj CBM block started supply of CBM gas to end customer through pipeline.

GRM includes the Sales Tax of US$ 2.71/bbl for H1 FY 2012 & US$ 2.07/bbl for H1 Y2011
Industry Overview & Market Outlook
Global Oil Demand

- 2010 annual oil demand has grown by 3.06 mops - one of the highest in history
- 2011 & 2012 oil demand growth is estimated to be 1.05 mbpd & 1.42 mbpd, with bulk of growth coming from Asia & Middle East

Source: IEA
Refinery Capacity Utilization

- EURO-16
- US
- Singapore
- EOL

Market Dynamics

- Crude Oil marker difference widened during the quarter due to supply outage Libya & due to Geo-political issues in Middle east and North Africa
- Gap between WTI – Brent widened to avg $ 27/bbl, mainly due to supply bottleneck at US market
- Asian Complex Refineries to benefit from higher difference between Brent & Dubai
- Difference between Arab light & Arab crude has gone down by 25% to average $3.80/bbl from avg. US$ 5.08/bbl for Q1 FY2011, impacted due to strength in fuel oil margin.
Asian gasoline cracks benefited from unplanned outage and lower Chinese export but expected to be moderated.

Singapore cracking margins for Gasoil expected to be strong on account of strong Non-OECD demand growth.
Operations
Vadinar Refinery
Processed 3.03 million tonnes of crude during the quarter & 6.65 million tones for half year ended Sept, 2011, lower throughput on account of shutdown in Sept, 2011.

Processed more than 18 types of crudes in the quarter including ultra heavy & tough crudes like Nowrooz, Ras Gharib & Mangala etc

Avg. API (Density) – 33.2, Avg. Sulphur % – 1.76 and Avg. TAN – 0.23
Operating Performance - Refinery

- Optimised production of middle & light distillates – High margin segment
Operating Performance - Refinery

- Continue to focus on domestic market due to better price realization of petro products; around 97% of Gasoil sold in domestic market during last 6 months.
- Domestic Sales as a % of Total Sales declined due to shut-down.
- Export products include Fuel Oil & Gasoline.
Retail

- Deregulation of Gasoline, resulted into ramp up retail sales volumes. Retail sales increased by more than 125%, mainly Gasoline, due to revision of prices inline with international prices.

- Network expansion will be pursued in a controlled manner until such time that a sustainable pricing scenario prevails. High MS potential outlets in city locations are being targeted for expansion.

- Number of Retail Outlets Operational are 1388 & 252 ROs under various stages of construction

- Focus on tapping the opportunity of ALPG & CNG pumps through tie-ups with Aegis, Sabarmati Gas, GAIL, Adani Gas. two new ALPG(1) & CNG (1) station commissioned with aggregating of 7 stations operating till Sept,2011
Projects
Expansion to 18 MMTPA

Complexity to improve to 11.8 from 6.1

- Most of Units & Facilities under Expansion Project achieved mechanical completion.
- Mechanical completion of DCU, VGOHT, SRU expected in next 6-8 weeks by end of Dec, 2011
- Revamp of CDU to 18 mmtpa, FCCU to 3.9 mmtpa, revamp of SRU to improve sulphur recovery, completed during planned shut-down.
- Start up activities of new units commenced
- Ramp up of throughput expected during Q1 CY12.
Accomplishment of Planned Shut Down

- **35 days planned Shut down successfully completed on 23rd Oct, 2011.**
  - **Tie - ins of Train - I new units & facilities with existing refinery**: ISOM, HMU, DHDT, ARU, VGO-HT, SRU, DCU, SWS, Sulphur blocks & all OSBL/offsite tankages facilities
  - **Revamp of existing units for capacity Augmentation has been completed**: CDU (18.0MMTPA) will enable us to consistently process high TAN crudes (around 0.8-1), FCCU (3.9MMTPA) enables FCC operation on hydro treated feed, SRU revamp will Improve the sulphur recovery from 99 to 99.9 wt%.
  - **Total Revamp (modification & reinstallation) completed in 28 engineering days:**
    - World tallest single crude distillation column (77 trays, 90 meter height)
    - Vacuum distillation column revamped in (4 bed, 60 meter height & new vapour horn installation)
    - Major piping modifications & replacement in existing units i.e. CDU & FCC (dismantling 75,424 inch meter & erection of 85,098 inch meter)
  - Replacement of old catalyst in DHDS and CCR units reactors with new generation catalyst to provide boost to quality of Gasoline & Gasoil.
  - All maintenance & inspection jobs, modification/ corrective engineering jobs, reliability improvement jobs have been successfully completed.
  - Implemented several measures to improve the plant reliability and on-stream factor
  - All jobs/tasks were completed on time without any accidents or injuries.
Refinery Expansion Project : Units Mech. Completed

ISOM Unit (Isomerization Unit)
Refinery Expansion Project: Units Mech. Completed

Diesel Hydrotreater (DHDT)
Refinery Expansion Project: Units Mech. Completed
Refinery Expansion Project: Units Mech. Completed

Amine Regeneration Units (ARU)
Revamp of Units

CDU Crude Column

VDU Vacuum column

Flare Drum Area

Cooling Tower – I

Flare Racks

Cooling Tower - II

Demineralisation Plant

Caustic System Pumps & Tanks

Sour Water Stripper

OSBL Pipe Rack

Natural Gas Station

Desalination Plant
Refining Optimization Project

Expansion to 20 MMTPA

(Project Cost: Rs 1700 crore)

- Overall progress: 63.73%
- Engineering: 94.42%
- Procurement: 71.47%
- Construction: 44.4%

- Optimization Project is on schedule & expected to complete by Sept, 2012

New Units/ Facilities under optimization.

- Conversion of VBU into Crude Dist. Unit
- Additional Mangala Crude Tankages & Pipeline & blending Facilities
- Additional two Coke Drums & Associated Facilities
- Revamping of FCCU

Funding Structure:

- Total amount of money spend till Sept, 11: Rs 1045 crore out of total project cost of Rs 1700 crore, funded through combination of debt & equity.
Exploration & Production
Project Progress at Raniganj

- Supply of Gas to end customers through pipeline started.
- Current Production @ 22000 scmd.
- Received Environmental Clearance for Phase – I of Raniganj Project.
- Field Development Plan for drilling of 500 wells approved by DGH.
- Gas Sales Price of $ 5.25/mmbtu + $1.00/mmbtu for marketing & transportation charges, approved by MOP&G for test sales.
- Planning to ramp up the production by deploying resources (manpower, equipment, rigs).
- Deployment of innovative industry standard technologies for drilling & production from CBM Wells.
- Essar owns a versatile fleet of oil well rigs, core hole rigs, air drilling rigs & other critical equipment.
- Cost incurred upto Sept, 2011 : Rs 568 crore
Leading CBM Gas Player in India

- Leading CBM player in the country with 2733 sq km of acreage & more than 10 TCF of reserve & resources in place under five blocks.
- Presence in major key market deficient in natural gas supplies.
- Applied for Petroleum Exploration Licenses for all four blocks to respective state government.
- Consultants have been appointed to conduct environmental impact study.
- Terms of Reference (TOR) for EIS approved by MOEF.
- Baseline Environmental survey to commence shortly.
- Experience Team of 150 engineers, geoscientists & technical staff with avg. experience of more than 8 years in the field of execution & operation of CBM projects.

<table>
<thead>
<tr>
<th>Details of CBM Block</th>
<th>Place</th>
<th>Ownership</th>
<th>Acreage</th>
<th>2P/ 2C resources</th>
<th>Best estimate prospective resources</th>
<th>Unrisked inplace resource</th>
<th>Total</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raniganj (CBM)</td>
<td>West Bengal</td>
<td>100%</td>
<td>500 Sq km</td>
<td>201</td>
<td>792</td>
<td>-</td>
<td>993</td>
<td>CPR by NSAI (2010)</td>
</tr>
<tr>
<td>Rajmahal (CBM)</td>
<td>Jharkhand</td>
<td>100%</td>
<td>1128 sq. km</td>
<td>-</td>
<td>4,723</td>
<td>-</td>
<td>4,723</td>
<td>CPR by ARI (2010)</td>
</tr>
<tr>
<td>Sohagpur-CBM-2008/IV</td>
<td>M.P. &amp; Chhattisgarh</td>
<td>100%</td>
<td>339 sq. km</td>
<td>-</td>
<td>-</td>
<td>600</td>
<td>600</td>
<td>As per DGH</td>
</tr>
<tr>
<td>Talcher -CBM-2008/IV</td>
<td>Orissa</td>
<td>100%</td>
<td>557 sq. km</td>
<td>-</td>
<td>2,600</td>
<td>2,600</td>
<td></td>
<td>As per DGH</td>
</tr>
<tr>
<td>IB Valley-CBM-2008/IV</td>
<td>Orissa</td>
<td>100%</td>
<td>209 sq. km</td>
<td>-</td>
<td>-</td>
<td>1,200</td>
<td>1,200</td>
<td>As per DGH</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>2733 sq km</td>
<td>201</td>
<td>5,515</td>
<td>4,400</td>
<td>10,116</td>
<td></td>
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</table>
Financials
## Financial Highlights - H1 FY12

<table>
<thead>
<tr>
<th>Particulars</th>
<th>H1 FY11</th>
<th>H1 FY12</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput (mmt)</td>
<td>7.37</td>
<td>6.65</td>
<td>-10%</td>
</tr>
<tr>
<td>Revenue (Gross)</td>
<td>24464</td>
<td>30283</td>
<td>24%</td>
</tr>
<tr>
<td>EBITDA</td>
<td>1041</td>
<td>1172</td>
<td>13%</td>
</tr>
<tr>
<td>Profit Before Tax</td>
<td>72</td>
<td>207</td>
<td>188%</td>
</tr>
<tr>
<td>Profit After Tax</td>
<td>60</td>
<td>303</td>
<td>405%</td>
</tr>
<tr>
<td>CP GRM (US$/bbl) with STI</td>
<td>$6.14</td>
<td>$7.31</td>
<td>19%</td>
</tr>
<tr>
<td>Operational Profit</td>
<td>437</td>
<td>571</td>
<td>31%</td>
</tr>
<tr>
<td>Property, Plant &amp; Equipment</td>
<td>19699</td>
<td>24160</td>
<td>23%</td>
</tr>
<tr>
<td>Gross Debt</td>
<td>12102</td>
<td>14758</td>
<td>22%</td>
</tr>
<tr>
<td>Gross Debt - Operations</td>
<td>9377</td>
<td>9729</td>
<td>4%</td>
</tr>
<tr>
<td>Gross Debt - Projects</td>
<td>2725</td>
<td>5029</td>
<td>85%</td>
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<tr>
<td>Net Worth</td>
<td>5943</td>
<td>6840</td>
<td>15%</td>
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</tbody>
</table>

Net Worth excludes FCCBs of $ 262 million issued to EEPLC; (Rs 1282 crore for H1FY12 & Rs. 1177 crore for H1 FY11)
## Financial Results

<table>
<thead>
<tr>
<th>Particulars</th>
<th>FY 10-11</th>
<th>H1 FY11</th>
<th>H1 FY12</th>
<th>Q2 FY11</th>
<th>Q2 FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throughput - Million Tones</td>
<td>14.76</td>
<td>7.37</td>
<td>6.65</td>
<td>3.69</td>
<td>3.03</td>
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<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue (Gross)</td>
<td>53,119</td>
<td>24,464</td>
<td>30,283</td>
<td>12,415</td>
<td>13,805</td>
</tr>
<tr>
<td>Less: Excise Duty &amp; Taxes</td>
<td>6,131</td>
<td>3,024</td>
<td>2,398</td>
<td>1,506</td>
<td>866</td>
</tr>
<tr>
<td>Net Income from Operation</td>
<td>46,988</td>
<td>21,440</td>
<td>27,885</td>
<td>10,909</td>
<td>12,939</td>
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<tr>
<td>Other Income</td>
<td>260</td>
<td>94</td>
<td>334</td>
<td>55</td>
<td>209</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>47,248</td>
<td>21,534</td>
<td>28,219</td>
<td>10,964</td>
<td>13,148</td>
</tr>
<tr>
<td><strong>EXPENDITURE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>43,197</td>
<td>19,928</td>
<td>25,785</td>
<td>10,139</td>
<td>12,096</td>
</tr>
<tr>
<td>Other Expenditure</td>
<td>1,266</td>
<td>671</td>
<td>793</td>
<td>206</td>
<td>386</td>
</tr>
<tr>
<td>Forex Loss/(Gain) - Total</td>
<td>(94)</td>
<td>(106)</td>
<td>469</td>
<td>(115)</td>
<td>407</td>
</tr>
<tr>
<td>- Realised</td>
<td>61</td>
<td>36</td>
<td>300</td>
<td>89</td>
<td>268</td>
</tr>
<tr>
<td>- Unrealised MTM</td>
<td>(155)</td>
<td>(142)</td>
<td>169</td>
<td>(204)</td>
<td>139</td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td>44,469</td>
<td>20,493</td>
<td>27,047</td>
<td>10,330</td>
<td>12,889</td>
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<tr>
<td><strong>EBITDA</strong></td>
<td>2,779</td>
<td>1,041</td>
<td>1,172</td>
<td>634</td>
<td>259</td>
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<tr>
<td><strong>EBITDA without FE MTM</strong></td>
<td>2,624</td>
<td>899</td>
<td>1,341</td>
<td>430</td>
<td>398</td>
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<tr>
<td>Interest &amp; Finance Charges</td>
<td>1,220</td>
<td>604</td>
<td>601</td>
<td>306</td>
<td>317</td>
</tr>
<tr>
<td><strong>Operational Profit</strong></td>
<td>1,559</td>
<td>437</td>
<td>571</td>
<td>328</td>
<td>(58)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>731</td>
<td>365</td>
<td>364</td>
<td>184</td>
<td>183</td>
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<tr>
<td><strong>PBT</strong></td>
<td>828</td>
<td>72</td>
<td>207</td>
<td>144</td>
<td>(241)</td>
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<tr>
<td>Tax</td>
<td>174</td>
<td>12</td>
<td>(96)</td>
<td>14</td>
<td>(75)</td>
</tr>
<tr>
<td><strong>PAT</strong></td>
<td>654</td>
<td>60</td>
<td>303</td>
<td>130</td>
<td>(166)</td>
</tr>
<tr>
<td><strong>C P GRM $/bbl</strong></td>
<td>$4.53</td>
<td>$4.07</td>
<td>$4.60</td>
<td>$4.65</td>
<td>$5.07</td>
</tr>
<tr>
<td><strong>C P GRM $/bbl (With STI)</strong></td>
<td>$6.91</td>
<td>$6.14</td>
<td>$7.31</td>
<td>$6.49</td>
<td>$7.22</td>
</tr>
</tbody>
</table>
Summary

- Vadinar Refinery to become one of the most complex refinery in the global market.
- Expansion to create flexibility in Refinery to process any variety of sour / tough / acidic crude available in global market thus reduce the overall cost of crude.
- Expansion to produce EURO IV & V grade of Gasoil & Gasoline to cater the demand of domestic as well as international market.
- Usage of Coal for power plant to reduce overall cost of operation.
- Refinery Expansion Project set to deliver strong refinery margin cashflow & profitability.
Thank You
## Major Units and Licensors

<table>
<thead>
<tr>
<th>UNIT / FACILITY</th>
<th>CAPACITY (MMTPA)</th>
<th>CAPACITY Post OPTIMISATION</th>
<th>LICENCER / TECHNOLOGY</th>
<th>DETAILED ENGG</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDU / VDU</td>
<td>10.5 (CDU)</td>
<td>18 (CDU)</td>
<td>ABB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.2 (VDU)</td>
<td>10.9 (VDU)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VISBREAKER (VBU)</td>
<td>1.9</td>
<td>2.0 (CDU)</td>
<td>Axens</td>
<td></td>
</tr>
<tr>
<td>NAPHTHA HYDROTREATER (NHT)</td>
<td>1.6</td>
<td>1.8</td>
<td>ABB</td>
<td></td>
</tr>
<tr>
<td>CONTINUOUS CATALYTIC REFORMER UNIT (CCR)</td>
<td>0.9</td>
<td>1.1</td>
<td>Axens</td>
<td></td>
</tr>
<tr>
<td>FLUID CATALYTIC CRACKING UNIT / UNSATURATED GAS SEPARATION SECTION (FCCU)</td>
<td>2.9</td>
<td>3.9</td>
<td>ABB</td>
<td></td>
</tr>
<tr>
<td>DIESEL HYDRODESULFURISATION UNIT (DHDS)</td>
<td>3.7</td>
<td>5.3</td>
<td>Axens</td>
<td></td>
</tr>
<tr>
<td>VGO HYDROTREATER (VGO HT)</td>
<td>-</td>
<td>6.5</td>
<td>UOP</td>
<td>Technip</td>
</tr>
<tr>
<td>DIESEL HYDROTREATER (DHDT)</td>
<td>-</td>
<td>4.0</td>
<td>UOP</td>
<td>Technip</td>
</tr>
<tr>
<td>DELAYED COKER UNIT (DCU)</td>
<td>-</td>
<td>7.5</td>
<td>Kvaerner</td>
<td></td>
</tr>
<tr>
<td>ISOMERISATION (ISOM)</td>
<td>-</td>
<td>0.7</td>
<td>UOP</td>
<td></td>
</tr>
</tbody>
</table>
Expansion to provide crude as well as product flexibility

- Processing an increasingly high proportion of high sulphur and low API crudes
- Focus on delivery of higher margin products (middle/light distillates)

Note: Ultra-heavy crude defined as having API<25, heavy crude with API 25 – 33, light crude with API>33
Dar and Mangala crude with high tan and wax content classified as ultra heavy crude
Product yield – fuel and loss include natural gas, but excludes 1 mmtpa of Coal

Source: Company information
Yield to shift to higher grade products optimal for export markets

- Conversion of entire negative margin fuel oil into high value added products and pet coke
- Building higher flexibility between light and middle distillates
- Flexibility to produce petrochemical feed stock
- Euro IV & V grade at 55% in Gasoline pool and 50% in Diesel pool

<table>
<thead>
<tr>
<th>Product</th>
<th>14 MMTPA</th>
<th>18 MMTPA</th>
<th>20 MMTPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPG/Naptha</td>
<td>1.09</td>
<td>1.41</td>
<td>2.29</td>
</tr>
<tr>
<td>Gasoline</td>
<td>2.47</td>
<td>2.49</td>
<td>2.63</td>
</tr>
<tr>
<td>Jet/Kero</td>
<td>0.70</td>
<td>1.17</td>
<td>0.28</td>
</tr>
<tr>
<td>Diesel</td>
<td>5.34</td>
<td>7.72</td>
<td>9.13</td>
</tr>
<tr>
<td>VGO</td>
<td>3.06</td>
<td>1.84</td>
<td>1.75</td>
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<tr>
<td>Fuel Oil</td>
<td>0.53</td>
<td>0.60</td>
<td>2.15</td>
</tr>
<tr>
<td>Coke</td>
<td>0.81</td>
<td>0.21</td>
<td>0.76</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>1.28</td>
<td></td>
</tr>
<tr>
<td>Fuel &amp; Loss / Residue</td>
<td>0.53</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

Note: Others include bitumen, sulphur
Product yield – fuel and loss include natural gas, but excludes 1 mmtpa of Coal
Source: Company information
Increasing capacity and complexity

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity (MMTPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today Current</td>
<td>14</td>
</tr>
<tr>
<td>Q3/Q4 CY2011</td>
<td>18</td>
</tr>
<tr>
<td>Optimization Q3 CY 2012</td>
<td>20</td>
</tr>
<tr>
<td>Phase II</td>
<td>38</td>
</tr>
</tbody>
</table>

**Total cum. Capex**
- US$2.8bn
- US$4.65bn
- US$4.95bn
- US$9.75bn

**Total Incremental Capex**
- US$1.85bn
- US$0.38bn
- US$4.8bn

**Complexity**
- 6.1
- 11.8
- 11.8
- 12.8

**API (density) avg.:**
- 32.4
- 24.8
- 24.8
- 24.0

**Sulphur % avg.:**
- 1.5%
- 3%
- 3%
- 3%

**Product grade:**
- Euro III/IV
- Euro IV/V
- Euro IV/V
- Euro V/US Specs/CARB

Key highlights

1. Low cost, safe and efficient operations – refinery operating cost US$1-2 per barrel lower than global peers
2. Strategically located on the west coast of India
3. Increasing complexity from 6.1 to 11.8 following Phase – I enhancing crude and product flexibility
4. Crude slate geared towards heavy crudes (89% of crude mix comprises of heavy and ultra-heavy crude) post phase - I
5. Vadinar currently one of India’s largest refineries: will be amongst the top 5 globally at 780k bbl/d post Phase -II
6. Timing for Phase - II to be determined based on a review of market conditions and attainment of financial closure
7. Expansion at competitive capex cost; cost/complexity/bbl of $1018 and $983 post Phase I & Phase II respectively
<table>
<thead>
<tr>
<th>Assets</th>
<th>Ownership</th>
<th>2P/2C resources</th>
<th>Best estimate prospective resources</th>
<th>Opex</th>
<th>Peak Prodn.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raniganj (CBM)</td>
<td>100%</td>
<td>- 201 33</td>
<td>- 792 132</td>
<td>$0.43/mmbtu</td>
<td>3.5 mmscmd</td>
<td>Test production commenced. Moving to commercial development</td>
</tr>
<tr>
<td>Rajmahal (CBM)</td>
<td>100%</td>
<td>- - 4,723 787</td>
<td>- - 4,723</td>
<td></td>
<td></td>
<td>Large acreage. Situated in rich coal belt</td>
</tr>
<tr>
<td>Mehsana (b)</td>
<td>70% (b)</td>
<td>2 - 2 -</td>
<td>- - -</td>
<td>-</td>
<td>-</td>
<td>Potentially significant CBM play</td>
</tr>
<tr>
<td>Ratna/ R-Series (a)</td>
<td>50% (a)</td>
<td>74 40 81</td>
<td>- - -</td>
<td>$5.3/bbl</td>
<td>35k bbl/d</td>
<td>Discovered fields. Development to commence post signing of PSC</td>
</tr>
<tr>
<td>Nigeria (C)</td>
<td>63% (c)</td>
<td>11 136 33</td>
<td>49 264 93</td>
<td></td>
<td></td>
<td>Located in proven Nigerian petroliferous basin</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>87 377 149</td>
<td>49 5779 1012</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) For Ratna / R-Series, balance 50% is held by ONGC (40%) and Premier Oil (10%)

(b) For Mehsana (ESU oil field), balance 30% ownership is held by ONGC

(c) 37% has been farmed out in favour of local Nigerian partner, Agamore Energy
## Essar Global: one of India’s largest industrial houses

### Energy

#### Oil & Gas
- **Upstream**
  - 2,132 MMBOE Reserves/Resources
- **Midstream**
  - 14 MMTPA refining capacity expanding to 20 MMTPA
- **Downstream**
  - c. 1,385 retail outlets

#### Power
- **Raw Material**
  - 450 MT coal reserves
- **Generation**
  - 1,600 MW operational capacity, to go up to 9,670 MW by 2014

#### Steel
- **Raw Material**
  - 2 billion tonnes of iron ore reserves
  - 27 MTPA pellet plants
  - 150 MT coal reserves
- **Steel-making**
  - 14 MMTPA steel-making capacity

#### Shipping
- **Shipping**
  - 24 ships. 12 new ships on order.
- **Oilfields Services**
  - 1 semi-submersible rig
  - 12 land rigs

#### Services
- **BPO**
  - 50,000+ employees globally
  - 38,000+ seats in 47 locations

### Infrastructure

#### Ports
- **Operational**
  - Dry Bulk 30 MTPA
  - Wet Bulk 58 MTPA

#### Projects
- **Essar Projects India**
  - Engineering Fabrication Construction
  - Fully geared to execute turnkey EPC projects in India and overseas
  - 2nd largest equipment bank in India

### Integrated company spanning the oil & gas value chain
- Over a decade’s experience in the Indian power industry
- Integrated, global steel producer
- International logistics provider to steel, oil and power sectors
- Provider of multi-channel CRM solutions to blue-chip clients
- India’s 2nd largest pvt. sector port company
- Leading EPC contractor with 40 years track record